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Measuring the Contribution of Service Learning Programs in Low Value Added Microenterprises: A Mexican Experience

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Abstract

Developing economies are featured by an overwhelming presence of microenterprises. Their support has become important as a strategy for poverty alleviation. Support programs have been proposed to overcome human capital constraints in MEs and improve their performance, by offering Business Development Services, which are aimed at developing skills and knowledge. This research addresses the question: to what extent service learning programs contribute to improve performance of low value added MEs? In answering this question, the research assesses the impact of the Program for Research, Assistance and Teaching of Small Enterprises (PRATS), a Mexican service learning program in favor of MEs. In practice, this kind of support programs has been evaluated in different ways under different set of indicators. The research proposes estimating learning curves applied to average costs, extending this method to revenues and profits, with the use of time series data from the enterprises supported by PRATS in order to measure its contribution. Preliminary results indicate that between 40 and 50% of the MEs exhibited learning, thus confirming the positive effect of service learning programs in the MEs.

Keywords: Business Development Services - Microenterprises - Impact Assessment Method - Service Learning Program - Learning Curves

1. Introduction

The micro and small firm constitute an important feature of the industrial structure of most countries. In developing economies, this trend is reinforced by the overwhelming presence of microenterprises (MEs) or self-employment units, a subset of the informal sector, which are run by modest entrepreneurs who engage in survival activities because they lack of better alternatives for a living. This had led many governments, international development agencies and NGO's to recognize their importance and place considerable emphasis on the promotion of this segment of the economy Support programs have been proposed to overcome human capital constraints and take Business Development to MEs in order to improve their performance by offering Business Development Services

(BDS) (Goldmark, 2001), which are aimed at developing skills and knowledge. This research addresses the question: to what extent do service learning programs contribute to improve performance of low value added MEs? In answering this question, the research assesses the impact of the Program for Research, Assistance and Teaching of Small Enterprises (PRATS), a Mexican service learning program led by a Higher Education Institution (HEI) in favor of MEs. In practice, this kind of support programs has been evaluated in different ways under different set of indicators (Hyman & Dearden, 1998). The research proposes as impact assessment method estimating learning curves applied to average costs as suggested by Berndt (1991), and extends this method to revenues and profits with the use of time series data from the enterprises supported by PRATS in order to measure its contribution. Preliminary results indicate that between 40 and 50% of the supported MEs exhibited evidence of learning, thus confirming the positive effect of service learning programs in this type of enterprise.

2. Business development services and impact assessment systems of support programs

Business Development can be understood as a package of conditions providing the elements for the businesses to prosper in a market based economy, where several complementing institutions, organizations and some other ingredients play a role: policy environment favorable to enterprise competitiveness, access to some specialized services, and market expansion for MEs products and services. Perhaps the most acknowledged elements of business development are Business Development Services (BDS), which can be classified as either financial or non financial. The former is compounded by the well known models of Microfinance, as well as other services like deposits, insurance, and payment services. The latter includes a broad range of services attempting to provide the entrepreneurs some basic assets for livelihood, particularly human capital, by developing skills and knowledge (Carney, 1998), at various stages of their development including the start-up stage. It is difficult to provide a unique definition of this concept, one definition can be stated as "... services that improve the performance of the enterprise, its access to markets, and its ability to compete...and includes an array of business services, both strategic [medium to long term issues that improve performance] and operational [day-to-day issues], basically designed to serve individual businesses, as opposed to the larger business community." (Committee of Donor Agencies for Small Enterprise Development, 2001). Another one sees BDS as institutions, private, public or mixed, offering technological services directly usable by the enterprises, developing and transferring applied research and technology (Pietrobelli & Rabelloti, 2002). Some BDS focus on reducing poverty by raising the productivity and the income of entrepreneurs and their enterprises, to overcome internal and external constraints related to their start-up, development and performance.

A broad group of BDS include group training, individual counseling and advice, the development of new commercial entities, technology development and transfer, information provision, business links, policy advocacy, marketing assistance, business advice, mentoring, information, feasibility projects, among

others (ILO, 2003). These services are aimed at helping the entrepreneurs improve the performance of their businesses (Goldmark, 1996).

The Delivery mechanism of BDS is an important issue regarding the provision of such services. A classification of delivery mechanisms is provided in UNDP (2003) as the Traditional Development or Market Development approach, whose main characteristics are also reviewed. The UNDP document states the main intervening agents in BDS: small enterprises, which may be either profit-oriented or subsistence productive units; BDS providers including for-profit firms (e.g. consultancies, lawyers, bookkeepers etc.), individuals, NGOs, national and sub-national government agencies, industry associations, among others; BDS facilitators, which support BDS providers through functions such as product development, capacity building, good practice promoting, external evaluation, quality assurance, advocacy, include NGOs, industry and employers' associations, government agencies, donors; project offices, among others; donors whose goal is providing funding for BDS projects and programs; and finally governments participating in funding provision for BDS and "public goods" such as information, education and training, and provision of infrastructure.

The Traditional Development approach has been practiced via intervention in the BDS markets at a transaction level and entails the establishment of an organization to provide BDS directly to the Micro and Small Enterprises, usually taking the form of NGO with diverse names such as Enterprise Development Agencies, Business Support Centers, Local Enterprise Agencies, Regional Development Agencies, among other which may be familiar in regions (Sievers, Haftendorn & Bessler, 2003 in UNDP, 2004). The Market Development approach is relatively new, having been formulated as a response to the poor quality of the services delivered, lack of sufficient outreach and lack of sustainability observed in BDS provided via the Traditional Development approach, and is founded on the argument that outreach and sustainability cannot be achieved through direct provision with subsidies by donors and governments. In this context, this approach seeks to facilitate a sustainable increase in demand and supply of services, where subsidies are replaced by private payment for services.

In the context of the traditional development approach which involves donors, sponsors or public funds from governments, tracking the impact of the funds devoted to the program has become very popular and even pre-requisite for the supporting organization, and thus an important activity of the supported organization. The impact assessment of a project is embedded on the wider concept named comprehensive evaluation. A comprehensive evaluation is defined in the literature as an evaluation that includes monitoring, process evaluation, cost-benefit evaluation, and, certainly, impact assessment, each element being distinctly different (Beker, 2000). Monitoring helps to determine whether the program is being implemented well as compared to what is planned, which in addition enables continuous feedback on the status of the program implementation. Process evaluation concentrates on how the project operates and focuses on problems in service delivery. Cost-benefit evaluations assess program costs, monetary or non-monetary, and in particular against alternative uses of the same resources and to the benefits being produced by the program. The impact evaluation attempts to determine whether the program had the intended effects on individuals, households, and institutions attributable to the program intervention, and also unintended positive and negative consequences

on beneficiaries. An impact assessment system can be defined as a set of internal and/or external indicators representing the performance of a BDS provider in terms of several areas. The internal dimension represents the provider performance with respect to the BDS which provides agency organization, the personnel profile and qualifications, the cost-effectiveness, profitability among others. The external dimension relates to the small enterprises impact derived from the program, which attempt to determine whether the enterprises would be worse off with out the program.

The impact assessment systems are critical in testing the hypothesis that business development services can produce more sustainable increases in microenterprise productivity than credit alone, and can help to identify the extend at which the program reaches the intended population, impacts the targeted population, and delivers BDS profitably and cost-effective (Hyman and Dearden, 1998). It is fundamental, however, to distinguish between impact in terms of benefits to the businesses, which are the users of BDS, and impact in terms of the development of profitable BDS suppliers. A profitable deliverer of BDS cannot necessarily be equated with client benefits or impact, particularly the smallest-scale and most vulnerable clients in whose welfare donors are presumably most interested (Harper, 2001).

There is now a substantial literature on general methods for tracking the impact of social projects, mostly introduced by international development agencies. Baker (2000) classifies impact assessment systems into Quantitative and Qualitative, and the former into Experimental or Randomized Control Design and Non-experimental or Quasi-Experimental Designs. A succinct description of these methods is introduced next based on the World Bank's document by Baker.

Some basic questions addressing assessment efforts are the following: How did the project affect the beneficiaries? and fundamentally, were any improvements a direct result of the project, or would they have improved anyway?, among quite a few other questions. These questions are not measured directly by the outcome of the project, since there are other factors or events which may be correlated with the outcome but are not caused by the project. The Quantitative Methods attempt to ensure methodological rigor in answering those questions, and doing it takes estimating the counterfactual, which refers to what would have happened had the project never taken place or what otherwise would have been true. To determine the counterfactual, it is necessary to net out the effect of the interventions from other factors, and is accomplished through the use of comparison or control groups (those who do not participate in a program or receive benefits), which are subsequently compared with the treatment group (individuals who do receive the intervention). Control groups are selected randomly from the same population as the program participants, whereas the comparison group is simply the group that does not receive the program under investigation. Both the comparison and control groups should resemble the treatment group in every way, the only difference between groups being program participation.

Qualitative methods concerns with understanding processes, behaviors, and conditions as they are perceived by beneficiaries of the projects, and are able to provide insight into the ways in which households and local communities perceive a project and how they are affected by it. This method can provide critical insights into beneficiaries' perspectives, the value of programs to beneficiaries, the processes that may have affected outcomes, and a deeper interpretation of results observed in quantitative analysis (Baker, 2000).

Either method reviewed in the previous paragraphs requires questions to be asked, analytical structures and indicators to be created, which would depend fundamentally on the data compilation instruments of the program. At the same time, the complexity of the assessment methodology either quantitative, qualitative or hybrid would be dependent upon the kind of support project, its reach, and objectives. In terms of programs supporting microenterprises, Hyman and Dearden (1998) review the monitoring and evaluation systems of four nongovernment organizations providing BDS to MEs in developing countries. The paper compares their approaches to data collection and analysis, uses, and types of impact indicators. They found a diversity of microenterprise programs which makes difficult to specify a standard set of indicators, but provide examples of the questions that can be addressed to introduce a comprehensive assessment system for MEs support programs. Some questions are: How do the type and quality of microenterprise services affect impact?, How have clients fared relative to those without access to microenterprise services and those assisted by other programs?, How does length of participation in the program affect impact'?, Do microenterprise programs empower women and other disadvantaged group?, and what is the impact on institutional development and policies'? In addition to these questions, Hyman and Dearden work suggests indicators at enterprise, household and community level to asses the program impact on the targeted groups. The enterprise level indicators are particularly relevant: number of enterprises, gross income, net income, valued added, change in assets, employment, enterprise management practices, financing, and sustainability of enterprises.

3. The PRATS model of MEs assistance and Impact Assessment Method

3.1 The PRATS Assistance Method

Service-learning is a method of experiential learning that links the classroom with the local community. It requires students to spend time in volunteer service and relate their experiences to the educational theories they learn in the classroom (McGoldrick, 2002). This concept inspires the Program for Research, Assistance and Teaching on Small Enterprises (PRATS), which was crated as a Community Service program in 1999 at the Autonomous University of Baja California, Tijuana. The main objectives of PRATS are to deliver BDS *in situ* at no cost to unprivileged enterprises, conduct research on small firm development, and build up a model of teaching and learning for students in the field of Economics, Business, Management, and surrounding disciplines. From the HEI perspective, PRATS constitutes a Service Learning approach of teaching,

encouraging the students' professional learning, experience and entrepreneurial skills; and a research-action method of doing research while providing care, also making pertinent research. Detailed information for further inquiry on PRATS is provided in Mungaray et. al. (2007).

Students in PRATS attend the microenterprises for a twelve-week period and work as consultants, developing a complete program of data collection, processing and analysis. While the students involve with the entrepreneurs, they transfer knowledge, economic and business concepts, management and technical skills, and information on regulations and institutional environment, allowing these agents acquire some human capital that they would have never gotten otherwise.

The microenterprise-assistance feature of the program is intended to make free provision of Business Development Services by the students. The main service is training, which is aimed to develop human capital in the organization by transferring marketing, accounting, finance, and cost techniques; business concepts, as well as some economic education, as to improve entrepreneurs' assets for their livelihood. Other services are also provided such as economic and financial assessment; cost analysis, market analysis, and marketing strategies are introduced to assess the performance of the enterprise. With this, the students as consultants gather elements to provide counsel to the enterprise on how the business can be improved, or whether the business is able to be financed for investments profitably by a microfinance institution.

The assistance method uses a set of instruments and tools to formalize the relation between the entrepreneurs and the University. The main of them are Agreement, Diagnosis, and Schedule of Indicators. The Agreement is a written document subscribed by the entrepreneurs and the supporting institution which formalizes the participation of the MEs in the program. The Diagnosis is a comprehensive survey applied by the students at the beginning of the assistance phase which constitutes a baseline to start intervention and includes preliminary information about the enterprise. The Schedule of Indicator is a record of the enterprise's operations and indicators on a daily or weekly basis, such as sales, output, costs, usage of inputs, wages, among other variables.

At the end of the assistance period, students analyze the ME data, use a set of economic and financial techniques to assess the enterprise and elaborate a report on the status of the enterprises, recommendations for improvement, and microfinance feasibility, which is signed by the University.

3.2 The MEs Impact Evaluation Method

The PRATS project is ample in terms of its objectives. It could incorporate several dimension of impact beyond the MEs perspective, which certainly would be fundamental in the program. A comprehensive evaluation would take digging out into MEs, students, University, and faculty perspectives, in order to net out the overall outcome, which is currently in progress. In this paper, the MEs impact from the program, which is embedded as part of the comprehensive, is reported, which certainly would provide an alternative and different perspective, but yet rigorous, to approach impact on MEs derived from the program. The method

employed is quantitative in that it attempts to determine the effects derived from the project on MEs, and fundamentally, if any improvements can be considered direct result of the project.

The method relies on data collected by the consultant students with the use of the Schedule of Indicators defined earlier, which captures the daily figures of the MEs. Three dimensions of enterprises performance are followed overtime: Technical, Market and Profitability, where the notion of learning curve play an important role in the statistical significance of the results. The learning takes place through time with the acquisition of knowledge, which is the result of experience and is reflected in the improvement of skills, routines and problem solving. In the firm, learning by experience processes are acquired during activity and are materialized in quality products, machinery and tools, as well as on a competent organization, thus increasing the efficiency in the production of goods, that is at least stimulated by the productive process itself (Rosen, 1972). Learning in the firm may be reflected in different indicators of ME performance associated to the three dimensions: Average cost c_t , (technical dimension), Revenues R_t (Market dimension) and Profits π_t (Profitability dimension). The link between these variables and the support program is the idea of learning over the intervention period (12 weeks as suggested in the previous section), which is measured by learning curves arranged to fit these dimensions as shown in equations 1, 2 (or 2a) and 3 below.

$$(1) \ln c_t = \beta_0 + \beta_1 \ln n_{t-1} + \beta_2 \ln y_t$$

$$(2) \ln(R_t) = \phi_0 + \phi_1 \ln n_{t-1} + \phi_2 \ln y_t$$

$$(2.a) \ln(R_t) = \phi_0 + \phi_1 \ln n_{t-1}$$

$$(3) \ln(\pi_t) = \alpha_0 + \alpha_1 \ln n_{t-1} + \alpha_2 y_t$$

Equation 2.a is incorporated to estimate learning when changes in output equal changes in revenues, which may be the case if product prices do not vary over the period. In this case, equation 2 does not hold. If prices change, then revenues changes would be consequence of changes in prices and changes in output, thus separating the effects would be possible with equation 2.

As suggested in Berndt (1991), the change of the variables under analysis over time is dependent upon the evolution of experience or cumulative output n_{t-1} and the scale or output y_t . Experience in the context of this method is associated with the period of intervention, which takes the shape of cumulative output. Thus, what the method determines is the presence of statistically significant changes in the performance variables c_t , R_t and π_t during program intervention and enterprise participation. By introducing scale, the model controls for some variables affecting performance which are related to the activity level of the enterprises. This leaves more room to separate the learning component which is supposed to be the result of assistance during participation in the program.

Equations 1-3 are estimated by using ordinary least square, since data by enterprise run on a daily basis for 12 weeks, times series econometric problems would be neglected. The impact of the assistance over the enterprise considered as learning is determined econometrically by analyzing the overall significance of

the model in terms of F-test, which test jointly the parameters in the multiple regressions and verifying the theoretically expected signs in equations for the program expected impact to materialize: $\beta_1 < 0$, $\Phi_1 > 0$ and $a_1 > 0$. Quantitative methods of impact assessment usually consider the counterfactual, which refers to what would have happened had the project never taken. To determine the counterfactual, it is necessary to net out the effect of the interventions from other factors, and is accomplished through the use of comparison or control groups. Since the data base available to practice the evaluation is derived from the participating MEs in PRATS, it is not possible to use control groups, rather a baseline is established to track the evolution of the performance variables over the intervention period, which is the initial figures of the MEs and then the effect of the 12-week intervention is captured by the experience component of the equations. Since the delivery method of PRATS is *in situ*, which takes getting the students in the MEs several times a week during 12 weeks in which the collect data and provide assistance, assigning control groups would not be feasible given the nature of the program.

3.3 The Sample of participating MEs

The assessment method is applied to 220 MEs participating in PRATS from the Mexican states of Baja California and Nayarit, which were supported during different points in time a long 2001-2007 period and had at least 20 time series to the perform assessment. The number of daily observations of the assessed MEs ranges from 20 to 84. This sample was selected from 425 MEs registered in the program, not all having enough number of time series to perform analysis. This fact is explained for several reasons: Some enterprises may have accepted to participate in the program and then as intervention progressed they either refused to provide data, exit the market or switch to different activity, showed intermittent business, or the consultant students drop the project and the associated academic units. Although these factors are relevant to the project and particularly to a comprehensive evaluation, they would not challenge the impact assessment on MEs conditional to full participation.

Female entrepreneurs represents the majority (60%), whereas males the remaining 40%. The MEs in sample produce processed food (50.4%), metal products (5.7%), offer services (17.2%) and 26.7% are traders. Annual income in 2003 prices averaged \$107,240 pesos for female and \$ 167,656 for male entrepreneurs, which corresponds to an income per employee of \$56,468 and \$ 88,240 respectively. These figures are about 50% of formal MEs counterparts in Mexico, whose information is available in the official source.

Working experience of the male entrepreneurs prior to running their businesses are employees, traders, students or even entrepreneurs producing hand crafted production of food. Female entrepreneurs had previous activities such as home wife, or were not working. The enterprises of the sample have been business for short time, most of them having under five years of operation (73%), with a significant proportion of having been operated for one year (25%).

The MEs employ 1 to 3 workers (80%), so they are basically self-employment units employing few workers. The average worker age per ME, including the

owner, ranges 16 to 78 years. The age structure resembles bell shape because they the number of entrepreneurs increases with age, reaches a maximum age (43 years old) and then drops. Most of entrepreneurs are married, having one to three children. Income generated by the ME represents the main source of the household income, half of it in 44.1% of females and 60.2% of males. In about one third of the entrepreneurs the MEs contribute to 91% to 100%.

3.4 The Impact Assessment Outcome

Results derived form estimation of equations 1-3 are exhibited on next chart. The econometric report for each assessed ME is located in the Appendix section.

	Equation		
	1	2	3
	$\beta_1 < 0$	$\phi_1 > 0$	$\alpha_1 > 0$
Num. of MEs	107	75	86
%	49	35	39
Prob. F-statistic (95%)			

Results of equation 1 suggest evidence of learning, an inverse relationship between average cost and cumulative output, in 49% of the cases. This reflects the development of learning processes at the technical dimension in 107 MEs. For equation 1 and 2 (2.a), learning processes in market and profitability dimension are evidenced in 35 and 39% of the MEs respectively. In these cases we expected a positive relation between of revenues and profits with respect the experience of intervention with the program, that is, cumulative output.

The preceding results show the ability of MEs to embark on learning process in different dimension with support programs. MEs can learn and establish a direct relationship with their income. At this dimension, the intervention period focuses on whether the enterprises are able to improve their revenues with their experience in the program, which is the consequence of market improvements. The third dimension (equation 3) determined that intervention could encourage improvements in profits, setting the MEs in a better position in terms of welfare. In this sense, impacts can match the skills they develop to establish a greater margin between costs and revenues the company.

In general, 13% of MEs showed evidence of learning simultaneously in the three dimensions assessed in this work. At the other extreme, MEs that exhibited learning in at least one method is 65%, so seven out of 10 derived positive effect with intervention of the program. As counterpart, 37% of the MEs showed no statistical evidence of improvement in any of the dimensions assessed.

4. Conclusion

The contribution of service learning strategies to support microenterprises was approached through the estimation of learning curves in three different dimensions: technical, market, and profitability. The objective of this procedure was proposing an alternative impact assessment method to measure the extent to which the MEs benefited from BDS delivered through service learning programs. A comprehensive evaluation is not yet introduced to assess the overall program, which is research on progress.

The assessment method suggested that 67% of the MEs benefited in at least one dimension of analysis, whereas 49%, 35% y 39% benefited in terms of the technical dimension, market dimension, and profitability dimension. From this result, is relevant to explain why some MEs could learn and improve from the program and getting in touch with college students, although it is not possible to conjecture that all learning experiences in the sample relate to the service learning program, the incorporation of control variables associated to multiple factors, contributed significantly to improve the probability of that conjecture. One explanation regards the knowledge spillovers taking the form of basic principles of economics, unsophisticated ideas, advice, hints, technical aspects, including motivational stimulus, and some general economic education to improve decision making. Another explanation regards a some what similar reasoning which applies in situations where the entrepreneurs are engaged full time in a routine of production-distribution in their business, and have no time left to do the planning and think about how to do things better as to rise profitability. It may be that entrepreneurs have reached a point where no new ideas are generated due to fatigue. The consulting services by the students focused naturally on the planning and serve as a refreshing flow of ideas complementing the experience of the entrepreneurs and bringing good consequences on the firm performance.

The incorporation of service learning programs in challenged MEs contribute to an important discussion on how to deliver BDS to a large segment of enterprises, a concern that no country can evade, and to current discussion on development and poverty alleviation. Service learning programs such as PRATS has the potential to benefit developing countries in a three-fold ways: by deepening the social returns of public resources devoted to education, complementing industrial policy with specific programs suitable to the increasing sector of MEs, and by highlighting the social relevance of the work done by higher education institutions. Particularly to the economics, finance, business management and related disciplines, Service learning may be a complementing teaching strategy providing an alternative motivating experience of learning contributing to improve higher education.

5. References

Berndt, E. 1991, .The Practice of Econometrics: Classical and Contemporary, Addison Wesley, New York.

Baker, J, 2000, Evaluating the Impact of Development projects on Poverty World Bank Publication

Committee of Donor Agencies for Small Enterprise Development, 2001, "Business Development Services for Small Enterprises: Guiding Principles for Donor Intervention". Also known as the "Blue Book".

Donor Committee on Small Enterprise Development, 1997, "Business Development Services for SMEs: Preliminary Guideline for Donor-Funded Interventions", October.

Goldmark, Lara, 2001 "Microenterprise development in Latin America: Towards a New Flexibility", Journal of Socio-Economics, 30, pp.145-149.

Harper, M., 2001, Business Development Services for Micro-Enterprises, Enterprise Development Impact Assessment Information Service (EDIAIS), Application Guidance Notes

Hyman. E. and Kirk, D., 1996, A review of impact information systems of NGO microenterprise programs. Management Systems International. Prepared for USAID AIMS Project. Washington. DC.

Hyman, E. and Kirk, D, 1998, "Comprehensive Impact Assessment Systems for NGO Microenterprise Development Programs". World Development. Vol. 26 (2), pp. 261-276.

Inter-American Development Bank, 1997 "Microenterprise Development Strategy".

International Labor Organization, 2003, BDS Reader: Developing Commercial Markets for Business Development Services, BDS Primer by Miehbrandt, A. & McVay, M. for ILO SEED.

McGoldrick, K., 2002, "Using the Theory of Service-Learning as a Tool for Teaching Economic Theory" in Putting the Invisible Hand to Work: Concepts and Models for Service-Learning in Economics, KimMarie McGoldrick & Andrea L. Ziegert Ed. Edward Zlotkowski, Series Ed, 2002 11-26

Mungaray, A., Ramírez-Urquidy, M., Taxis, M., Ledezma, D. y Ramírez, N., 2007 "Promoting Learning in Small Entrepreneurs and Higher Education Students Through Service Learning Programs", International Journal of Business Research, IJBR, Volume VII, Number 3, pp. 10-28. ISSN: 1555-1296

Pietrobelli, C. and Rabelloti, R., 2002, "Business Development Services Centers in Italy, an empirical of three regional experiences: Emilia, Romagna Lombardia Veneto" Cepal, Santiago Chile.

Rosen, S. 1972, "Learning by Experience as Joint Production" Quarterly Journal of Economics, 86 pp. 366-82.

Sievers, M., Haftendorn, K. & Bessler, A., 2003, "Business Centres for Small Enterprise"

Development Experiences and Lessons from Eastern Europe, ILO SEED Working paper No. 57.

United Nations Development Programme Business, 2004, "Business Development Services: How To Guide", July, Bratislava Regional Centre

What Can be Learned from Students' Written Comments on Instruction?

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Abstract

Extensive research has been done on student ratings given on closed-ended questionnaires, but little research has examined students' written responses to open-ended questions. This study investigated the written comments of students in 198 classes, focusing on their frequency, content, direction, and consistency with quantitative ratings on closed-ended items. Results indicated that about 45% of the students wrote comments. Comments were more often positive than negative and tended to be general rather than specific. Written comments addressed dimensions similar to those identified in the closed-end items, but they also related to unique aspects of the courses as well.

Keywords: teacher evaluation - student written comments - student ratings

1. Introduction

The intensive and nearly exclusive use of student ratings for evaluating instruction in higher education has led to extensive research of both their psychometric qualities (reliability and validity) and their relationship to potential biasing factors (e.g., Cashin, 1995, 1998; Feldman, 1976, 1989, 1993; Marsh, 1987; Obenchain et al., 2005; Renaud & Murray, 2005; Watchel, 1998). Studies have focused on Likert-type questionnaires made up of a series of statements which address different aspects of instruction. Although this type of closed-ended questionnaire is the most common, there exist two other kinds of course evaluation questionnaires:

(1) questionnaires on which students write freely in response to open-ended questions, and (2) questionnaires which contain a combination of both closed-ended and open-ended items (Sheehan & DuPrey, 1999). Both types contain items that generate data in the form of written comments. Despite the extensive research literature on course evaluation, little is known about the quality of data obtained from students' written comments, their content, and the relationship between them and other variables.

Panasuk and Lebaron (1999) reported an attempt to combine open and closed instruments in a situation in which course evaluation took place periodically throughout the semester. Their closed-ended instruments addressed different aspects of instruction, including contents, materials, relevance, instructional

strategies, and organization. In their study, open-ended feedback was classified into three categories: contribution to learning, lack of contribution to learning, and suggestions as to how to increase learning. Their paper describes the evaluation procedure but does not report research data.

Several studies directly examined students' written comments within an institution's course evaluation scheme. In one study carried out by Braskamp, Ory and Pieper (1980, in Centra, 1993), strong relationships were found between the statistical results of a closed-ended questionnaire, students' written comments, and evaluations given in group interviews. In a later study conducted by the same researchers (Braskamp, Ory & Pieper, 1981 in Centra, 1993), over 3,000 comments written by students were analyzed. Two-thirds of the comments were positive. Many of the dimensions of instruction which are often identified from factor analyses of results using closed-ended instruments were addressed in students' written comments, such as whether or not an instructor comes prepared to class, the teacher-student relationship, course content, and course organization. Students most frequently referred to the instructor's ability to communicate with students clearly. A strong positive correlation was found between students' written comments and their quantitative ratings of instruction. In a different context in which medical school students in clerkship positions were assessed by evaluators, Frohna and Stern (2005) also found a correlation between ratings and comments, as well as a tendency for evaluators to be positive in their written comments.

In a recent study by Zimmaro and colleagues (2006) 4,480 course evaluation responses in 100 course sections were analyzed and coded. Unlike the finding in an earlier study carried out by Theall and Franklin (1991) who reported that only 10% of the students wrote comments, 41% of the students in the Zimmaro and colleagues' study wrote some form of comment. Similar to the studies mentioned above, positive comments were twice as common as negative comments. The two most common dimensions addressed by the students in this study were teaching skills of the instructor and course quality. Positive comments tended to be more general, whereas negative comments related to more specific aspects of the course.

It appears that instructors tend to prefer receiving written comments from students as opposed to the statistical summaries generated from responses to closed-ended questions (Centra, 1993; Lewis, 2001; Svinicki, 2001). Students' written comments are more likely to result in better teaching as compared to statistical summaries (Nasser & Fresko, 2002), since they often make concrete suggestions for improvement (Centra, 1993; Hammond, Taylor & McMenamin, 2003). Articles have been published suggesting various ways in which instructors can organize and analyze students' comments in order to learn from them and improve instruction (e.g., Hodges & Stanton, 2007; Lewis, 2001; Svinicki, 2001).

The purpose of the present study is to add to this small body of knowledge surrounding open-ended questions on course evaluation questionnaires. At the college where this study took place, the course evaluation instrument was of the mixed type, containing both Likert-type items and open-ended questions. Students' responses to the open-ended questions were analyzed in order to answer the following questions:

1. To what extent do students respond to the open-ended questions and provide comments about the courses?
2. What are the areas and dimensions of instruction most frequently commented upon?
3. What is the direction of student comments (positive or negative)?

2. Method

2.1. Sample

Comments written by students in 198 different undergraduate courses in an Israeli teacher training college that grants a four-year bachelor degree in education were analyzed. Only lecture style courses were included in the sample and one course per instructor was randomly selected. On the average, 70% of students per course completed the course evaluation questionnaire. The exact number of students who participated in the study is unknown since some students were undoubtedly studying in more than one of the courses sampled. Overall, 3,067 questionnaires were analyzed.

Courses in the sample include both introductory and advanced courses in the educational sciences, social sciences, natural sciences, and humanities, as well as professional training courses. About half were of one semester duration, while the others were year-long. The student population at this college is predominately female and in 30% of the courses in the sample all students were female.

The instructors in these courses (N=198) were two-thirds female, with 23 years of teaching experience on the average. Approximately 78% were tenured faculty and half held a doctoral degree.

2.2. Research instrument

The course evaluation questionnaire was made up of two parts. In the first part students were presented with 17 Likert type items: 16 items related to various dimensions of instruction and one item was general. They were asked to indicate to what extent each statement described what happened in the course on a 7-point scale from 1 "very little" to 7 "very much". The second part of the questionnaire included two open-ended questions, which asked students to add any comments on different aspects of the course and to give specific recommendations for improving the course. An entire page was provided for their responses.

2.3. Research variables

2.3.1. Written comments

What each student wrote was decomposed into meaning units, which were sorted into categories and coded according to direction (positive or negative) and intensity (from +2 to -2). This procedure was carried out by three independent raters. A coding scheme was developed based on a preliminary analysis of one-third of the comments. Each rater independently decomposed the comments into meaning units. Forty five content categories were identified, which related to the focus (course, instructor, or fellow students), the primary content area (e.g., teaching style, teacher personal attributes, course content), and the secondary content area (e.g., interest generated, structure, clarity, difficulty). Each meaning unit was assigned a score ranging from -2 to +2. A meaning unit which expressed a very positive evaluation was assigned a score of +2; a mildly positive meaning unit received a score of +1; a mildly negative meaning unit was assigned a score of -1; and a strongly negative meaning unit was assigned a score of -2. Extreme scores (± 2) were assigned in three different situations: when the meaning unit contained strong descriptors (fantastic, horrible); when the meaning unit included superlatives ("the best", "very"); and when several meaning units referred to the same category (and then that category was coded only once with an extreme score).

Using the above 45 categories, the three raters working together decomposed and analyzed students' comments on 12 courses. The purpose was to increase uniform application of the coding scheme. Then, Inter-rater reliability was examined for an additional 25 courses which were independently rated by each rater using the coding scheme. Inter-rater reliability was calculated for four parameters: number of identified meaning units, their classification into categories, and the intensity of the score assigned to them, and its direction.

The percentage of agreement among all three raters was 100% for direction. Less, but satisfactory agreement was reached with regards to classification of comments into categories and their intensity. Content analysis and coding of the remaining comments were completed for all courses in the sample.

For each of the 45 categories an aggregate score was computed for each course by summing the scores for all the students on that category and dividing by the number of students in the course who had written comments of any kind. In the case in which no student related to a particular category, the score assigned to the course in this category was zero. In this manner, 45 aggregate variables were created.

The 45 categories were conceptually grouped into eight dimensions: general evaluation of the course, general evaluation of the instructor, course content, scheduling issues, characteristics of course assignments, instructor personal traits, instructional style, and student characteristics. A score was created for each dimension by averaging the specific category scores. In addition, a general score was calculated by averaging the scores on the five most frequently mentioned dimensions.

3. Findings

3.1. Frequency of written comments

On the average 44.8% of the students per course wrote comments (SD =21.1%). The percentage of students writing comments ranged from 5% to 100%. Moreover, the percentage of students writing comments was found to be correlated to student ratings on the closed section of the questionnaire. Students in highest and lowest rated courses tended to write more comments. When courses were sorted into quartiles according to student ratings, student in courses belonging to the highest and lowest quartiles wrote more comments (53% and 46%, respectively) than those in the second and third quartiles (38% and 42%, respectively). These differences were statistically significant ($F = 4.28$, $p = .006$).

3.2. What do students write?

Three measures were calculated for each of the 45 categories:

1. The mean percentage of students in each course who wrote comments
2. The percentage of courses in which the category was mentioned
3. The mean category score from which the magnitude and direction of the comments could be ascertained.

Table 1 summarizes the results. Findings indicate that only six of the 45 categories were mentioned by at least 10% of the students on the average. These categories were general evaluation of the instructor, general evaluation of the course, interest generated by the course, interest generated by the instructor, learning in the course, and clarity of instruction. Categories related to the instructor's personal traits, course schedule, course assignments, and student traits were all mentioned less frequently. It was found that students had a tendency to write more general comments about the course or the instructor as opposed to specific comments, and they referred more to interest in course content and learning as opposed to the more technical aspects of teaching.

Both positive and negative meaning units were identified for all 45 categories. However, more positive meaning units (59%) than negative ones (41%) were found. For example only five of the 18 most-mentioned categories (those mentioned by at least 5% of the students) had a mean score which was negative: scope of material covered in the course, relevance of content taught, variation in instructional methods, the degree to which instruction is systematic and structured, and the relation between this course and other courses in the study program. The most positive meaning units related to evaluation of the teacher in general ("He's a great teacher"), evaluation of the course in general ("It was one of the best courses I have taken"), how interesting the course was, how interesting the teacher was, and how much the student learned from the course.

Table 1. Mean percentage of students in course who commented, percentage of courses in which students commented, and mean coded score per category

<i>Focus</i>	<i>Primary content area</i>	<i>Secondary content area</i>	<i>Mean percentage of students who commented on category</i>	<i>Percentage of courses in which students commented on category</i>	<i>Mean coded score on the category</i>
Instructor	General	General evaluation	23.12	67.7	+.387
	Teaching	Interest	14.87	49.0	+.113
		Clarity	10.04	41.4	+.070
		Structure	8.66	35.9	-.014
		Classroom environment	8.26	37.4	+.078
		Diversity of methods	6.83	31.8	-.011
		Contribution to learning	5.23	26.3	+.068
		Activating students	5.20	23.7	+.029
		Efficiency of time use	4.70	20.7	-.037
		Combining theory and practice	4.44	19.7	-.003
		Use of teaching aids	3.49	16.2	+.009
		Pace	1.59	8.6	-.019
		Supervision quality	1.01	6.1	-.001

Table 1 continues ...

<i>Focus</i>	<i>Primary content area</i>	<i>Secondary content area</i>	<i>Mean percentage of students who commented on category</i>	<i>Percentage of courses in which students commented on category</i>	<i>Mean coded score on the category</i>
	Personal traits	Conduct towards students	8.94	38.4	+ .052
		Flexibility and consideration	8.31	37.4	+ .032
		Professional competence	6.72	32.8	+ .088
		Commitment	4.06	19.2	+ .044
		Emotional support	1.90	10.6	+ .018
		Ability to influence students	1.83	8.1	+ .022
		Responsiveness	1.63	8.6	+ .021
		Sense of humor	0.71	4.0	+ .012
Course	General	General evaluation	15.23	51.5	+ .242
	Content	Interest	16.87	56.1	+ .178
		Contribution to learning	16.29	53.5	+ .111
		Scope	7.74	34.3	- .028
		Relevance	6.96	31.8	- .030
		Compulsory	5.49	27.3	- .048
		Importance	5.40	28.8	+ .064
		Difficulty	3.28	15.7	- .039

Table 1 continues ...

<i>Focus</i>	<i>Primary content area</i>	<i>Secondary content area</i>	<i>Mean percentage of students who commented on category</i>	<i>Percentage of courses in which students commented on category</i>	<i>Mean coded score on the category</i>
		Match with syllabus	1.01	4.0	-.011
		Combining theory and practice	1.01	5.1	-.007
	Assignments	Quantity	3.18	15.2	-.039
		Relevance	2.95	15.7	-.026
		Difficulty	2.67	15.7	-.041
		Clarity	2.63	14.1	-.024
		Contribution to learning	1.35	8.6	+.014
		Timing	1.17	5.1	-.004
Context	Scheduling	Length of course	3.12	10.1	-.029
	issues	Hour of class meetings	0.93	3.5	-.010
		Sequence in training program	0.51	0.5	-.005
	Student composition	Class size	1.40	6.6	-.020
		Heterogeneity	0.57	4.5	-.006
		Discipline problems	0.57	4.5	-.008
		Overall academic level	0.29	3.0	-.001
		Overall motivation	0.10	0.5	-.001

4. Summary and Discussion

Apparently not all students make the effort or feel the need to add written comments to the numerical ratings on course evaluation questionnaires. In this study less than half of them added some form of comments which ranged from a single word to several sentences. This finding is similar to that reported by Zimmario and her colleagues (2006). Moreover, students in the college where the present study was conducted tended to write comments when the course evoked relatively strong reactions, either positive or negative.

Several explanations could be given to explain why a large percentage of students did not provide written comments. One possibility is that many students felt that they did not have anything to add beyond the numerical ratings. Another possibility is that they had no faith in the impact of their comments on instruction, teacher behavior, and course content, a claim put forth by Svinicki (2001) and supported by Spencer and Schmelkin (2002). Also, lack of student motivation to provide comments may have stemmed from the fact that the questionnaire was given at the end of the course and their suggestions, if adopted by the instructor, would not affect them personally. Yet another possibility is that students were reluctant to provide written comments, because they feared that their evaluations would be used against them. However, a survey of students' perspectives on course evaluation conducted at a private comprehensive university in the USA indicates that students are willing to complete course evaluations and have little fear of repercussions (Spencer & Schmelkin, 2002). Future research is needed to empirically examine students' reasons for writing, or not writing, comments.

Content analysis of the comments indicated that three major areas were most commonly addressed: general course and instructor evaluation, the interest generated by the course and instructor, and the extent to which the students learned from the course (contribution and clarity of teaching). The fact that general comments were more frequent than almost any specific comment can be interpreted in several ways. First of all, it is probably easier and quicker to write a short general statement rather than to go into detail about various specific aspects of a course. This explanation has some validity in the present study, if we take into account that the course evaluation questionnaire presented only general open-ended questions rather than questions that specified which course aspects should be addressed. Secondly, since the closed items which appear first on the evaluation questionnaire addressed specific aspects of the course, students may not have felt the need to repeat their ratings in words, feeling that a brief inclusive statement would suffice. Still another possible reason is that students lack the skills required to provide detailed and useful feedback. As Svinicki (2001) claims, students can acquire these skills only if they are themselves provided with feedback on the quality of their comments to the instructor, a situation which is rare if existent at all.

Comments related to assignments, scheduling, and fellow students were least frequent. When students did relate to these areas, they tended to be critical. Apparently these factors become salient mainly when students feel that they interfere with achieving their own personal goals in relation to the course.

As to the personal traits of the instructor, all eight categories tended to be mentioned positively. However, four traits (treatment of students, flexibility and consideration, professional competence, and commitment) were mentioned more frequently than the others (providing emotional support, ability to influence students' attitudes towards the subject, responsiveness to students' needs, and sense of humor). The more frequently-mentioned personal traits tended to relate to qualities which are perhaps more essential to good teaching. In essence they related to the competences of the instructor, his or her motivation to teach, and his or her caring behavior towards the students. The other set of personal traits are apparently perceived by the students as less central to quality instruction.

Overall, students tended to write more positive comments than negative. Similar findings were reported by others (Braskamp, Ory, & Pieper, 1981; Frohna & Stern, 2005; Zimmaro et al., 2006). Possible explanations for writing positive comments are similar to those for not writing at all. For example, students may be reluctant to express criticism because they fear that the instructor will identify their handwriting and unfavorable comments will negatively affect their grades. Likewise, it is possible that many critical students did not write comments at all in the belief that they have no impact on improving instruction anyway so why bother, thus reducing the number of negative comments actually received.

Analyzing students' written comments and sorting them into meaningful categories is of great importance for making sense of them, as pointed out by Lewis (2001). Imposing some structure on the comments should make them more comprehensible to instructors and could possibly yield better insights into teaching, thereby enabling instructors to take informed actions for improving their teaching practices. Moreover, in order for written feedback to be effective, it may be preferable to administer open-ended questions at different times throughout a course rather than at the end. This way the instructor can relate to the comments and students will be more likely motivated to put an effort into writing meaningful comments.

Despite the contribution of the present study to understanding students' written feedback on teaching, more research is needed. This study examined comments provided by students in response to two general questions after completing a closed-ended questionnaire. Future research should investigate students' comments which are given before they respond to closed-ended items and comments provided on questionnaires containing open-ended questions only. In addition, responses to open-ended questions which focus on specific aspects of the course, the teacher, and instruction need to be compared to responses to general open-ended evaluation questions. Furthermore, because of the importance attributed to students' written comments by instructors and their potential impact on the quality of instruction, studies in various types of institutions of higher learning, in other countries, and with different instruments will strengthen confidence in the validity of the information obtained using open-ended course evaluation measures.

5. References

- Cashin, William E. (1995). Student ratings of teaching: The research revisited, IDEA paper No. 32. Manhattan, KS: Kansas State University, Center for Faculty Evaluation and Development.
- Cashin, William E. (1998) Student ratings of teaching: A summary of the research, IDEA paper No. 22. Manhattan, KS: Kansas State University, Center for Faculty Evaluation and Development.
- Centra, John, A. (1993). *Reflective faculty evaluation: Enhancing teaching and Determining faculty effectiveness*. San Francisco: Jossey-Bass.
- Feldman, K. A. (1976). A superior college teacher from the student's view. *Research in Higher Education*, 5, 243-288.
- Feldman, K. A. (1989). Instructional effectiveness of college teachers as judged by teachers themselves, current and former students, colleagues, administrators, and external (neutral) observers. *Research in Higher Education*, 30, 137-189.
- Feldman, K. A. (1993). College student views of male and female college teachers: Part II-evidence from students' evaluations of their classroom teachers. *Research in Higher Education*, 34,151-211.
- Frohna, A. & Stern, D. (2005). Professional attitudes and behavior: The nature of qualitative comments in evaluating professionalism. *Medical Education*, 39(8), 763-768.
- Hammond, I., Taylor, J., & McMenamin, P. (2003). Value of structured participant evaluation questionnaire in the development of a surgical education program. *Australian & New Zealand Journal of Obstetrics & Gynaecology*, 43(2), 115-118.
- Hodges, L. C. & Stanton, K. (2007). Translating comments on student evaluations into the language of learning. *Innovations in Higher Education*, 31, 279-286.
- Lewis, K.G. 2001. Making sense of student written comments. *New Directions for Teaching and Learning*, 87, 25-32.
- Marlin, J. W. (1987). Student perception of end-of-course evaluations. *Journal of Higher Education*, 58(6), 704-716.
- Marsh, H. W. (1987). Students' evaluations of university teaching: Research findings, methodological issues and directions for future research [Entire issue]. *International Journal of Educational Research*, 11(3).
- Nasser, F. & Fresko, B. (2002). Faculty views on student evaluation of college teaching. *Assessment and Evaluation in Higher Education*, 27(2), 187-198.
- Obenchain, K. M., Abernathy, T. V. & Wiest, L. R. (2005). *The reliability of students' ratings of faculty teaching effectiveness*. *College Teaching* 49, no. 3: 100-104.
- Panasuk, R. M. & Lebaron, J. 1999. *Student feedback: A tool for improving instruction in graduate education*. *Education*, 120(2), 356-368.
- Renaud, R. D. & Murray, H. G. 2005. *Factorial validity of student ratings of instruction*. *Research in Higher Education*, 46(8), 929-953.
- Sheehan, E. P. & DuPrey, T. (1999). *Student evaluations of university teaching*.

Journal of Instructional Psychology, 26(3), 188-193.

Spencer, K. J. & Schmelkin, L. P. (2002). Student perspectives on teaching and its evaluation. *Assessment & Evaluation*, 27(5), 397-409.

Svinicki, M. D. (2001). Encouraging your students to give feedback. *New Directions for Teaching and Learning*, 87, 17-24.

Theall, M. & Franklin, J. (1991). Using student ratings for teaching improvement. *New Directions for Teaching and Learning*, 48, 83-96.

Watchel, H. K. (1998). *Student evaluation of college teaching effectiveness: A brief review*. *Assessment & Evaluation in Higher Education*, 23(2), 191-211.

Zimmaro, D. M., Gaede, C. S., Heikes, E. J., Shim, M. P. & Lewis, K.G. (2006). A study of students' written course evaluation comments at a public university. Retrieved April 20, 2008 from:

<http://www.utexas.edu/academic/mec/publication/pdf/fulltext/courseevalcomments.pdf>

Mathematics Achievement of Fifth Grade Students: The Role of Mother's and Child's Beliefs about Mathematical Ability

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Abstract

The purpose of this study was to model mathematics achievement of 5th grade students in terms of child's sex, mothers' gender-stereotyped beliefs, the interaction of child's sex and mothers' gender-stereotyped beliefs, mother's specific beliefs about child's mathematics ability, child's perception of mother's specific beliefs about child's ability, and child's self-conception of his/her mathematical ability. Data were obtained from a randomly selected sample of 246 fifth grade boys and girls from all elementary schools in the northern part of Israel and from their mothers. Questionnaires for mothers and children and a national test in mathematics were used to collect the data. Results indicate that the hypothesized model does not fit the data. An alternative model from which child's perception of mother's specific beliefs about her child's ability and the interaction between child's sex and mother's gender stereotypic beliefs were excluded fits the data well accounting for a significant amount of variance in mathematics achievement.

Keywords: Mathematics achievement - mother's gender - stereotyped beliefs - child's self-conception

1. Introduction

In many countries the scores of boys and girls in mathematics on international tests, such as TIMSS and PISA, are comparable. In a few countries, however boys continue to outperform girls. One of these cases involves the Jewish community in Israel. The gap in mathematics achievement between boys and girls on national and international tests stimulates interest in studying the factors that potentially influence achievement in mathematics for each gender.

A large body of literature has recognized the influence of parents' beliefs on their children's academic performance and their attitudes towards achievement (e.g., Jacobs, 1992; Parsons, Adler, & Kachzala, 1982). In particular, parents' beliefs seem to play a considerable role in mathematics achievement even when gender differences in attitudes are greater than differences in performance (Chapman, Brush, & Wilson, 1985). Research has shown that compared to parents of girls, parents of boys are more likely to report that mathematics is more important than other subjects, are more likely to attribute high mathematics performance to ability than to training and effort (Parsons et al., 1982; Holloway & Hess,

1985). These findings imply that parents possess gender-differentiated beliefs about mathematical competence.

Despite available evidence for parents' gender stereotypes and parents' beliefs about their children's abilities, the link between the two was not investigated until the early 1990s (Jacobs, 1991). More recent research suggests that parents and other adults possess beliefs regarding the appropriateness of certain behaviors for each sex (e.g., Jacobs, 1991; Jacobs & Eccles, 1985, 1992, 2000; Perloff, 1977). These general gender beliefs are likely to impact parents' judgments regarding their child's self-conception of mathematical ability and achievement in mathematics.

Social and psychological research suggests that parents' gender stereotypes about the relative abilities of boys and girls are likely to impact their beliefs about their child's ability also when information about the target person is available (e.g., Darley & Gross, 1983). These findings have important implications for parents because the stereotypes they possess may impact the way they interpret their children's behaviors, leading them to transmit messages consistent with the stereotypes they hold.

Evidence regarding the sex-specific effect of gender stereotypes was found in previous research indicating that parents' beliefs depend on the gender of their child (Parsons et al., 1982; Jacobs & Eccles, 1985). This implies that it is the interaction of stereotype and child gender that influences parents' specific beliefs about their child's mathematical abilities rather than stereotypes alone. If parents possess stereotypic beliefs that boys are better than girls in mathematics, then they are likely to allow their stereotypes to lower their perception of their daughter's mathematical ability and to raise their perceptions of their son's. Thus, a test of parents' gender stereotypes is actually a test of the effects of the interaction of stereotypes and child sex on parents' beliefs about the child.

Through the parent-child interaction, parent's specific beliefs about child's mathematical ability are expected to play a critical role in socializing boys and girls' self-conception of their mathematical competence through children's perceptions of their parents' beliefs regarding their mathematical ability (Eccles & Jacobs, 1992; Jacobs, 1991). Parent's positive beliefs about their child's mathematical ability are expected to exert a positive effect on the child's self-conception of their mathematical ability, which in turn exerts a positive direct effect on his or her achievement in mathematics (Jacobs, 1991, Nasser & Birenbaum, 2006).

Eccles and her colleagues (e.g., Eccles [Parsons], 1984; Eccles [Parsons] et al., 1983) have proposed a model of parental impact in which parents play an "expectancy socializer" role. They suggested that parents convey their expectations for their children by transmitting different messages concerning their beliefs about their children's abilities depending on the child's sex. Eccles [Parsons] et al. (1983) proposed a general model in which cultural factors, such as stereotypes, are expected to impact parents' beliefs about their child's abilities. However, Parsons et al. (1982) focused on parents' specific beliefs regarding their children's abilities rather than on cultural variables. Jacobs (1991) noted that focusing on beliefs about a specific child is consistent with

most research on the impact of parental beliefs. Jacobs (1991) used Eccles [Parsons] et al.'s (1983) expectancy socializer but included the effects of parent's gender stereotypes about mathematical ability as an additional effect on their specific beliefs about their child mathematical ability and performance outcome variable in addition to attitudinal outcomes. Parent's belief about their child's mathematical ability and parent's expectations for their child's future success in mathematics were the specific beliefs examined by Jacobs (1991). On the basis of previous research and the general model proposed by Eccles et al. (1983), the influence of gender stereotypes on children's self-conceptions was expected to be gender-specific and indirect.

1.1. Research model

This study examined the effect of child's sex and mother's gender-stereotyped beliefs on mother's specific beliefs about their child's mathematical ability and on child's beliefs and performance. Mothers provided the data regarding their gender-stereotyped beliefs and their beliefs about their children's ability because it was thought that mothers as primary care givers have longer and deeper interaction with their children than fathers.

The hypothesized model (Figure 1) was based on the conceptual model proposed by Eccles (Parsons) et al. (1983) and Jacob's (1991) model. Mother's' gender stereotypes were expected to interact with child's sex to affect mother's specific beliefs about her child's mathematical ability. Particularly, it was hypothesized that stronger stereotypes favoring males would be related to more positive beliefs possessed by mothers of sons than beliefs possessed by mothers of daughters. The interaction of gender stereotypes and child's sex was expected to exert a direct effect on mother's specific beliefs regarding child's mathematical ability, which would affect child's perception of mother's specific beliefs about his or her ability, which would in turn affect child's self-conception of mathematical ability, which would then affect the child's performance in mathematics. More specifically, four hypotheses based on the literature and earlier research involving the model of Eccles et al. (1983) (Eccles [Parsons], 1982; Eccles & Jacobs, 1986; Jacobs, 1992; Jacobs & Eccles, 1992) were tested:

1. The hypothesized model fits the data
2. Mother's gender stereotypes interact with child's sex to affect mother's specific beliefs about the child's mathematical ability. Specifically, stronger stereotypes favoring boys were expected to relate to higher evaluation made by mothers' of sons than of daughters.
3. Child's perception of mother's specific beliefs about his/her mathematical ability and child's self-conception of own mathematical ability mediate the effect of mother's specific beliefs about child's mathematical ability on child's achievement in mathematics.
4. Mother's and child's beliefs and conceptions account for significant amount of the variance in mathematical achievement.

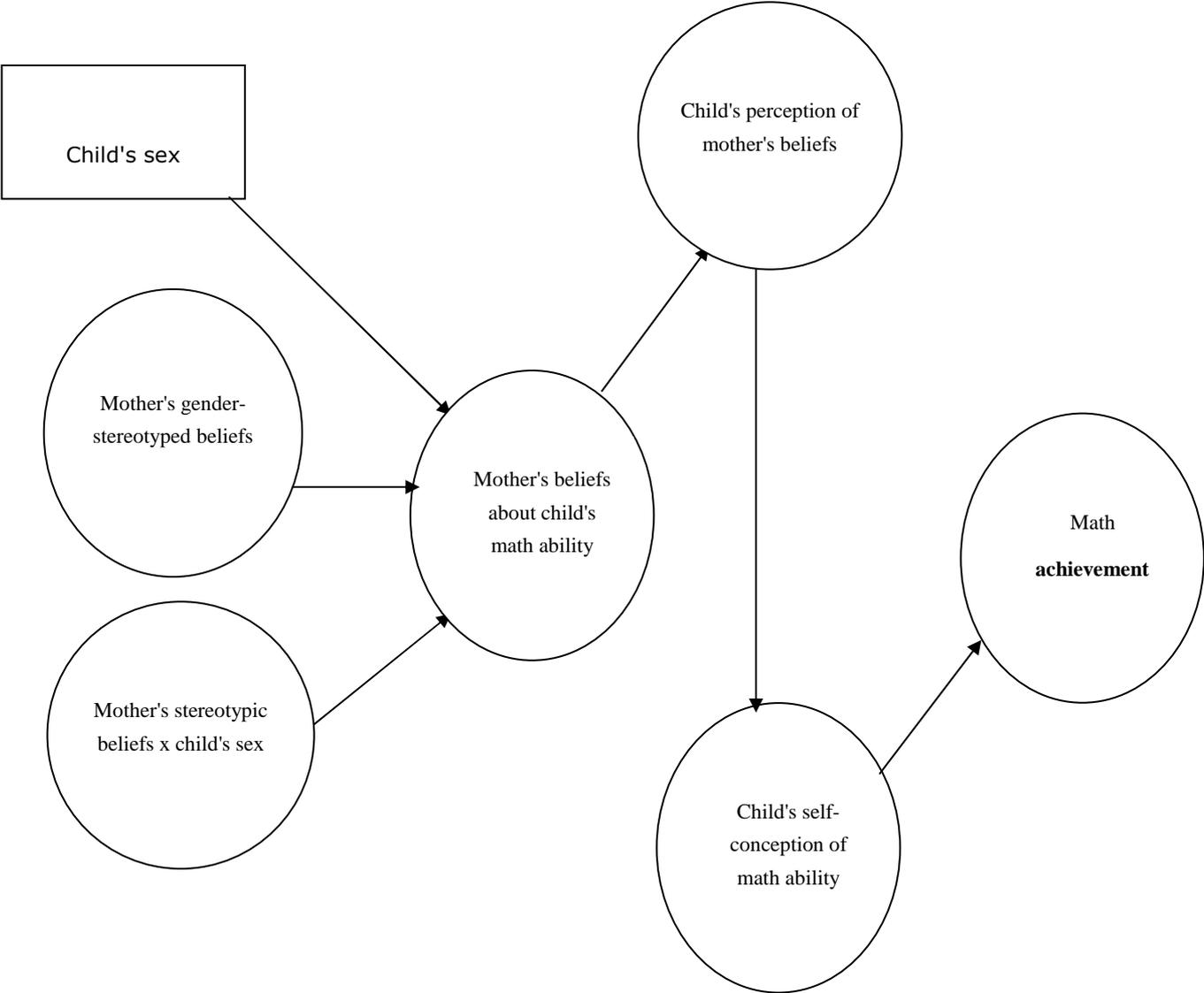


Figure 1. Research model

2. Method

2.1. Sample

Data were collected from 246 (120 boys and 126 girls) fifth grade students and their mothers. Six elementary schools in the northern part of Israel were randomly sampled and two classes were randomly selected from each. All students in the 12 selected classes and their mothers participated in the study. Fifth grade students were selected to participate in this study because this population has not been studied in previous research.

2.2. Measures

Mother's gender stereotyped beliefs and perceptions of her child's ability and the child's perceptions of mother's beliefs about his/her own ability and self-conceptions of mathematical ability were assessed by directly asking participants to report their beliefs and conceptions. Parsons, Adler, & Kaczala's (1982) questionnaire was used as a basis for the Hebrew version of mother's and child's measures used in this study. The Hebrew version was prepared by the second author and translated back into English by a bilingual teacher. The reliability coefficients of the scores as measured by Cronbach's α for the current sample ranged from .68 to .85 for the four subscales.

2.2.1. Mother's questionnaire

The questionnaire administered to the mothers consists of six items organized in two parts. The first part includes three items related to mother's gender-stereotyped beliefs regarding mathematical ability. Participants responded to each item by using a 7-point Likert response scale, where a higher score reflects strong belief in stereotypes favoring boys over girls with regards to mathematical ability. Example item: In general, how do you believe males and females compare in their mathematical ability? Where 1 indicates that girls are much more mathematically competent than boys and 7 indicates that boys are much more mathematically competent than girls. The second part includes three items related to mother's perception of her child's mathematical ability. Example item: How good is your child at mathematics? Where 1 indicates not good at all at math and 7 indicates very good at math.

2.2.2. Child's questionnaire

The child's questionnaire consists of two parts, each of which includes three items with a 7-point Likert response scale. Items in the first part measure child's perception of mother's specific beliefs about child's math ability where a high score indicates child's perception of mother's evaluation as high. Example item: *In your view, what your mother think about your math aptitude?* Where 1

indicates not good at all at math and 7 indicates very good at math. Items in the second part assess child's self-conception of math ability. High score reflects child's self-conception of math ability as high. Example item: *How good at math are you?* Where 1 indicates not good at all at math and 7 indicates very good at math.

2.2.3. *Test in mathematics*

One form of the 2004 national test for fifth grade was used to assess mathematics achievement. The test includes 25 questions in different formats (multiple-choice, open-ended and justification questions). Questions focused on three areas: geometry, verbal problems and inquiry tasks. Scores on the test ranged from zero to 100.

2.3. Data analysis

Structural equation modeling with maximum likelihood as an estimation method was used to test the research hypotheses. The EQS (version 6.1) program (Bentler, 1995) was used to analyze the structural model.

The structural modeling approach serves two general purposes in research: evaluating the degree to which the hypothesized model fits the data in hand, and estimating the parameters. A structural model with acceptable fit informs the researcher that the empirical relationships among the variables are consistent with those implied by the model whereas model parameter estimates indicate the magnitude and the direction of the relationships among the variables.

Child's sex, mother's gender-stereotyped beliefs and the interaction between the two served as exogenous variables. Mother's perception of child's mathematical ability, child's perception of mother's specific beliefs about his/her math ability, child's self-conception of own math ability and mathematics achievement were treated as endogenous variables. Each of the variables (except child's sex) was defined by three indicators and the factor loading of the first indicator on each variable was fixed to 1 to set the metric (Jöreskog & Sörbom, 1993).

To aid the interpretation of the findings child's sex was coded as -.5 for girls and .5 for boys. The interaction of mother's stereotypic beliefs and child's sex was obtained by multiplying the standardized scores of mother's gender-stereotyped beliefs and child's sex. The scores on all the other variables in the model were standardized.

3. Findings

3.1. Descriptive results

The means, the standard deviations for the participants' scores on each of the observed research variables, and the inter-correlations among these scores, were obtained and are summarized in Table 1. In general, mothers possess moderate to strong gender stereotypic beliefs and evaluate their children's mathematics ability as relatively high. Children's perceive mothers' specific beliefs about their mathematics ability as moderate to high and possess a similar self-conception of their own mathematics ability. The mean scores for geometry and verbal tasks are moderate while for the inquiry task the score is low and quite variable. Pearson product moment correlation coefficients between each of the mothers' and child's variables and the three measures of achievement in mathematics ranged from very low to medium. Child's sex has the strongest correlation with the score for the inquiry task indicating that boys score much higher than girls. Although statistically significant, the inter-correlations among the other variables are mostly low to moderate, except the correlations between the indicators of child's perception of mother's specific beliefs about child's mathematics ability and his/her self-conception of mathematics ability that tend to be large.

Table 1

Correlation Coefficients, Means and Standard Deviations for the Research Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. child's sex	-															
2. a1s	.25	-														
3. a2s	.19	.63	-													
4. a3s	.22	.63	.64	-												
5. mother's evaluation1	.37	.29	.24	.22	-											
6. mother's evaluation2	.35	.28	.30	.22	.70	-										
7. mother's evaluation3	.37	.22	.22	.23	.60	.65	-									
8. child's perception 1	.35	.07	.04	.02	.56	.48	.43	-								
9. child's perception 2	.37	.16	.14	.14	.54	.54	.49	.63	-							
10. child's perception 3	.28	.08	.06	.11	.42	.51	.54	.51	.58	-						
11. child's self-conception 1	.34	.06	.07	.03	.47	.45	.44	.75	.61	.59	-					
12. child's self-conception 2	.32	.08	-.01	.03	.50	.55	.56	.58	.79	.69	.68	-				
13. child's self-conception 3	.27	-.01	-.10	.01	.35	.37	.44	.50	.58	.71	.60	.69	-			
14. geometry	.24	-.04	-.07	-.03	.26	.28	.32	.26	.29	.34	.25	.36	.30	-		
15. verbal problems	.16	.09	.14	.07	.27	.33	.30	.23	.26	.27	.19	.23	.15	.42	-	
16. inquiry	.47	-.02	-.05	-.04	.17	.23	.23	.28	.31	.27	.28	.26	.34	.48	.35	-
Mean		4.75	4.87	4.76	5.53	5.54	5.50	5.21	5.09	4.85	4.99	4.84	4.67	74.07	77.85	49.32
SD		1.32	1.21	1.26	1.07	1.06	1.17	1.15	1.10	1.28	1.14	1.28	1.36	20.78	19.83	24.73

Note. a1s-a3s = mother's gender stereotypic beliefs; scale for variables 2-13 = 1-7; scale for variables 14-16 = 0-100

3.2. Structural modeling results

In order to examine the effects of mother's gender-stereotyped beliefs and specific beliefs about child's ability and child's sex, perception of mother's specific beliefs about child's mathematics ability and self-conception of that ability on mathematics achievement, a structural equation modeling procedure was employed. This procedure allows an assessment of the goodness-of-fit of the hypothesized model to the data, as indicated by the degree to which the specified model leads to exact reproduction of the population covariance matrix of the observed variables (Bollen & Long, 1993), as well as to estimating the model parameters.

The goodness-of-fit data for the hypothesized structural model (Figure 1) were inconsistent whereby the values of the NNFI and CFI fit indices were very high (.99) reflecting good fit while the values of GFI (.84) and RMSEA (.098), as well as the ratio χ^2/df (3.35) indicated poor fit. Inspection of the solution revealed that the effect of child's perception of mother's specific beliefs about his/her mathematics ability on child's self perception is very large (.99) indicating that the scores on these constructs are highly redundant. This diagnosis led to the conclusion that the initial intent of assessing these two constructs separately amongst fifth grade children using the child's questionnaire proved to be unsuccessful. The operative translation of this conclusion was excluding one of the two constructs from the originally hypothesized model. Consistent with studies in which mother's specific beliefs about his/her mathematics ability was not included in the tested models (e.g., Jacobs, 1991; Tiedemann, 2000) this construct was removed and the revised (alternative) model was tested.

The fit of the revised model to the data was improved relative to the originally hypothesized model. However, the values of GFI (.88) and the RMSEA did not meet the commonly used criteria for evaluating goodness of fit indices: larger than .90 for GFI and less than .08 for RAMSEA (Hu & Bentler, 1995). Inspection of the parameter estimates revealed that the effect of the interaction of child's sex and mother's gender stereotypic beliefs on mother's specific beliefs about her child's mathematics ability was not significant statistically. Examination of the modification indices suggested that adding a direct path between child's sex and achievement in mathematics will improve the fit of the model. Consequently, a second alternative model was tested. This alternative model resulted from discarding the insignificant path between the interaction variable and mother's specific beliefs about her child's ability and adding a direct path between child's sex and mathematics achievement. In this last model the main effects of child's sex and mother's stereotypic beliefs on mother's specific beliefs about her child's ability were tested.

The second alternative model along with the measurement coefficients, error terms and the direct structural effects are displayed in Figure 2. The fit data for this alternative model were satisfactory [$\chi^2/df = (2.4)$, CFI = .94, GFI = .91, SRMR = .074, and RMSEA = .077 (.061, .092)].

All the measurement coefficients in the second alternative model are in the expected direction (positive) and statistically significant. Of more interest for the purpose of the current study were the structural effects. The effects of child's sex and mother's gender-stereotyped beliefs on mother's specific beliefs about her

child's mathematics ability were both positive and statistically significant. Sex of the child was coded so that the coefficient for the sex corresponds to the sex difference in standard deviation units at the mean level of stereotyping. At the mean level of stereotyping, there was a significant difference for sons and daughters whereby mothers evaluated their son's mathematics ability higher than that of their daughters. Similarly, mothers who possess stronger gender-stereotypic beliefs are predicted to evaluate their child's mathematics ability higher than mothers who endorsed gender-stereotypic beliefs to a lesser extent (regardless of child's sex).

The third hypothesis proposed that child's self-conception and his/her perception of mother's specific beliefs about his/her mathematical ability are expected to mediate the effect of mother's specific beliefs about child's mathematical ability on child's achievement in mathematics. As indicated earlier, child's perception of mother's specific beliefs about his/her mathematical ability was excluded from the structural model due to its redundancy with child's self-conception of mathematical ability. Therefore, only the mediation effect of later variable was tested in the alternative models. A summary of the direct, indirect and total effects of mother's and child's variables on each other and on mathematics achievement is presented in Table 2.

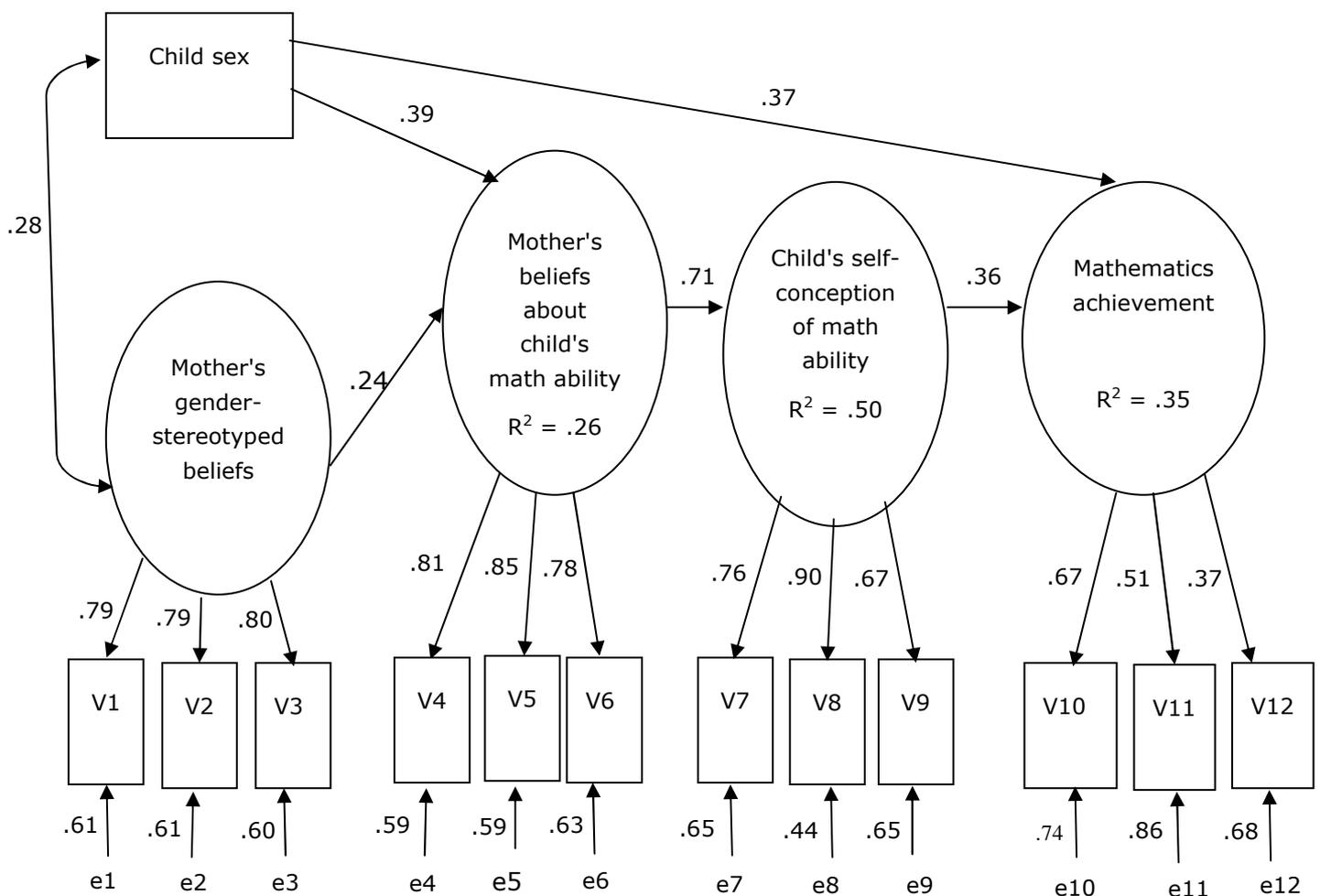


Figure 2: The Measurement Coefficients, Error Terms and the Direct Structural Effects in the Second Alternative Model

Table 2

Direct, Indirect, and Total Effects of Gender, Epistemological Beliefs, Self-Efficacy, Attitudes, and Anxiety on Mathematics Achievement (N=246)

Variable	<i>Mother's specific beliefs about child's Math ability</i>		<i>Child's self-conception of math ability</i>		Math achievement		
<i>Gender</i>							
Unstandardized	.312	.312	.208	.208	.241	.068	.309
Standardized	.387	.378	.273	.273	.360	.102	.462
SE	.053		.039		.051	.019	
<i>Mother's gender-stereotyped beliefs</i>							
Unstandardized	.243	.243	.163	.163	.053	.053	
Standardized	.240	.240	.169	.169	.063	.063	
SE	.072		.050		.020		
<i>Mother's beliefs about child's Math ability</i>							
Unstandardized			.669	.669	.213	.213	
Standardized			.705	.705	.262	.262	
SE			.074		.052		
<i>Child's self-conception of math ability</i>							
Unstandardized					.326		.326
Standardized					.372		.372
SE					.073		

Results revealed that this mediated (indirect) effect (.218) was positive and statistically significant. The effect of child's sex on mother's specific beliefs about child's mathematical ability was stronger than the effect of mother's gender-stereotyped beliefs on the same variable (.39 vs. .24, respectively). Mother's specific beliefs about child's mathematics ability had a strong direct positive effect on child's self-conception of mathematical ability. Child's sex had both direct (.37) and indirect (.102) positive effects on child's mathematical achievement. Thus child's sex had the strongest total effect on mathematical achievement indicating higher achievement for boys. Part of the effect of child's sex was mediated by mother's specific beliefs about child's math ability and child's self-conception of his/her math ability, both favoring boys.

The last hypothesis predicted that mother and child variables account for a significant (practically rather than statistically) amount of the child's mathematical achievement. Results supported this prediction whereby child and mother variables accounted for 35% of the variance in child's mathematics achievement.

4. Summary and Discussion

The conceptual model proposed by Eccles (Parsons) et al. (1983) was used as a basis for the model tested in the current study. Eccles (Parsons) et al.'s (1983) model has been extensively tested using conventional statistical methods such as regression, path analysis and ANOVA. In the current study structural equation modeling method was employed. This method is advantageous over the conventional regression and path analysis because it allows simultaneous estimation of all the parameters in the hypothesized model while taking into account measurement errors.

Four hypotheses were tested in the current study. The first hypothesis focused on the extent to which the hypothesized model fits the data. The originally hypothesized model yielded poor fit to the data. However, the revised models yielded improved model fit. Particularly, the second alternative model that did not include child's perception of mother's beliefs about child's mathematical ability and the interaction between mother's gender-stereotyped beliefs and child's sex, yielded acceptable fit to the data. It seems that children at this age are unable to make proper distinction between their perception of mothers' evaluation and self-conception of their mathematical ability. Consequently, the information regarding the two constructs turned out to be redundant causing the model fit to be poor.

The second hypothesis focusing on mother's gender-specific effect of stereotypes was not supported because the effect of interaction between child's sex and mother's stereotyped beliefs on mother's specific beliefs about child's mathematical ability was not significant, that is, the effect of child's gender on mother's specific beliefs about child's mathematical ability was not dependent on their level of stereotyping. This result contradicts findings reported by Jacobs (1991) and Eccles & Jacobs (1992) indicating that the interaction between child's sex and mother's gender-stereotyped beliefs had a significant effect on mother's specific beliefs about child's mathematical ability. The absence of interaction effect indicates that mother's gender-stereotypic beliefs impact her beliefs regarding her child's ability in favor of boys regardless of the sex of her child.

Only part of the third hypothesis focusing on the mediation role that child's self-conception and his/her perception of mother's specific beliefs about his/her mathematical ability play between mother's specific beliefs about child's mathematical ability and child's achievement in mathematics was tested in the alternative models. The child's self-conception of his/her mathematical ability mediated the effect of mother's specific beliefs about the child's ability and his/her mathematical achievement. This finding is in accordance with findings from previous studies (Jacobs, 1991; Eccles & Jacobs, 1992). It appears that messages that children receive from their mothers regarding their mathematical ability affect, along other things, their self-conception of their mathematical ability.

Child's sex and child's self-conception of mathematical ability had significant positive effects on mathematics achievement. The positive effect of child's sex on mathematics achievement is not surprising given that in each and every national and international study, Israeli (Jewish) boys scored higher than girls. The positive effect of child's self-conception of mathematical ability provide support to findings of previous studies (Jacobs, 1991) and findings from a study which revealed a positive effect of mathematical self-efficacy on mathematics achievement (Nasser & Birebaum, 2005).

The last hypothesis regarding the amount of variance in mathematics achievement that is accounted for by mother and child variables was clearly upheld. Given the complexity of the achievement construct and the numerous variables that bear an effect on it, accounting for 35% of the variance by the few variables included in the model is clearly impressive indicating the important roles that child's sex and mother's and child's perception play with respect to child's performance and achievement in mathematics.

The findings of the current study have important implications for the mathematical achievement of children. It seems that the ability messages that mothers convey to their children has a substantial effect on their self-conception of their mathematical ability and in turn on their mathematics achievement. Therefore training and educating mothers of young children to resolve gender related stereotypes and to provide constructive feedback and convey positive messages about child's mathematics ability can contribute to child's self-conception of mathematical ability and result in improvement in mathematical achievement. Teachers can play an important role in this task.

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5. References

- Bentler, P. M. (1995). EQS structural equations program manual. Encino, CA: Multivariate Software.
- Bollen, A. K., & Long, J, S. (1993), *Testing structural equation models*, Newbury Park, CA: Sage.
- Darley, J. M., & Gross, P. H. (1983). A hypothesis-confirming bias in labeling effects. *Journal of Personality and Social Psychology*, 44, 20-33.
- Eccles (Parsons), J. E. (1984). Sex differences in mathematics participation. In M. Stenkamp (Ed.), *Advances in motivation and achievement* (vol. 2, pp. 93-137). Greenwich, CT: JAI Press.
- Eccles, J. S., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., & Midgley, C. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and academic motives* (pp. 75-146). New York: Freeman.
- Holloway, S. D. & Hess, R. D. (1985). Mothers' and teachers' attributions about children's mathematics performance. In I. R. Sigel (Ed.), *Parental belief systems* (pp. 177-197).
- Hu, L., & Bentler, P. M. (1995). Specific evaluation of model fit. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp.

- 76-99). Thousand Oaks, CA: Sage.
- Jacobs, J. E. (1991). Influence of gender stereotype on parent and child mathematics attitudes. *Journal of Educational Psychology, 83*(4), 518-527.
- Jacobs, J. E., & Eccles, J. S. (1985). Gender Differences in math ability: The impact of media reports on parents. *Educational Researcher, 14*, 20-25.
- Jacobs, J. E., & Eccles, J. S. (1992). The impact of mothers' gender-role stereotypic beliefs on mothers' and children's ability perceptions. *Journal of Personality and Social Psychology, 63*, 932-944.
- Jacobs, J. E., & Eccles, J. S. (2000). Parents, task values, and real-life achievement-related choices. In C. Sansone & J. M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation: The search for optimal motivation and performance* (pp. 405-439). San Diego, CA: Academic Press.
- Jöreskog, K., & Sörbom, D. (1993). *LISREL 8 user's reference guide*. Chicago, IL: Scientific Software International.
- Nasser, F., & Birenbaum, M. (2005). Modeling mathematics achievement of Jewish and Arab eighth graders in Israel: The effects of the learner-related variables. *Educational Research and Evaluation, 11*(3), 277-302.
- Parsons, J. E., Adler, T. F., & Kaczala, C. M. (1982). Socialization of achievement attitudes and beliefs: Parental influences. *Child Development, 53*, 310-321.
- Perloff, R. M. (1977). Some antecedents of children's sex-role stereotypes. *Psychological Reports, 40*, 463-466.
- Tiedemann, J. (2000). Parents' gender stereotypes and teachers' beliefs as predictors of children's concept of their mathematical ability in elementary school. *Journal of Educational Psychology, 92*(1), 144-51.

Teaching English To Muslim Students: Some Pedagogical Considerations

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Abstract

Realizing the importance of education in shaping future generation, Muslim scholars (al-Attas,(1993); al-Faruqi ,1986) have advocated Islamic values to be inculcated in every discipline. English language teaching is no exception as it is not neutral, but in fact, has been infused with the values of the West, as reflected in Western instructional materials (Lazar,1993;Alptekin,1993;Pennycook,1994;Elnimeiri,1996;Ratnawati,1997). This is inevitable as language is a carrier of culture (Corder, 1973) and therefore language and culture are intertwined and inseparable (Lado, 1956; Alptekin, 1993). A study was conducted to find out how Muslim teachers inculcated Islamic values in the teaching of English. The methodology adopted were interview and classroom observation. The study found five recurring themes employed by these teachers in teaching English to Muslim students. The teachers highlighted un-Islamic practices, brought in Islamic concepts and Islamic Arabic terms, related the texts to the stories of the prophets, with special reference to Prophet Muhammad, discussed current issues pertaining to Muslims and finally made references to Quranic verses and hadith.

Keywords: English language teaching - Islamic values – methodology – Western texts – Islamic texts

1. Introduction

Realizing the importance of education in shaping future generation, Muslim scholars such as al-Attas,(1993) and al-Faruqi (1986) have advocated Islamic values to be inculcated in every discipline. This is crucial to be implemented because they believe that contemporary or modern knowledge has been monopolized by the West, which enabled the West to project their worldview, values and beliefs. In other words, to them modern knowledge that comes from the West is neither neutral nor universal. It has undergone the process of secularization and westernization, and is not only incongruent with, but also more importantly, endangers the Islamic faith.

Given the fact that Islam is more than just a religion, but in fact, a way of life, with its own worldview, it would be incongruent for Muslims to view modern knowledge – which carries with it its own presuppositions – from other perspectives other than the Islamic. The same is true for the teaching of English as a second or foreign language. Given the fact that the teaching of English is not value free (Casewit, 1985; Valdes, 1986; Alptekin, 1993; Zawiah, 1994; Pennycook, 1994; Dahiru, 1996; Elnimeiri, 1996; Ratnawati, 2005) and those values, both those that are contradictory to Islam and those that are not, are

transmitted – and probably imbibed – through the teaching of English, it is incumbent for Muslim teachers to approach the teaching of English from an Islamic perspective. Teaching English to Muslim students requires English to be taught from an Islamic perspective which means that the values, beliefs, aspirations and aims reflected in the teaching of English would be in harmony with the principles of Islam.

The purpose of the paper is to highlight the approaches adopted by Muslim teachers in teaching English to Muslim students. It begins by justifying the need for English to be taught from an Islamic perspective, follows by five approaches adopted by Muslim teachers and finally, provide recommendations to teachers, curriculum developers and administrators who are teaching English to Muslim students.

2. Literature Review

English language teaching is not neutral but in fact, has been infused with the values and aspirations of the West as reflected in Western instructional materials (Casewit,1985; Valdes,1986; Ngugi,1986; Alptekin,1993; Lazar,1993; Pennycook,1994; Zawiah,1994; Argungu,1996; Hamad,1996; Elnimeiri,1996 and Ratnawati,1997). This is inevitable because language is a carrier of culture (Corder, 1973) and therefore language and culture are intertwined and inseparable (Lado, 1957; Alptekin, 1993). As pointed out by Alptekin (1993), “most textbook writers are native speakers who consciously or unconsciously transmit the views, values, beliefs, attitudes, and feelings of their own English-speaking society”(p.138).

Ellis, as cited by Pennycook (1994) argues for the ethnocentric nature of Western textbooks that give little consideration to the sociocultural contexts in which they may be used, and therefore considered inappropriate by Muslims. He further gives examples taken from British textbooks that are incompatible with Muslim lifestyles and that pose problems to Muslim audiences. These include:

social interactions between men and women, including living together, advertising for boy/ girlfriends in personal ads (a favourite of textbook writers), and holiday romances; social settings, often ‘boy meets girl’ settings such as pubs and parties, where the dress, the social setting and the drinking of alcohol are all discordant with Islamic norms; and other topics such as rock music, astrology, gambling and revealing clothes (miniskirts, off-the-shoulder gowns, swimsuits).

(Ellis, as cited by Pennycook ,1994, p. 177)

In the teaching of literature in the second language classrooms, the values and beliefs of the West are more obviously portrayed to those who are aware, concerned and critical. This is inevitable, as pointed out by Valdes (1986) who acknowledges that one of the major functions of literature is “to serve as a medium to transmit the culture of the people who speak the language in which it is written” (p. 137). Elnimeiri (1996) concurs and states that:

the literary text is not only charged with meaning but also with intentions and desires that express stances and attitudes towards

the writer's world. What the writer expresses is never abstract, general, or neutral; it is always connected with the particular and the historical and it necessarily embodies the writer's perspectives, attitudes, and prejudices (p. 12).

Zawiah (1994), a Malaysian educationist, could not agree more with Elnimeiri (1996) when she related her experience of accepting what was written in the literary texts after being trained in the discipline for 15 years and teaching the course for 21 years:

I was, for instance, schooled in the rhetorics omniscient third-person narrators autonomous, autocratic demigods spewing "eternal universal truths". I learnt from the canon of the Great Tradition that a good novel should deal with human problems of universal application that must transcend historical, social and political boundaries. I was trained to map typological features of plot, setting and character, assumed to be universally decodable, to gain passage to aesthetic enjoyment of a work of art. Point of view was something that only belonged to the author and his assorted fictional creatures while I must sit on their shoulders to view the world with them or put myself in their place in order to "identify" with them. The fact that I might see things differently, being a descendant of what was once a subject race, was totally irrelevant to the reading process. In short, I became the kind of universal (i. e. western) reader literary conventions wanted me to be. After graduation, I then religiously preached this universal gospel to more unsuspecting brown disciples, both in school and university, for more than two decades (p. 3).

She admits that she is fortunate as her later encounter with several theories of ideology, subjectivity, and representation in general, and of colonial discourse in particular, has made her re-examine her position both as a reader and as a teacher of English literature. Zawiah (1994) also believes that what a colonialist writer, meaning a writer from a dominant or colonizing society writing on a colonial experience, chooses to include or leave out is not a random decision, but rather ideological. She also strongly believes that Eurocentric tendencies in the teaching of literature in English in Malaysian schools and universities persists to this day.

Because literary texts are culturally-bound, Western texts may instill values and beliefs which may run contrary to the students' values and detrimental to them. For this reason, Ngugi (1986) strongly disapproves of the study of only English literature because:

our children are made to look, analyse, and evaluate the world as made and seen by Europeans. Worse still, these children are confronted with a distorted image of themselves and of their history as reflected and interpreted in European imperialist literature (p. 225).

To him, the study of only English literature could lead to cultural imperialism which is "a very powerful instrument of oppression because it distorts a people's vision of history and of reality of the world around them" (Ngugi 1986, p. 225).

Lazar (1993) concurs with Nyugi by highlighting the danger that the teaching of literature may be identified with the imposition of particular imperialistic views, even though literature has the value to be a source of cultural enrichment, as pointed out by Collie and Slater (1987). To overcome this, she suggests that students be encouraged to be critical so that "underlying ideological assumptions in the texts are not merely accepted and reinforced, but are questioned, evaluated and, if necessary, subverted" (1993, p. 17). Zawiah (1994) also insists that readers read Western literature from a perspective that does not "short-change them into the bargain"(p.16).

With regards to the problem encountered by Muslim learners in reading Western secular texts, Argungu (1996) strongly suggests that Western texts be Islamized "through heavy (oral) editing of their contents – vocabulary and even sentence structures – as the teacher teaches in class so that the language can conform to Islamic concepts, ideas, names and norms" (p. 343). Besides Islamizing the texts, he also proposes the writing of new ELT materials along the lines of Islamic English at all levels of education that would allow Islamic terms and concepts such as *jihad*, *shahada*, *zakat*, *Islamic banking*, *Islamic economy* to be injected so as to enable Muslim students to sharpen their understanding of Islam as well as stimulate them culturally and ideologically.

Ratnawati (1997) concurs with Argungu (1996). In teaching English to Muslim learners, she proposes that Islamic teaching materials to be developed and used, which is in line with the recommendation of the First World Conference on Muslim Education. By doing this, the Islamic worldview and the Islamic outlook would be projected. She argues:

We need to come up with materials that express how we view our world, how we view happiness, how we deal with tragedy, and how we deal with others. We need to inspire our students with stories about our great scholars, both past and present, and to motivate them to aspire towards those ideals that great Muslims have always aspired to. We need to demonstrate, through English, the thoughts, the lives, and the culture of Muslims. We need to articulate, through literature, our point of view. We need to do all these, because in the absence of Islamic materials in English that can inspire, motivate, and challenge our students, Western materials would certainly serve as a primary socializing factor.

(Ratnawati 1997, p. 15)

However, in suggesting Islamic teaching materials to be used, Ratnawati (1997) does not totally reject the use of 'Western' texts written in English. Rather, she recommends a balance in the kinds of reading materials, and suggests that teachers include both materials written by and about Muslims as well as materials from Western sources and those of other cultures.

Ratnawati (1997) also emphasizes that when discussing texts from Western sources or those from other cultures, teachers should highlight how Muslims' ways of life and how their ways of doing things might differ. She adds that it is important that the teachers discuss how the text represents the point of view of the writer and his vision of truth and reality, which does not necessarily correspond to that of Muslims'. Highlighting these differences in worldview "would help the learner to appreciate his own culture, and thus show him that the culture of the West is not inherently superior to his" (Ratnawati 1997, p. 16).

3. Research Design

3.1 Participants

The participants were Muslim teachers who taught in a tertiary level Islamic institution. They taught an ESL course that included the reading of Western short stories. They were first interviewed to find out whether they brought in Islamic values in their teaching. Only three teachers confidently responded that they instilled Islamic values in their teaching and willing to be observed. The data were based on the classroom observation over a period of six weeks.

3.2 Texts

Six Western texts were included in the book of readings for the use of both teachers and students. They were *Appointment in Samarra* (AIS) by W. Somerset Maugham, *The Last Leaf* (TLL) by O. Henry, *The Chaser* (TC) by John Collier, *The Luncheon* (TL) by Jeffrey Archer, *The Doll's House* (DH) by Katherine Mansfield and *Lamb to the Slaughter* (LTTS) by Roald Dahl.

3.3 Data Collection and Analysis

In analyzing data from observations, data were first described chronologically, over time, from the beginning of the lesson until the end, with emphasis on how the participants taught English from an Islamic perspective. Any points highlighted or acknowledged by the participants that deviated from the stories were recorded. Case analysis was adopted where each participant's lesson was first described, before all the lessons were analyzed within and between cases. Only when all the participants' lessons were described and analyzed within and between cases, analysis between participants' lessons took place. This allowed us to see the recurrent themes and patterns in the teaching. Since no study had been done in this area, we had to come up with my own classification based on the data in hand. Furthermore, Glaser and Strauss (1967), as cited by Merriam (1998:183) advocate the danger of borrowing someone else's classification scheme:

Merely selecting data for a category that has been established by another theory tends to hinder the generation of new categories, because the major effort is not generation, but data selection. Also emergent categories usually prove to be the most relevant and the best fitted to the data...Working with borrowed categories is more difficult since they are harder to find, fewer in number, and not as rich; since in the long run they may not be relevant, and are not exactly designed for the purpose, they must be respected.

Nevertheless, in this study, the inductive search for patterns was guided by the theory of Islamization of knowledge, specifically, al-Attas's (1993) two inter-related steps involved in the process of Islamization of contemporary knowledge, and al-Faruqi's (1986) Islamic English. Inductive analysis means that "the

patterns, themes, and categories of analysis come from the data; they emerge out of the data rather than being imposed on them prior to data collection and analysis" (Patton, 1990:390).

4. Findings

The classroom observation data revealed five recurrent themes.

The first theme was that the teachers highlighted the un-Islamic practices found in the texts. Their action was based on al-Attas's (1993) first step of Islamization of knowledge, which requires that foreign or un-Islamic practices be eliminated from the texts. All the three participants did this, particularly when the texts run contrary to Islamic principles. Some of the un-Islamic practices that were highlighted were *syirk* (associating Allah with other things) as found in *The Last Leaf* and *The Chaser*, materialism as in *The Doll's House*, taking another person's life, and extra-marital relationships, as in *Lamb to the Slaughter*, and taking advantage of other people, as in *The Luncheon*.

The second theme was that the teachers brought in Islamic concepts and Islamic Arabic terms into their lessons. This is in line with al-Attas's (1993) second step of Islamization of knowledge, which requires Islamic concepts to be brought in once un-Islamic elements have been identified and eliminated. The inclusion of Islamic Arabic terms is also in line with al-Faruqi's (1996) Islamic English. It was found that the inclusion of the Islamic Arabic terms did not pose any difficulty to both the participants and the students, as both parties are Muslims. No explanation was made with regard to the meaning of these terms. Furthermore, the Islamic Arabic terms used were similar to the ones used in the Malay Language, the students' mother tongue.

All the participants brought in either Islamic terms or Islamic concepts in their teaching. In *The Last Leaf*, for instance, Islamic terms such as *taqdir*, *syirk*, *zakat*, 'Asr, *Ramadhan*, and *iman* were highlighted. In *The Doll's House*, Islamic terms like 'ibadah, *sadaqah* and 'amal *jariah* were used in addressing the issue of materialism discussed in the story. In *Lamb to the Slaughter*, the issue of killing another person prompted the participants to discuss its punishment by relating it to the concept of the hereafter. Hence, terms such as *syari'ah*, *zina* and *rajm* were employed. The un-Islamic practice of using love potions in *The Chaser* led the participants to highlight Islamic terms such as *syirk*, *iman*, and *Allah*, as well as, belief in the will of *Allah*. The issue of death in *Appointment in Samarra* led the participants to highlight the Islamic concept of fate and the importance of preparing for death, as one cannot run away from it. Hence, Islamic terms such as *Subuh* prayer, *Juma'at*, *pahala*, *sadaqah* came into the picture.

The third theme was the highlighting of the stories of the prophets, particularly, with special reference to the Prophet Muhammad and his companions. The first participant brought to light the story of the Prophet Muhammad's patience and perseverance in spreading Islam, as well as the endurance of Bilal bin Rabah in facing the torture of his employer, when she discussed the patience of the poor children in *The Doll's House*. In talking about the relationship between husband and wife in *Lamb to the Slaughter*, she also emphasized the need to take Prophet

Muhammad (s.a.w) as the model. The other two participants brought to light the story of Prophet Sulaiman in *Appointment in Samarra*.

The fourth theme emerged from the data was the discussing of current issues in relation to the stories. In *The Last Leaf*, for instance, the issue of *syirk* was related to the practice of referring to horoscopes. One of the participants also related the theme of extra-marital relationships in *Lamb to the Slaughter* to incurable diseases such as AIDS.

The fifth theme that arose was that they made references to the relevant *Qur'anic* verses and *hadith*. In discussing the issue of *ajal* that death is predetermined and that one cannot run away from his death, in *Appointment in Samarra* and *The Last Leaf*, the participants made the students see the relevance of *Qur'anic* verse which says "But to no soul will Allah grant respite, when the time appointed for it has come; and Allah is well-acquainted with all that ye do" (*Al-Munafiqun*:11). The issue of *syirk* in *The Chaser* and *The Last Leaf*, led *Qur'anic* verses to be cited, "Serve God, and join not any partners with Him" (*An-Nisa'*:36) and "Behold, Luqman said to his to his son by way of instruction; O my son! Join not in worship (others) with Allah: for false worship is indeed the highest wrongdoing" (*Luqman*:13) to be highlighted. A *hadith* related by Bukhari and Muslim which says "No one of you really believes in Allah and His religion until he loves for his brother what he loves for himself" was quoted when talking about the issue of friendship in *The Last Leaf*.

In short, in teaching English from an Islamic perspective, five recurrent themes emerged from the data: i) highlighting the un-Islamic practices; ii) bringing in Islamic concepts and Islamic Arabic terms; iii) relating the stories to the stories of the prophets, with special reference to Prophet Muhammad; iv) discussing current issues; and v) making references to *Qur'anic* verses or *hadith*.

5. Pedagogical Implications

5.1 Recommendations for Teachers

To teach English from an Islamic perspective, Muslim teachers need to be equipped with adequate knowledge of Islam. This is because one cannot hope to teach English from an Islamic perspective if one is not sufficiently grounded in the Islamic worldview. Hence, teachers should attend courses in Islamic studies at least in the transitional phase. Some of the courses may be *Islamic Civilization and History*, *Islamic Ethics*, *Islamic Thought*, *Qur'an* and *Sunnah*, and *Akhlaq*.

For non-Muslim teachers teaching English to Muslim students, it is good that they are aware of the differences in terms of values, concepts and practices of the Muslims than that of their lifestyles.

5.2 Recommendations for Curriculum Developers

5.2.1 Stating Explicitly the Aim, Goals and Objectives of Teaching

It is important that curriculum developers specify clearly the aim, goals and objectives of teaching English from an Islamic perspective. Doing so would make the teachers conscious of the purpose of teaching and remind them of the need to do so. As pointed by Rosnani (1999:38), "Clear goals and objectives of education must be spelled out" as "They act as the 'true North' of an educational compass and are vital in ensuring that the whole educational enterprise progresses toward achieving its intended goal and not wander about in search of direction".

5.2.2 Islamic Texts

Besides the use of Western secular texts, which project the secular values of the West, curriculum developers should also include a balanced selection of Islamic texts in the curriculum, as argued by Argungu (1996) and Ratnawati (1997). This would allow the Islamic outlook and worldview to be projected, as well as sharpen the students' understanding of Islam, particularly when Islamic terms and concepts are used. Nevertheless, this does not mean that only the texts written by Muslim writers should be used. Texts written by non-Muslim writers could also be used, as long as the texts do not come in conflict with Islamic values and principles.

5.2.3 Teachers' guide.

To help those who do not have any idea at all about teaching English from an Islamic perspective, it is a good idea for the department to come up with a teachers' guide. A committee could be set up to discuss questions that could be used to elicit answers that would lead to the Islamic perspective for each of the stories. Then those questions could be used as a guide. Islamic perspective of the stories should also be provided. It would also be helpful to include the relevant verses of *al-Quran* and *hadith* in the teachers' guide.

Nevertheless, as the name implies, a teachers' guide serves as a guide and the purpose is to help those who do not have any idea at all about teaching the short stories from an Islamic perspective. For those who do not have any problems in identifying un-Islamic views and practices in the stories could go beyond the teachers' guide. Making the teachers to follow strictly the teachers' guide could hamper their creativity.

5.2.4 Evaluation

To determine whether the objectives of teaching English from an Islamic perspective have been achieved, there is a need for teachers to evaluate their students' understanding of looking at Western texts from an Islamic perspective. Doing this would give an idea to the teachers as to whether they need to

improve on, maintain, or discontinue their teaching approaches. As pointed out by Rosnani (1999:41), "evaluation is a powerful device for clarifying educational objectives". Citing Tyler, Rosnani (1999:41) asserts that "evaluation is the process for determining the degree to which changes in behaviour are actually taking place". Since both students and teachers are influenced in their learning and teaching, respectively, by the kind of evaluation, it is important for the evaluation procedure to be closely parallel to the educational objectives of the curriculum, as otherwise, the focus of both the students and the teachers will be on the evaluation, rather than the objectives, asserts Tyler, as cited by Rosnani (1999).

5.3 Recommendations for Administrators

5.3.1 In-house training

It cannot be denied that teachers need training. As indicated by Husain and Ashraf (1979:108), "a good teacher can convert even inadequate materials to his own purposes provided he himself has had the right kind of training". In-house training which includes peer observation and demonstrations of how specific Western texts could be exploited in the language classroom could be conducted. Teachers need access to models of good teaching practice which can be demonstrated by those identified by the department as teaching English from an Islamic perspective.

6. Conclusion

The paper aims to highlight how Muslim teachers teach English to Muslim learners by instilling Islamic values in their teaching and utilizing the western texts. By observing the actual practice in their classrooms, authentic data were captured.

It has been three decades since the First World Conference on Muslim Education, which took place in Makkah in 1977 demands Islamic values to be inculcated in the teaching of all disciplines, including English. Teaching English to Muslim students requires the teachers to have adequate knowledge of Islam and appropriate approaches to deal with western texts. This paper therefore serves as an eye-opener not only to Muslims but non-Muslim teachers in giving them ideas on how to treat western texts to Muslim learners in the ESL classroom. Curriculum developers and administrators need to play their roles in ensuring the teachers have adequate expertise in doing so.

7. References

- Abdussalam, Ahmad Shehu (1999). *Islam and Language*. Kuala Lumpur: Al-Hilal Publishing.
- Al-Attas, Syed Muhammad Naquib. (1993). *Islam and secularism* (2nd edn). Kuala Lumpur: Institute of Islamic Thought and Civilization.

- Al-Faruqi, Isma'il Raji. (1986). *Toward Islamic English*. Virginia: International Institute of Islamic Thought.
- Ali, Abdullah Yusuf. (1991). *The Holy Quran: Text, translation and commentary*. (Revised edn.). Maryland : Amana Corporation.
- Alptekin, C. (1993). Target-language culture in EFL materials. *ELT Journal*, 47(2), 136-143.
- Argungu, Dahiru Muhammad. (1996). English, Muslims and Islamisation: Between needs and deeds. In J. Khan & A.E. Hare (Eds.), *English and Islam: Creative encounters* 96 (pp.331-347). IIUM: Research Centre.
- Casewit, Stephen Daoud. (1985). Teaching English as a foreign language in Muslim countries. *Muslim Education Quarterly*, 2 (2), 1-47.
- Collie, J. & Slater, S. (1987). *Literature in the language classroom*. Cambridge : Cambridge University Press.
- Corder, S. P. (1973). *Introducing applied linguistics*. Harmondsworth: Penguin.
- Elnimeiri, Ahmad Mohamed. (1996, January). Islamization of the study and teaching of literature in English. Paper presented at a one-day workshop on Islamization of English language and literary studies, Department of English Language and Literature, Kulliyah of Islamic Revealed Knowledge and Human Sciences, IIUM.
- Hamad, Abdullah. (1999). The problem of culture in language teaching. *Muslim Education Quarterly*, 16(2), 37-45.
- Husain, S.S. & Ashraf, S.A. (1979). *Crisis in Muslim education*. Jeddah: King Abdulaziz University.
- Lado, R. (1957). *Linguistics across cultures*. Ann Arbor: The University of Michigan Press.
- Lazar, G. (1993). *Literature and language teaching*. Cambridge: Cambridge University Press.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Josey-Bass Publishers.
- Ngugi, wa Thiong'o. (1986). Literature in schools in *Literature and language teaching*. Oxford: Oxford University Press.
- Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). California: Sage Publications.
- Pennycook, A. (1994). *The cultural politics of English as an international language*. Oxford: Oxford University Press.
- Ratnawati Mohd. Asraf. (1997). The cultural implications of teaching English as a second or foreign language. *Muslim Education Quarterly*, 14(4), 4-15.
- Rosnani Hashim. (1999). Islamization of the curriculum. *The American Journal of Islamic Social Sciences*, 16:2, 27-43.
- Sa'Adeddin, Mohammed Akram A.M. (1996). Towards a model for systematic Islamization: A general linguistics blueprint. *The American Journal of Islamic Social Sciences*, 12 (3), 361-394.
- Valdes, J. (1986). *Culture bound: Bridging the cultural gap in language teaching*. Cambridge: Cambridge University Press.
- Wan Mohd Nor Wan Daud. (1977). *The educational philosophy and practice of Syed Muhammad Naquib Al-Attas: An exposition of the original concept of Islamization*. Kuala Lumpur: International Institute of Islamic Thought and Civilization.
- Zawiah Yahya. (1994). *Resisting colonialist discourse*. Bangi : UKM.

Let's Get the Juices Flowing! Examining the Effects of Interaction in Higher Education

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Abstract

Studies have shown that business students are not able to effectively identify business problems or grasp the complexity of decision-making processes. Reflection and interaction are critical to enable students to understand and disable problems, particularly in settings where no one solution to a problem exists. Evidence demonstrates that increasing student interaction and involvement is an important learning tool. It is equally imperative to provide students with a comfortable setting so they are able to safely engage in debate. This interaction must be coupled with reflection to stimulate positive outcomes in student learning.

This paper reviews the initiatives offered in the teaching of Consumer Behavior at the undergraduate level for a Commerce degree. Faced with a number of international students and students from a variety of disciplinary areas within the university, teaching Consumer Behavior had become a challenge. This paper reviews how a lecture innovation and web-based tool prompted student-to-student and instructor-to-student interactions and augmented learning. The paper concludes with a review of the positive outcomes, challenges encountered upon implementation and recommendations for other instructors considering the use of these tools.

Keywords: Interaction – innovations – problem solving – learning - undergraduates

1. Introduction

It is imperative that students are able to identify interrelationships between subject areas in Consumer Behavior to understand how and why a purchase is made. Specifically, there are two primary course objectives: (1) that students are able to apply buyer behavior concepts to marketing decision making; and (2) that students are able to synthesize theories and models of consumer behavior to apply to case studies. The quality of student assessment indicated that undergraduate students found this difficult to do. To identify specific areas of student difficulty, committees were formed to allow the instructor to interact with students and investigate areas for improvement. From these committees, two key problems emerged. Firstly, there was minimal interaction between students in class. Students did not feel confident in tutorials to discuss problem areas. This was exacerbated by many students originating from a non-English speaking background or non-business disciplinary area. This inhibited their confidence to engage in class discussions and work in teams to solve marketing problems.

Secondly, students found it challenging to understand the relationships between subject areas. This was essential for students to grasp in order to fully understand why and how consumers make decisions. This was a core problem that had to be addressed in the subject. For example, while students were able to identify each step in the decision-making process, many found it difficult to determine how attitudes and information processes could change the nature of the decisions made by consumers. These problems are related to the manner in which students interacted and interpreted material.

This paper is organized as follows. Firstly, it reviews applicable literature regarding the learning problems. It then outlines a problem faced by students in a consumer behavior course that inhibited their learning. Next, the innovations are presented, together with the student outcomes achieved over a two-year period and the teething problems presented upon first use of the innovations. Conclusions are drawn at the end of the article.

2. Increasing Interaction and Debate: A Review of the Literature

Studies have shown that business students are not able to effectively identify business problems or grasp the complexity of decision-making processes (Peltier, Hay and Drago 2005). Reflection and interaction are critical to enable students to understand and disable problems, particularly in settings where no one solution to a problem exists (Peltier, Hay and Drago 2005). Evidence demonstrates that increasing student interaction and involvement is an important learning tool (Hake 1998; Johnson, Johnson and Golden 1996). It is equally imperative to provide students with a comfortable setting so they are able to safely engage in debate (Sims 2004). This interaction must be coupled with reflection to stimulate positive outcomes in student learning (Peltier, Hay and Drago 2005).

Marketing educators are perceived to be most effective by students when they are proactive, engage with students and stimulate student-to-student and instructor-to-student interactions (Farando and Clarkell 2004; Young 2005). Indeed, interactions and social exchanges are essential to foster reflection and learning (Peltier, Hay and Drago 2005). Debate stimulates critical thinking which assists students to progress through the six stages of learning: knowledge, comprehension, application, analysis, synthesis and evaluation (Bloom 1956; Roy and Macchiette 2005). While listening to lectures and discussion stimulates knowledge capture and comprehension, it is when students apply this knowledge and debate information that they progress through the remaining stages to stimulate learning. Educational technology can induce this active learning, raise student awareness, knowledge and understanding and assist in the formation of competencies such as critical thinking skills (Drea, Tripp and Stuenkel 2005, Paul and Mukhopadhyay 2001). Technology can serve a number of roles, including facilitating discussion between the instructor and student and between students themselves (Malhotra 2002).

Accordingly, a number of initiatives were introduced into Consumer Behavior to address the two key challenges outlined previously, as well as to assist students to form the requisite skills needed to meet the course objectives. This study also serves to provide evidence regarding the outcomes associated with using new

technologies and techniques in the classroom, thereby addressing the dearth of research in this area (Malhotra 2002). The next section details these course objectives and innovations.

3. The Learning Objectives

Two innovations were introduced into the course. These sought to increase: (1) interactions between students from diverse cultural and disciplinary backgrounds to stimulate discussion and learning, and (2) student ability to understand and apply subject content in an integrative manner. One innovation was introduced to the lecture format to prompt interaction and learning and the second was introduced 'out-of-class' to prompt debate and student-to-student and instructor-to-student interaction via the Internet. Research shows that use of lectures alone are not the most effective ways to stimulate learning. In fact, there has been a shift away from passive learning to active, experiential learning activities that involves the use of technology and in particular, the Internet (Paul and Mukhopadhyay 2001, Scribner et al 2002, Wright et al 1994). Lectures typically contained 200 students each year over the two-year period where the innovations were introduced.

Students emanating from varied multicultural and disciplinary areas possess different habits, behaviors and abilities to learn, thereby increasing the teaching challenge. For example, some student cohorts found it difficult to question the lecturer and engage in debate, whereas others consistently questioned 'the teacher' and engaged in debate. This intimidated a number of students, leading to many withdrawing from interactions and the learning experience. This influenced a student's ability to meet the course objectives of (1) applying buyer behavior concepts to marketing decision-making and (2) synthesizing theories and models of consumer behavior and applying these notions to case studies. The inability to debate concepts and understand the complexity of decision-making also inhibited the students' ability to form the required generic skills of collaborative learning and teamwork, problem solving and critical thinking. These had clear consequences for student performance. Thus, consistent with the recommendations from a number of researchers such as Malhotra (2002), the enhancement of effective and efficient student learning was a key guiding principle for the introduction of the innovations introduced in the class under examination in this paper.

4. Presenting the Teaching Innovations and Learning Outcomes

4.1. Innovation One

To address the problem of not being able to grasp integration, an animated character was introduced into the lecture power point slides to prompt students about subject content integration and encourage them to participate. The character was an animated cartoon available from Microsoft clipart. Students were advised that they had to identify the relationships that existed between specific subject areas when this character appeared on the slides.

The character was introduced at the beginning of semester and reappeared at a number of intervals throughout each unit that was taught. Specifically, the animated character was inserted on power point slides at various points throughout topics which were shown to be related in the textbook and literature. This encouraged students to engage in their reading materials prior to coming to class so that they could nominate the relevant integrated topics in the lectures and discuss material. Secondly, review slides were inserted at the conclusion of topics within units to remind students that each area being covered was linked to each element of consumer decision-making. The character not only prompted students to stop and reflect on the subject areas that were related, but also provoked class discussions. This is a particular achievement in classes of this size where students are accustomed to passive learning. Discussion typically takes place only in small tutorial classes of up to twenty students.

The animated character introduced humor into the classes. Research has demonstrated that humour can increase student attention and enjoyment of subject content thereby leading to effective learning and retention of information (Anonymous 2003, Horng et al 2005, Jones 2004, Tomkovick 2004, Torok et al 2004). In turn, this made students feel comfortable in asking questions and prompted them to consider integration on a small scale that is, using two or three topics at the one time. To allow students to consider how further areas were related, additional slides were introduced to guide students in considering how alternate areas were covered. The introduction of this integration prompt was favourably received by students. It enabled them to identify how areas were linked and initiated student involvement.

4.2. Student Outcomes

The introduction of this animated character had a significant effect on student learning, initiating reflection and debate in the classroom. Student interactions in lectures were monitored by tutors after students were allowed to reflect briefly on subject content. These student-to-student and instructor-to-student interactions increased markedly in lectures and tutorials. Specifically, the character contributed to an increased number of students who spoke up in class and it also improved the quality of discussion. Ultimately, this tool assisted students with their ability to integrate theory and identify the relationships between diverse learning areas within consumer behaviour. These outcomes are supportive of literature which demonstrates that reflection coupled with student-to-instructor and student-to-student interaction has a positive impact on learning outcomes (eg, Peltier, Hay and Drago 2005). These interactions are further enhanced with the use of IT, helping students to improve a number of skills including critical thinking (Paul and Mukhopadhyay 2001). This innovation prompted many favourable comments noted by students in end of semester course evaluations. Such comments included:

"I loved the groovy cartoon. He made me think of how areas of theory linked together. [Our instructor] has made this subject fun and easy to learn".

"The worm made me think of how course areas linked together. It helped that [our instructor] gave us time to think about what was being integrated and made us laugh and talk in class."

To formally assess student understanding and their ability to apply subject content in an integrative manner, two forms of assessment were introduced. First, a range of conceptual essays which required students to consider the relationship between at least three areas of consumer behavior were introduced. Students had to choose the question that they would complete. This served as an introduction to how subject areas 'fit' together. After the introduction of the character in class and the web tool described in the next section, the quality of student essays increased notably. This was assessed through the average grade attained by students in this piece of assessment, which increased by forty percent over the previous year's student cohort who had no access to the character.

The second form of assessment was a case analysis targeted at encouraging students to solve 'real-life' consumer dilemmas. To do this, students were required to work in teams and draw on multiple areas of consumer behavior to provide consumers with a solution to their problem. The character introduced in lectures was successful as a trigger to student memory regarding which areas of theory were interrelated. The quality of analyses continued to increase over two years with the average mark achieved by students in the case analysis increasing by over twenty percent, representing a marked improvement. Both assessment tasks allowed me to determine the success of the integration prompts throughout the semester.

4.3. Innovation Two

To increase interaction and address the cultural barrier that inhibited discussion and student learning, a web-based tool was introduced. This provided students with an anonymous and 'safe' forum for discussion. The "on-line tutor" enables students to log onto a web page and ask questions to a skilled moderator. The moderator, usually either the professor or an experienced teaching assistant, responds to queries within twenty-four hours. Students are not identified throughout this process to other students. Thus, while all students are able to view all questions being posed, they are not able to view the source of the query. This allowed students to post 'any question' without the fear of being ridiculed by peers. Examples of questions posed by students ranged from general administrative to thought provoking conceptual questions. Examples included:

"Does 'purchase situation' refer to the situation of the consumer making the purchase, or more the type of store, store location, promotions within the store etc.? It's listed as integrative in information search and alternative evaluation".

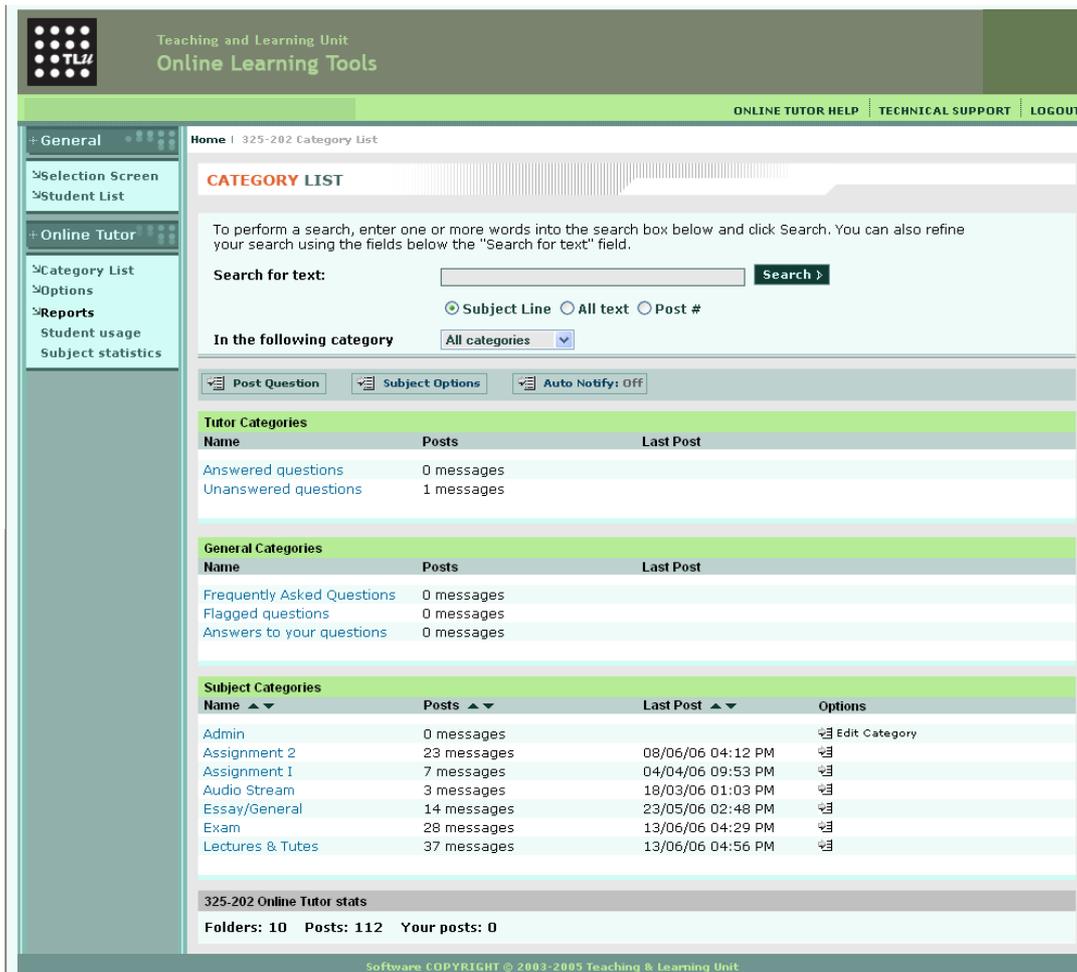
"Hi. I don't quite understand the difference between signals and cut-offs. Is it true that cut-offs are based on past performance? Thanks".

This tool increased student confidence in their ability to ask questions in class, particularly when the on-line tutor reaffirmed the correctness of their query. The web tool also increased students commenting on peer questions posted online,

thereby increasing online interaction. Students also appreciated that this technological innovation added a 'human touch' and personalized their marketing education, thereby augmenting their comfort with using the tool. The tool is accessed by students from the subject web page which is based on the Blackboard application. The on-line tutor however is created specifically by a computer programmer within the University, thus the software is not widely available at present. Figure 2 illustrates the first page of the web tool.

Figure 2

Front Page of the Online Tutor for Consumer Behavior*



4.4. Student Outcomes

This tool had an effect on student interaction and confidence to pose questions and engage in debate. This was assessed by the tutorial leaders in the smaller classes as well as in the large lectures where student confidence to ask questions increased dramatically. The interaction between students was also noticeably improved as students engaged in debate and referenced online tutor questions and responses as a safety net. Teamwork exercises in tutorial classes also assisted in the feeling of safety and increased confidence. The quality of student assessment increased, with students able to critique topics more substantially

(reflected through average critical points identified in the analysis) and integrate topical areas more effectively in their formal case analysis assessment task (hence, average grades increased).

When reviewing student usage of the tool, approximately 82% of the students logged onto the online tool were found to either pose a question or peruse the site for information by reading the questions and answers. Of these, approximately 63% of students were repeat users. This illustrates the extensiveness of use as well as the utility of the information provided from the tool. Statistics also demonstrated that of these students, approximately 43% were from a non-English speaking background.

Both innovations had a notable effect on student perceptions of the subject. Every semester students complete an evaluation of the subject using a likert-type scale anchored at 1=strongly agree to 5=strongly disagree. The questions are determined by the university administrators. Student evaluations regarding whether they perceived that "the subject is well taught" increased by over twenty percent between the two years under review. Student perceptions of feedback received from staff increased by the same margin, as assessed by the formal student evaluations completed at the end of semester. However, what was of most interest was the increased average of student performance, increasing by forty percent from the previous year. This performance was assessed through the monitoring of average student grades at the end of semester which was obtained through three different types of assessment: (1) an essay question, (2) an in-depth case analysis and (3) a comprehensive examination which encompassed problem set, essay and case analysis questions. Students replied favorably to lecture innovations and a personal approach to teaching.

5. Challenges Encountered in Innovation Adoption

The problem encountered with the first innovation in the first year was the lack of attention drawn to the character. To address this, the size of the character was augmented and animation was added so that it would 'flash' on screen repeatedly to prompt students to consider integration issues. This would also enable the instructor to pause in class to prompt students regarding integration and to encourage students to reflect on the relevant theory. This would further trigger discussion.

There were also some teething problems encountered with the introduction of the second innovation, the online tutor. Students were traditionally reliant on face-to-face contact with the instructors to discuss issues, together with the extensive use of e-mail. While face-to-face interactions were not discouraged, the use of email was. When the tool was first introduced, students would still revert to the use of email to pose questions. Hence, the frequency of tool use was rather low, with less than ten percent of students logging onto the system in the first quarter of the semester. To target this, students had to be 'sold on' the benefits of using the tool, specifically that they would all be allowed to view questions posed and solutions posted so that all students would benefit from the response.

This simultaneously presented another obstacle where students believed that they could be identified online. As a result, they were hesitant in posting questions which they felt could embarrass them among peers. The quality of questions posed was rather low. Students posted administrative rather than thought provoking questions that would initiate debate and interaction. To address this, demonstrations of the tool were conducted in lectures. Mock questions were posted by the instructors to stimulate student use. As students viewed the quality of information after in-class demonstrations, student use of the tool steadily began to rise. Word-of-mouth among students, supported by detailed and timely responses by instructors (within twenty four hours) further enhanced student adoption. This tool has evolved as one of the most popular and frequently used teaching aids in the subject. The effectiveness of the teaching tool was also gauged from student comments on student evaluations issued at the end of semester. These comments are viewed as an effective mechanism through which to attain feedback and evaluation of student learning (Caudill 2002). Representative comments included:

"Thank you on-line tutor. The answers were quick and detailed. I would log on all the time to check other questions and answers".

"The on-line tutor is FANTASTIC! It had lots of information and tips. It was easy to use, we always got a quick reply and could see everyone's questions and answers. Not knowing who posted a question made me feel really comfortable in using the system".

6. Conclusions

Two complementary innovations were introduced in this subject and effects monitored over a two year period. The first innovation was the introduction of high-tech animated entertainment through the inclusion of a humorous character in lectures to attract student attention and assist them with drawing together multiple areas of theory. This improved student understanding of the interrelationships between key subject areas. The second innovation, a web-based 'online tutor' assisted with student interactions, learning and debate. This ultimately assisted students to improve their analysis and integration skills.

These innovations have been introduced in one class over two years with great success. Overall, both have been educational for students and also the instructor. The online tutor allows an instructor to gauge student understanding from the level and number of questions posed, thereby allowing one to emphasize or clarify material accordingly in class. It also highlights areas of enjoyment for students which should be retained for future classes. The lecture character allows an instructor to attract attention in class, which is particularly important when a class is sizeable. It has also led to more intellectual probing by students and increased communication and dialogue between students and instructors. These initiatives have not only had positive outcomes for student assessment but also student and teaching staff perceptions, making the teaching experience more enjoyable for all involved.

Both innovations can be applied to other subject areas which require students to consider the integration of course content to solve business (or other) problems. They will take considerable time for the instructor to implement as all integration possibilities will need to be considered ahead of class time. The on-line tutor can also be applied to multiple subjects and in fact has been adopted by over 50 subjects now within the university. The program is a simple tool that is applied on-line with all content tailored to each unique subject. It is an effective tool in prompting students to increase interactions between students and between instructor and students.

7. References

Anon. (2003), "If humour works, don't knock it," *The Chronicle of Higher Education*, 50(3), B14.

Bloom, Benjamin S. (1956), *Taxonomy of Education Objectives Handbook I*, New York: Longman.

Caudill, Donald, W. (2002), "A model for interpreting written comments on student evaluations of marketing courses" *Marketing Education Review*, 12(1), 63-77.

Drea, John T., Tripp, Carolyn and Stuenkel, Kathleen (2005), "An assessment of the effectiveness of an in-class game in marketing students' perceptions and learning outcomes." *Marketing Education Review*, 15(1), 25-33.

Farando, W.T. and Clarkell, I. (2004), "Student observations of outstanding teaching: Implications for marketing educators," *Journal of Marketing Education*, 26(3), 271-81.

Fuhrman, B. and Grasha, Anthony (1992), "Evaluation guidelines," *The Teaching Professor*, May, 1.

Hake, R. (1998), "Interactive-engagement versus traditional methods – a six thousand student study," *American Journal of Physics*, 66, 64.

Hornig, J., Hong, J., ChanLin, L., Chang, S., and Chu, H. (2005), "Creative teachers and creative teaching strategies," *International Journal of Consumer Studies*, 29(4), 352.

Johnson, S.D., Johnson, D.M. and Golden, P.A. (1996), "Enhanced perceived learning within the stimulated marketing environment," *Marketing Education Review*, 6 (Summer), 1-9.

Jones, S. (2004), "Laughter is the best tutor," *The Times Educational Supplement*, 4583, A13.

Malhotra, Naresh, K. (2002), "Integrating technology in marketing education: Perspective for the new millennium," *Marketing Education Review*, 12(3), 1-5.

Paul, Pallab and Mukhopadhyay, Kausiki (2001), "Using information technology for active learning in international business education," *Marketing Education Review*, 11(3), 81-89.

Peltier, James W., Hay, Amanda and William Drago (2005), "The reflective learning continuum: Reflecting on Reflection," *Journal of Marketing Education*, 27(3), 250-263.

Roy, Abhijit and Bart Macchiette (2005), "Debating the issues: A tool for augmenting critical thinking skills of marketing students," reflective learning continuum: Reflecting on Reflection," *Journal of Marketing Education*, 27(3), 264-276.

Schrage, M. (2001), "Brave new world for higher education," *Technology Review*, 14(October), 90-91.

Scribner, Lisa L., Baker, Thomas, L. and Howe, Vince (2003), "Efficacy of group projects in support skill acquisition," *Marketing Education Review*, 13(1), 59-66.

Siegel, C.F. (2000), "Introducing marketing students to business intelligence using project-based learning on the world-wide web," *Journal of Marketing Education*, 22(2), 90-98.

Sims, R. (2004), "Business ethics teaching: Using conversational learning to build an effective classroom learning environment," *Journal of Business Ethics*, 2, 201.

Tomkovick, C. (2004), "Ten anchor points for teaching principles of marketing," *Journal of Marketing Education*, 26, 2, 109.

Torok, S. (2004), "Is humor an appreciated teaching tool?" *College Teaching*, 52, 1, 14.

Williams, Wendy and Ceci, Stephen, J. (1997), "How am I doing? Problems with student rating of instructors and courses," *Change*, September/October, 13-30.

Wright, Lauren K., Bitner, Mary Jo and Zeithaml, Valerie (1994), "Paradigm shifts in business education: Using active learning," *Journal of Marketing Education*, 16(Fall), 5-19.

Young, M.R. (2005), "The motivational effects of the classroom environment in facilitating self-regulated learning," *Journal of Marketing Education*, 27(1), 25-40.

Teachers Talk: Leaders Act

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Abstract

Many factors are claimed to be the cause of school failure. The persistent achievement gap between failing schools and successful schools is a major educational problem. The authors proposed that giving teachers the opportunity to identify needs critical to their practice could bring about school success. This research aimed to give teachers a voice in identifying what they consider to be critical needs in their teaching and learning endeavors and to suggest a set of guideline for educational leaders who are the facilitators supporting teachers as they are included as participants in the change process. In order to discern teachers' needs, the authors designed, administered and field-tested The Perception of Needs to Enhance Teaching Survey Form. Among others, teachers expressed needs for teamwork, continuity of instruction, opportunities for individualized professional development, and for developing a diversified curriculum. Having this information, the researchers requested scenarios from outstanding educational leaders on how best meet the identified needs. This resulted in a set of best practices to offer to educational leaders. Finally, this work provided alternative ways for educational leaders to use the instrument and to build scenarios.

Keywords : Needs-Reformers-Gap-Process-Practices

1. Introduction

Our work suggests ways on how to assess what teachers are thinking and believing is critical to their performance in the classroom. Also, it suggests strategies for educational leaders on how to give ear to teachers' voices and assist them in meeting their instructional goals and objectives for student achievement.

What follows is a process that the authors undertook to provide educational practitioners with guidance for a simple and useful procedure to hear and act. The current reform movement underway in the United States has been characterized as a bureaucratic, top-down process. On the federal, state, and local levels, politicians and high-ranking educational officials continuously engage in school restructuring and redesign. Often, those closest to the classroom are left out of the process. Teachers, for example, have limited opportunities to offer the suggestions for change which they deem essential to the teaching and learning agenda.

Believing that all credentialed educators are qualified to participate in school and/or district level decision making, the researchers designed, developed and field tested a Likert-type instrument to help school leaders assess teachers' views on what they perceive to be essential to enhancing their practice and the achievement of their students. After modifications, the instrument was finally administered to two hundred fifty elementary and secondary school teachers in urban and suburban settings on a state-wide basis. Using such a tool allows teachers to have a voice in the school change process since responses provide information to leaders as to instructional needs. Data collected from classroom practitioners provide direct input to leaders which, if heard, can result in helping them establish environments to bring about the collective energy and spirit needed for success.

As an educational leader, one can administer this survey in his/her particular educational setting in its current form or it may be used as the basis for an interview with your staff in order to ascertain what teachers express as essential to enhancing their performance in the classroom. It is advisable to use this survey either at the end of the academic year at the beginning of a new academic year so that sufficient time is provided for collaboratively planning appropriate interactive activities. As an educational leader, one may want to identify the one category that is in most need of attention and make that the basis for professional development activities for the year. By looking at the rank order of categories, it is possible to develop a five-year strategic plan of action.

Upon concluding that all 47 items were perceived as instructional needs by teachers who responded to The Perception of Needs to Enhance Teaching Survey Form (see attached) and after analyzing the collected data, the researchers with input from professors of teaching and learning placed the most significant thirteen instructional needs of teachers into five critical need categories. In general, the thirteen items suggested that teachers wanted to include parents in the learning process, felt it important to develop favorable and healthy learning environments, and wanted support and recognition for their work. The five categories of need with the specific items within them are as follows:

1. relationships and interactions with others (ex. collegiality, teamwork, recognition from supervisors, open communication between administrators);
2. program implementation (ex. the ability to observe other teachers, continuity of instruction, classes in art-music-science-and library, a diversified curriculum, better assessment of students);
3. professional development (ex. opportunities for career advancement, feedback on activities attempted, opportunities to express individual professional development needs);
4. resources (ex. classroom supplies, computers in the classroom, current textbooks); and
5. parent/student issues (ex. parent accountability, workshops to help parents help their children).

Knowing this, the researchers sought best practices from committed and active school leaders for the thirteen instructional need items. Thirteen practitioners

each provided a scenario describing actions taken to meet one of the most significantly identified instructional needs. One scenario is attached for your review. Guidelines suggested that practitioners describe the instructional need and its manifestation in their setting, indicate possibility strategies, discuss the selected strategy, make clear the implementation process, explain the evaluation procedure, and present modifications. The scenarios were read by the researchers in order to determine the most consistently mentioned actions, behaviors, recommendations, and/or strategies for equipping teachers to better their practice and improve student learning. Here is some of what the practitioners said. The ideas were grouped into five overriding concept with related ideas presented with them.

People who know you heard them and took their voice into consideration are more willing to cooperate. Make the "Open Door Policy" come to life; when someone stops you in the hall and needs to speak, it is important to pay attention; know through communicating what is happening before distress sets in; knowing requires excellent communication skills and the willingness to communicate; establish a schedule for discussion forums; allow all points of view to be expressed; respect the expertise of staff.

An atmosphere where adult learning is valued and opportunities for learning are abundant helps to create "super teams" of individuals who are willing to participate. Eliminate the isolation of the teacher as a sole practitioner; influence the growth of new teachers so they fit into the established culture and climate; be sure to have new staff orientation giving background, history and expectations; budget for an on-site peer coach; universities and community agencies have resources to share with teachers.

Be the champion of teachers and staff who depend on you for help and support so they can be partners in advancing mutually stated goals. Establish an interpersonal relationship between supervisor and teachers because helping relationships must be built on trust; accept teachers with a warm regard for them as persons of worth; understanding and encouragement are needed to unleash creative potential; empowerment brings about enthusiasm; offer choices and trust selections.

Collaborate to develop an essential curriculum delivered by all teachers; make your goals known to the staff and the community; promote cohesiveness and consistency of programs within the school and/or district; apply findings of research in the teaching and learning process; excellence requires a focus on the fundamentals of content; abandon the desk and the office and be part of the learning process; avoid "hyperturbulence" by expanding the use of technology.

Create a cultural if instructional growth, professional development must improve not coerce teachers; it must change behavior for individuals and groups; it must be collaboratively designed to meet the needs of the teachers not the organization showing them they are valued and respected; the most highly effective strategy is when teachers learn best practice from respected colleagues; use survey forms on an annual basis to define development activities; on-going staff development is the key to student's success- it cannot be a one shot deal; establish university links and invite outside specialists; needs assessment is a must; needs when met yield positive self images in teachers.

Make every effort to identify and solve the learning and behavioral problems of youngsters, develop a plethora of diverse, appropriate and specific strategies; understand that students must be able to validate themselves and their cultures; children who meet success early on have a positive regard for schooling; children require expertise, patience and love; explain to students that each class is a family- all making contributions; have students work in open study groups on class or school issues; establish a love of learning and a legacy of excellence culture using an efficacy model; divide classes into collegial circles to read in areas of interest to them.

In sum, the scenarios suggest that successful practices require high-quality communication and human relations skills. As an educational leader, we recommend incorporating some of the activities described by field-based practitioners in your practitioner setting. The scenarios can be used to develop policies and procedures to operationalize for collaborative action. In addition, the format offered provides a guide for developing your own specific collaborative ventures. The intent of the various scenarios is to have each leader from the scenarios ways to personally develop a positive, open, and healthy school environment. It may be that for certain situations, a combination of scenarios can best serve your set of particular needs.

2. Perception of Needs to Enhance Teaching Survey

Demographic Information

List your teaching license(s) and/or certification(s):

List the degree(s) you have earned:

Circle your current teaching assignment:

Elementary Middle School/Junior High High School

Circle your teaching environment: Monolingual Bilingual

Circle your school classification:

- Excellent (85% or more meeting standards)
- Average (50-84% meeting standards)
- Poor (below 50% meeting standards)

Circle one: Urban Teaching Suburban Teaching Rural Teaching

2.1 Survey Items

Directions: For each statement, please indicate how important you think the item is by using the five-point scale on the left. Then, please indicate how frequently you think the item occurs in your school by using the five-point scale on the right. Please circle the appropriate responses for each item. There is no right or wrong answer for each item.

Importance Scale: (5=Strongly Agree) (4=Agree) (3=Agree Slightly) (2=Disagree) (1=Strongly Disagree)

Frequency Scale: (5=Always) (4=Often) (3=Sometimes) (2=Rarely)

(I=Never)

Importance	Item	Frequency
In order to enhance your teaching, you need:		
1.	5 4 3 2 1 Technology for students	5 4 3 2 1
2.	5 4 3 2 1 Smaller classes	5 4 3 2 1
3.	5 4 3 2 1 Collaboration with colleagues	5 4 3 2 1
4.	5 4 3 2 1 Common preparation time for planning	5 4 3 2 1
5.	5 4 3 2 1 Recognition from supervisors	5 4 3 2 1
6.	5 4 3 2 1 Classroom management support	5 4 3 2 1
7.	5 4 3 2 1 Parent accountability	5 4 3 2 1
8.	5 4 3 2 1 Opportunity for career advancement	5 4 3 2 1
9.	5 4 3 2 1 Collegiality	5 4 3 2 1
10.	5 4 3 2 1 Continuity of program instruction	5 4 3 2 1
11.	5 4 3 2 1 Teachers' rooms	5 4 3 2 1
Open communication between		
12.	5 4 3 2 1 administrators and teachers	5 4 3 2 1
13.	5 4 3 2 1 Ways to motivate bilingual students	5 4 3 2 1
Workshops to help parents to help their		
14.	5 4 3 2 1 children	5 4 3 2 1
15.	5 4 3 2 1 Student recognition	5 4 3 2 1
16.	5 4 3 2 1 Classes in art, music, science and library	5 4 3 2 1
17.	5 4 3 2 1 Teamwork with all school participants	5 4 3 2 1
18.	5 4 3 2 1 Timely dissemination of information	5 4 3 2 1
19.	5 4 3 2 1 A diversified curriculum	5 4 3 2 1
20.	5 4 3 2 1 Social skills curriculum	5 4 3 2 1
A written curriculum with content and		
21.	5 4 3 2 1 activities	5 4 3 2 1
Better assessment of students' reading		
22.	5 4 3 2 1 and math levels	5 4 3 2 1
23.	5 4 3 2 1 Behavior modification programs	5 4 3 2 1
Clear, concise expectations for staff and		
24.	5 4 3 2 1 students	5 4 3 2 1
Importance Scale: (5=Strongly Agree) (4=Agree) (3=Agree Slightly) (2=Disagree) (1=Strongly Disagree)		
Frequency Scale: (5=Always) (4=Often) (3=Sometimes) (2=Rarely) (1=Never)		
Importance	Item	Frequency
In order to enhance your teaching, you need:		
25.	5 4 3 2 1 Meaningful staff recognition	5 4 3 2 1
26.	5 4 3 2 1 Credentialed staff	5 4 3 2 1
27.	5 4 3 2 1 Strategies for Academic Intervention	5 4 3 2 1
Assessment of professional development		
28.	5 4 3 2 1 needs	5 4 3 2 1
Professional development done by hired		
29.	5 4 3 2 1 experts	5 4 3 2 1
30.	5 4 3 2 1 Effective administrators	5 4 3 2 1
31.	5 4 3 2 1 Tracking/grouping of students	5 4 3 2 1
Counseling for students in dysfunctional		
32.	5 4 3 2 1 families	5 4 3 2 1
33.	5 4 3 2 1 Ways to encourage student accountability	5 4 3 2 1
Professional development followed by		

34.	<u>5 4 3 2 1</u>	<u>feedback on its implementation</u>	<u>5 4 3 2 1</u>
35.	<u>5 4 3 2 1</u>	<u>Support from administrators</u>	<u>5 4 3 2 1</u>
36.	<u>5 4 3 2 1</u>	<u>The ability to observe other teachers</u>	<u>5 4 3 2 1</u>
37.	<u>5 4 3 2 1</u>	<u>Sufficient time to complete work</u>	<u>5 4 3 2 1</u>
38.	<u>5 4 3 2 1</u>	<u>Freedom for teachers to be creative</u>	<u>5 4 3 2 1</u>
39.	<u>5 4 3 2 1</u>	<u>Projectors</u>	<u>5 4 3 2 1</u>
40.	<u>5 4 3 2 1</u>	<u>Teacher resource rooms</u>	<u>5 4 3 2 1</u>
41.	<u>5 4 3 2</u>	<u>1 Audio visual materials</u>	<u>5 4 3 2 1</u>
42.	<u>5 4 3 2 1</u>	<u>Classroom supplies for teachers</u>	<u>5 4 3 2 1</u>
43.	<u>5 4 3 2 1</u>	<u>Computers in classrooms</u>	<u>5 4 3 2 1</u>
		<u>Appropriate instructional materials for</u>	
44.	<u>5 4 3 2 1</u>	<u>students</u>	<u>5 4 3 2 1</u>
45.	<u>5 4 3 2 1</u>	<u>Current books/textbooks</u>	<u>5 4 3 2 1</u>
46.	<u>5 4 3 2 1</u>	<u>Supplies</u>	<u>5 4 3 2 1</u>
47.	<u>5 4 3 2 1</u>	<u>Extra curricular activities</u>	<u>5 4 3 2 1</u>

3. The Power of Collegiality through Instructional Support Teams

The schools of today's educational system typically do not represent learning organizations in which effective collegiality create a positive learning atmosphere where students' instructional needs can consistently be met. As a result, educators are unaware of the most effective strategies and support services to utilize with students who are experiencing learning or behavior problems and therefore, create an over-identification of students for special education consideration (Rodrigue, 1999). Collegiality, which is defined as "a shared power and authority vested among colleagues" (The American Heritage Dictionary of the English Language, 2000) is the foundation for Instructional Support Teams. Instructional Support Teams are a group of colleagues that form a team to collaborate, develop and implement interventions to assist a student in a general education setting.

Need: The New York State (NYS) Education Department, in 1995, identified school districts with effective prevention and pre-referral strategies as having a reduced amount of students referred for special education consideration and teachers making more appropriate referrals to the special education department. In the NYS Board of Regents 1998-1999 and 1999-2000 Proposal on School Finance, the Board recommended that the NYS Education Department strengthen the capacity of school districts to provide prevention and support services to students experiencing learning difficulties and behavior problems in the classroom. The NYS Board of Regents recommended an increase for prevention and support services to be provided in general education, as well as, a statewide training effort to provide special and general educators with information on effective use of prevention programs and strategies utilizing building-level teams to support student learning and assess their needs (Valenti, 2001).

Special education is a service not a place. Many times the same strategies utilized by special education teachers can be offered in the classroom the student is currently in.

Manifestation of the Need: There is a strong need to implement pre-referral interventions approaches that are designed to meet the challenges of students before they are to be considered for special education services. As the number of classified students increased administration at the Lincoln School District were notified by New York State Education Department that a plan was needed to support the students of the district.

Pre-referral intervention is preventative in nature and specially designed to: provide early and systematic assistance to students in their regular classroom environment, reduce or eliminate inappropriate referrals for testing, reduce unnecessary placements into special education and increase a general education teacher's knowledge base of how to deal with the students who exhibit certain behaviors that make it difficult to meet their educational needs (Hartman & Fay, 1996).

Possible Strategies: Current research has articulated specific models that incorporate collaborative problem solving techniques that can be used to foster student success through collegial support, carefully designed classroom strategies, and program coordination prior to referral for special education. Pre-referral intervention models have been identified in the recent Individuals with Disabilities Act Amendments of 1997, as a critical instructional practice to reduce the over-identification of students with disabilities.

Two possible pre-referral models that support collegiality were evaluated before implementation. The pre-referral strategies evaluated were Child Study Teams (CST) and Instructional Support Teams (IST). Perhaps the most significant difference between the two pre-referral models was that CST used a more traditional teacher-centered model instead of IST's learner-centered classroom. The IST model also presented a student with several opportunities to learn by varied means. The IST process places emphasis on the student's strengths and the collaboration with other professionals in the building to formulate new interventions to assist the student to be academically successful or behaviorally appropriate. The Administration at Lincoln selected the IST model as it promoted the individuality of the learner and offered instruction through multiple instructional strategies whereas the CST typically used one instructional strategy to assist a student.

The Administration at the Lincoln School District collectively felt that IST was the model that should be implemented district-wide as their pre-referral process. The most significant advantage of the IST process is its ability to promote collegiality among special educators and general educators. This process also helps to meet the requirements of the NYS Education Department and the NYS Board of Regents, which called for an increase for prevention and support services in regular education.

In order to effectively implement the IST model into the Lincoln School District the Administration hired consultants. The money to implement this model was accessed through the State Improvement Grant (SIG).

3.1 Implementation of the Strategy

Kovaleski, Tucker, and Duffy, 1995, reported that a vital component to the successful implementation of the IST process was that all professional staff, especially the build level principals participated in extensive IST training.

There are five components of the 1ST training process, which are highly specific and skill oriented. These components include: collaboration and team building, instructional assessment, instructional adaptation, student discipline, and student assistance for at-risk issues. IST training methods vary according to the specific roles of the principals, support teachers and other members of the team, but are primarily hands-on in the classrooms with the exception of some workshop training. All trainers must be experienced in all of the various components of the 1ST process in order to effectively teach the specific skills involved in the process (Kovaleski, Tucker, & Duffy, 1995). During the first year of training at Lincoln the consultants provided guidance in the development of IST in each school of the district, by organizing school specific training workshops in the five components of the IST process, as well as, coordinating networks of support teachers and teams throughout the district. After the first year school the district continued to receive training and support through their consultant that was assigned to their building in the beginning of the process. Through training the IST consultants are able to model instructional support, demonstrate effective instructional strategies, and facilitate guided practice on the part of the support teacher who is learning the process. Because most of the IST training is designed to take place at the school site, it provides districts the opportunity to include all of the personnel to participate without the added cost and effort of providing professional development off site and out of district. The primary objective of IST training is the development of effective techniques that will give the regular education teacher the ability not only to solve the learning or behavioral problems of one child, but to also utilize those same techniques to meet the needs of every child in the classroom (Kovaleski, Tucker, & Duffy, 1995).

Another outcome of the pre-referral process was that the director of special education/committee chairperson required the documentation of IST plans for each student prior to the consideration of classification for special education services. He/she was in constant communication with building level principals to help provide a guideline for specific strategies to offer through the IST process, as well as, share data to assist in IST training. The director of special education/committee chairperson participated in longitudinal data collection, which directly supports the collection of information regarding referrals to special education, classification data and placement data. These activities ensured that students receive IST services before they can be considered for special education services (Valenti, 2001).

3.2 Evaluation of the IST Process:

The Pennsylvania State Education Department designed an instrument to help school administrators assess the level of implementation of the essential elements of the IST process which was used at the Lincoln School District. The specific instrument used is a rating sheet or checklist, which notes whether or not components of the IST process are present. The number of features in place added together and used to make up a score that translates into an implementation level (Kovaleski, Tucker & Duffy, 1995).

The first section of the rating sheet/checklist is an assessment of the training features that are present, beginning with the action plan for the IST process and the training of the principal and support teacher. The final item in the rating of training implementation is that the school has provided guidelines and overviews of IST to all staff, with an emphasis on specific individuals who regularly participate in IST activities (Kovaleski, Tucker & DuffS', 1995).

The second section of the rating sheet/checklist focuses on the implementation features, beginning with the composition of the IST and the assignment of personnel. This section also examines and questions student identification assessment philosophy and techniques, which were utilized. The aspects of interventions which were used and the whether or not the students are referred for multi-disciplinary evaluation is also questioned in this section (Kovaleski, Tucker & Duffy, 1995).

The totals for the two sections of training and implementation are added in order to reach an implementation score for the specific school in which IST is being rated. Overall, the following steps of the rating sheet/checklist assess whether or not the IST process is effectively implemented (Kovaleski, Tucker & Duffy, 1995).

The Lincoln School District compared pre and post data to evaluate this collegial model. The data was collected before the model was introduced and at the end of the first year of implementation. The data supported that a significantly less amount of students were referred to Special Education therefore, more children were continuing to be educated by general education teachers in their current setting.

Modification of the Strategy: The Lincoln School District recognizes the need to improve and adjust the IST model based on ongoing evaluation of the process. This collegial model provides educators with a collaborative approach to assisting their students. It promotes best practices of teaching and learning. It also endorses three important messages: all general and special education staff share the responsibility for all students; all educators are qualified and competent to provide services to all students and, all students benefit from a collegial group of educators developing a plan to meet their specific needs.

The Lincoln School District has been successfully addressing student needs through the collegial model known as Instructional Support Teams. Its data reveals that it is highly effective and most importantly teachers are learning best practices from their colleagues.

4. References

Hartman, W.T., & Fay, T.A. Cost effectiveness of instructional support teams in Pennsylvania. *Center for Special Education Finance*, policy paper #9, May 1996.

Kovaleski, J. F., Tucker, J.A., & Duffy, D.J. School reform through instructional support: The Pennsylvania Initiative. Part I: The instructional support team (IST). *NASSP Communique*, 3(8). 1995.

Rodrigue, C. 3. Standardizing instructional support teams and minimizing special education referrals. *National Forum of Special Education*, 11(1). August 1999.

Valenti, V. Prevention and support services in general education: instructional support teams manual. Eastern Suffolk BOCES, 2001.

Recruitment of Minority Males

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Abstract

This paper explores the issues involved in the under representation of minority male teachers in early childhood education. The paper aims to suggest a variety of approaches to recruit, train, and retain minority male early childhood education teachers. Based on research conducted, the paper reviews the literature which discusses the significance of racial/gender identification in early childhood. The paper describes the literature, which identifies obstacles to the recruitment and retention of minority males in early childhood education. Obstacles include: public policy, university policies, criteria for recruitment, criteria for entry level positions, criteria for evaluating performances and public attitudes towards race and gender roles. Demographic data is presented which demonstrates the significant under- representation of minority males in early childhood education. Suggestions are made for long and short-term strategies to increase the percentage of minority male teachers in early childhood education.

Keywords: early childhood education – minority male teachers

1. Introduction

Historically, Early Childhood Education teachers have been women who came from the dominant culture. In the United States, men make up less than 2% of the nations pre-kindergarten and kindergarten teachers (Callas, 2003; DeMonte, 2004; Diamond, 2003A; Walzer, 2003, William, 2001). The number of minority males in that 2% is so small that the literature does not provide quantification. However, the need for male role models for minority youth is significant. According to Lee (1991), "black males from kindergarten through high school tend to experience significant alienation from America's schools. An increase in minority male educators in Early Childhood would enable us to measure the impact on children's alienation from schools. (P.1)" In addition, minority children struggle with identity development and with the ability to relate to the dominant and their own family cultures (Yeh & Drost, 2002). Obstacles to the recruitment of minority males in Early Childhood Education abound. Examples include: low salaries, fear of legal liability, and cultural stereotypes. To meet the challenge of recruiting substantial numbers of minority males into Early Childhood Education will require creative efforts and substantial investment.

2. Demographics

The percentage of males working in education hovers around 2%. Of that 2% researchers have been hard pressed to find the number of minority males that are presently working with young children. A nation wide survey by the National Education Association (NEA) said that the percentage of male teachers has fallen to a 40 year low. In 2003, 21% of the nation's teachers were men, down from 31% in 1961. For elementary teachers the percentage of black male teachers is 9% (Walzer, 2003). On the national level, men make up less than 2% if the nations pre-kindergarten and kindergarten teachers. A review of the literature was unable to uncover what percent of the 2% of men in Early Childhood Education are "minorities." The proportion of men teaching in ECE has not changed significantly in the last 40 years (Nweke, et.al, 2004). In France, the organization for Economic Co-operation and Development, in a project launched by their education committee developed a "Thematic Review of Early Childhood Education Care Policy." In that policy document, the following sentence appears, "The team also wondered whether the Ministry of Education might explore the possibility of explicitly recruiting teaching staff that represent the cultural ethnic and linguistic diversity of the children served, as well as strategies to attract more men into the profession (<http://www.oecd.org/dataoecd/60/36/34400146.pdf>). As in most European countries, practitioners in the ECE field in the U.S. are almost exclusively women; men account for only 3% of the work force. There are no public policies which take a clear stance on supporting a more mixed gender workforce. The whole issue has been overshadowed by the apparent public mistrust of men working with young children; myths and allegations of sexual abuse are proving to be a very real barrier towards creating an occupational field that is open to men.

New Zealand has also struggled with this issue. Even in the Christchurch area of New Zealand, which represents an anomaly when it comes to male representation in ECE, eight (8) of 200 teaching staff of early childhood children are men. There is no mention of the existence of minorities amongst those eight (8). One of the male teachers, David Baxendell, speaks about obstacles to men working in ECE. "Starting pay was not good. As a mature male with small children and being the single income earner it was very difficult to keep the family going. Had there been more men in the sector the pay rates would have improved much sooner. Women have always got the short end of the stick in terms of pay rates and I do not think the men in ECE have been sufficient to drag that up." (www.neon.org.nz/newsarchive/meninearlychildhoodeducation/).

In summary to say there is a significant gender gap in Early Childhood Education is an understatement. The gap, when you include minority males, is immeasurable. This problem goes beyond national boundaries and is probably universal.

3. Identification

It is impossible at this point to quantify the significance that ECE teachers who, look like the children they are teaching, live like them and can encourage them in ways with which they can identify, will have on academic performance and development of a healthy identities. This will only be able to be done when there is a substantial representation of minority males in Early Childhood Education. It is hypothesized here that this impact would be invaluable. "Minority cultural values and beliefs, differences in behaviors, language, world views and past power experiences with the dominant culture all influence the success of failure in negotiating identities" (Yeh & Drost, 2002).

The recruitment of males with like values and worldviews would help children in negotiating their identities. "Negotiating multiple, often contradictory, identities is a complex process for culturally diverse school age children. Social, cultural and political factors unique to their backgrounds influence the process of identity development and the extent to which youth relate to values of the dominant and family cultures (Yeh & Drost, 2002). Having role models of similar cultural backgrounds helps children relate both to their own values and to cultural norms. In addition, Early Childhood experiences affect cultural notions of masculinity and femininity. "An underlying premise is that the active engagement of males in the nurturing of young children challenges conventional print perceptions of masculinity and so, has the potential to contribute to gender reform" (McBride & Rune, 1997). Single mothers share these perceptions of the importance of the identification of children with ECE teachers. Almost every teacher I interviewed told me that their sons would have real male influence" (Sargent, 2002).

Perhaps as important as the impact of the development of identity is the likely impact on academic success. "Black males from kindergarten through high school tend to experience significant alienation from America's schools" (Nweke, et.al, 2004). "Minority group children show poorer school achievement and have substantially higher drop-out rates than majority children, at least in part because of the incongruent expectations, motives, social behaviors, language and cognitive patterns that teachers and minority students may have" (Yeh & Drost, 2002). It seems logical that recruiting teachers from like ethnic and cultural backgrounds would help raise student achievement. "The researchers remind us that low-income African American fathers are a diverse group, not only in their literacy experiences, literacy preparation and goals for their children, but also in their family relationships and family resources. These and other studies suggest that a father's ability to support his child's learning affects the child's engagement with books and schooling." Teachers of the same race, ethnicity and gender can fill the gap for male children in those instances where there may be a lack of male involvement. As indicated by Wood and Hoag, schools should strive to become as diverse as their student population. Students enjoy the balance a male brings to an elementary faculty. Boys need to know men are interested in academics as well as athletics (Wood & Hoag, 1993).

4. Recruitment

The imbalance of male minorities in Early Childhood Education classrooms, attributed by many to low salaries and the lackluster prestige of the profession is troubling. I believe that the presence of minority males in ECE classrooms is crucial for the success not only of children of those minority cultures, but to children of all cultures. For children who are at this critical stage, diversity in early childhood education is equally crucial to children in how they will live and learn. "There are hurdles that get in the way of increasing the number of men working with young children. Nurturing and teaching young children is still considered "women's work" and the number of men entering the field remains small. To be nurturing and sensitive is often considered unmanly and perhaps a little bit different" (Reynolds, 2005).

The male teacher plays a pivotal role in the life of any child. Teachers, particularly male minority educators, assume many important roles in our school systems and have frequent opportunities, while in the classroom, to shape their students' futures. As male educators, they play a pivotal role in helping young children that can identify with them culturally, thrive in academic settings and acquire the social skills necessary to thrive during their early childhood years. As cultural mentors, minority males can instill in children a sense of pride as well as the capacity to be good learners. "One of the barriers to recruiting and retaining quality male teachers is the lack of male role models for them in their teacher education programs, field experiences and in the schools in which they are hired" (Bittner, Cooney; 2003). "Research shows that minority youth need to be encouraged to become teachers (Williams, 2001). "Many minority students never, or rarely, have encountered another minority in a Pre-K to 12th grade teaching role" (Lee, 1991). "Therefore, it is hard for young minority males to imagine themselves in the role of a teacher" (Williams, 2001). Unless young children are exposed to learning from teachers with whom they can identify, the teaching profession will continue to face difficulties in the recruitment of minority male teachers. If we are not able to find fully qualified minority men, we should hire males as assistants and support their progress development until they can become teachers. Hiring minority males to perform other school program tasks (cooks, bus drivers...) will help in inviting males into the classroom. Our hope is that the Early Childhood Education profession embraces the challenges of recruiting minority men. This issue is fundamental to providing quality care to all children, and supporting the development of the "whole child." Gender equity should mean strong support of hiring practices that promote minority males as Early Childhood Educators.

5. Suggestions and Conclusions

So, what can we do to recruit and maintain minority males in early childhood education? "Creating a male friendly atmosphere in the classroom and school setting requires the school faculty and administration to study the messages their school culture communicates to fathers and male figures in children's lives" (Bittner, et.al, 2004). Methods that have been used to attract the number of black male teachers in Pre-K to 12 classrooms in Georgia, and nationally, will require more comprehensive and multi-pronged solutions than alternative

certification alone will offer. Alternative preparation programs are targeted at college degree holders in areas other than education. The problem is that more than 50% of black males that start grade 9 drop out before they reach grade 12. Not enough go to or graduate from college, so schools do not find enough black male degree holders to recruit into teaching via alternative or traditional certification routes. Black males constitute less than 6% of bachelor's degree graduates annually. Therefore, a lasting solution must reach lower into Pre-K-12 levels of education and include serious retention programs at the high school level. (Nweke, et.al, 2004)

Do prospective teaching candidates need to hold a degree before getting some practical experience? Programs like Troops-To-Teachers and Georgia Teacher Alternative Preparation Program(GATAPP) will become more effective in targeting and recruiting black males as the pool of black male college graduates increases. The benefits of increasing the number of male teachers, and especially black male teachers in the classroom are enormous. These teachers serve as role models for young black males and combined with other interventions at various educational levels, help improve student retention, completion, and graduation rates at both high school and college. Local and national support for these programs will increase our capacity to interest, teach and keep the flow of men coming into the field. The five-year (2002-2007) project in the Professional Standards Commission is funded through a grant awarded by the United States Department of Education. Its purpose is to recruit, support and retain teachers into high need school systems and schools... from a variety of sources. The targeted groups are recent non-educator college graduates, mid- and second career changes, and highly qualified paraprofessionals. Participants in the Transition to Teaching program are largely enrolled in the GATAPP program for preparation toward full certification. However, some participants are preparing toward full certification via other alternative, provisional routes while working as teachers of record in Georgia public schools. In the first two years of the project, black males represent approximately 5% of participants, only somewhat higher than the overall 3-4% of black males in the Georgia teaching force. The project will focus efforts to recruit black male teachers into Georgia's high need schools in its third year. GATAPP, a program established by the Professional Standards Commission (PSC) in FY01, provides preparation to individuals who hold Bachelor's or higher degrees in non-education fields to fully certify and enter the teacher profession. Recruiting individuals who hold degrees in non-education fields increase the pool of males that we can draw from.

The purpose of the Georgia Troops-to-Teachers (TTT) program in the PSC is to recruit retiring or separating active duty soldiers and active duty National Guard and Reserves military personnel into Georgia's public schools as teachers. Given the gender and ethnic composition of the military, TTT often recruits mainly male and minority teachers. In the 2002-2003 school year, 79.2% of teachers recruited through the Georgia Troops-to-Teachers program were male, and 33.5% were black males.

Other existing programs in other states to recruit males and ethnic minorities into teaching elementary education and early childhood education (ECE) include: "Call Me Mister" scholarship teaching program in South Carolina that seeks to recruit, train, certify, and secure employment for 200 black males as elementary teachers in the states public schools (Smiles, 2002). The Bay Area Male

Involvement Network in California that offers Male Involvement Curriculum for the training of teachers in ECE. Another program is Men Teach, a recruitment program for men in early and elementary education. The last program is The Black Collegian Magazine Teaching Scholarship program for black males who are majoring in elementary education. Move money for programs such as these and people will run to them.

Match male students with male cooperating teachers. Field placements should meet high standards. Cooperating teachers should be highly qualified, experienced, and eager to mentor students interested in teaching. In the quest to recruit minority males standards should not be lowered. However, by carefully expanding the search for male cooperating teachers, male student teachers could have role models that last them a lifetime.

A possible new approach would be to identify a group of minority male high school students who appear to have personal qualities or success as educators of young children. The group would then be mentored individually and as a group through high school including providing them with experiences with young children. Those who choose to continue through college would receive full tuition assistance along with continued mentored experiences in return for a commitment to spend at least two years teaching in a public early childhood school. It seems that this would be a worthwhile demonstration project for 20 students and if it resulted in a majority of the 20 becoming effective early childhood educators the program could be expanded.

6. References

- Bittner, M., & Cooney, M. (2003). Male Teachers and Gender Balance in Early Childhood Programs. *Childcare Information Exchange*. N153 p80-83.
- Callas, T. (March 31, 2003). *A man's place? As head of the class. In elementary schools, male teachers bring diversity- but face obstacles* Retrieved from: <http://philly.com/mid/inquirer/5520930.htm>.
- Demonte. (2004). *Mr. Demonte's Classroom- Men Working in Early Childhood Education*. Retrieved from: <http://weloveschool.com/men/htm>
- Diamond, L. (October 21, 2003a). *Fewer men teaching in elementary schools. Male role models needed as more kids grow up without father at home*. Retrieved from: http://www.jacksonville.com/tu-online/stories/102103/met_13833346.shtml.
- Lee, C. (1991). Empowering Young Black Males. *Eric Clearinghouse on Counseling and Personnel Services*. ED341887.
- McBride, B., Rune, T. (1997). Father/Male Involvement in Early Childhood Education Programs: Issues and Challenges. *Early Childhood Education Journal*. 25, 11-15.

- Nweke, W., Afolabi, C., Stewart, E., Stephens, C., & Toth, F. (2004). Recruitment and Training of Black Professionals: The Case of Black Males and Alternative Certification in Training. *Georgia Professional Standard Commission*.
- Reynolds, D (2005). When the Director is a Man. *Men in the Lives of Children*.
- Sargent, P. (2002). Under the Glass: Conversations with Men in Early Childhood Education. *Young Children*. 57(6) 22-30.
- Smiles, R.V. (October 10, 2002). Calling all potential Misters: South Carolina's teacher-training program "Call Me Mister" seeks to put Black males at the front of the class. Black Issues in Higher Education. Retrieved from: http://www.findarticles.com/cf_dls/m0DXK/17_19/92800207/print.jhtml.
- Walzer, P. (December 1, 2003). *Schools search for more Mr. Bradfords*. Retrieved from: <http://home.hamptonroads.com/stories/print.cfm?story=62979&ran=96870>.
- Williams, B. C. (August 30, 2001). Recruiting African American teachers requires collaboration, cooperation. Black Issues in Higher Education. Retrieved from: http://www.findarticles.com/cf_dls/m0DXK/14_18/78537594/print.jhtml.
- Wood, R. & Hoag, C. (1993) Male Elementary Teachers: are more needed: *Rural Educator*, 14 (3), pp. 16-19.
- Yeh, C., & Drost, C, (2002). Bridging Identities among Ethnic Minority Youth in Schools. *ERIC Digest*. 1-6.

Educating for an Innovation Economy

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Abstract

In 1991, the economy of the U.S., the largest in the world, moved into the Knowledge Age when the economic activity based on industrial goods (U.S.\$107 billion) was surpassed by that based on knowledge goods (U.S.\$112 billion). This change brings with it a challenge for education: We must now educate for a knowledge economy of innovation, starting at an early age.

This paper discusses knowledge building theory and practice, a theory of education for innovation and deep understanding. From there, we discuss a study conducted in a Gr. 5/6 knowledge building class studying Ancient Civilizations. Student work was analyzed using social network analysis. Data mining was used to obtain the social network data from the *Knowledge Forum*[™] online knowledge building environment.

We demonstrate that the knowledge building class formed a note reading community by the end of the first month, and that this was persistent through a level of five communication events.

Keywords: Innovation - knowledge building – economics - social network analysis

1. Introduction: Economics, the Knowledge Age, and Education

Here are two headlines from recent news articles:

- *Chrysler to cut 10,000 more jobs* ("Chrysler to cut 10,000 more jobs [Online]," 2007);
- *Auto Repair? More like rocket science.* ("Auto Repair? More like rocket science," 2008)

These two headlines neatly encapsulate the themes of this conference: the economy, society, and education. The first details job losses due largely to globalization, an ongoing process of moving manufacturing jobs away from the industrialized economies and to developing economies where the work can be done more cheaply (Brennan, 2007). These jobs will not come back—the losses are permanent, impacting both the economy and society. The job losses reported above were not restricted to the U.S. On the same day, Chrysler Canada also announced 1,000 layoffs.

The second headline details the process being termed *upskilling*, in which jobs that previously required few cognitive skills now require much higher skill sets. This has implications for both society and education. In general, jobs lost to offshoring are not replaced, although new jobs requiring higher skill levels and more education may appear. Using automobile technicians as an example, the

St. Petersburg Times reports ("Auto Repair? More like rocket science," 2008), "Automobile service technicians advance far beyond yesterday's mechanics, with specialized training in electronics, math, physics, computer science and even English" (p. 2F). Because about *one million pages* of new information are added to automobile technical manuals each year, the technicians need to be able to read and understand a large volume of complex material. They also need to be more innovative, adapting their skills to a wider variety and complexity of vehicles.

This is a process that is happening in all the developed economies as we move from the traditional industrial (manufacturing) economy to a knowledge-based economy. Headlines detailing job losses due to globalization are now distressingly common. For example, in the author's home, a suburban community near Toronto, a local company called BCL Magnetics recently laid off about 66% of its workforce because its customers are moving to Asian and Mexican suppliers. Quoting Tom King, one of the laid off employees (Whitnell, 2008):

This is my last day here after 16 years and I feel very lucky at 56 years old to land a position at [a nearby town]. It is some of the other employees here that worry me. This has been their life for almost 30 years. For them to get a job that pays as well as this will be pretty near impossible (p. 5).

In terms of the local economy, this kind of turmoil has serious repercussions. Given that the average Canadian family has two parents and 2.5 children, each layoff directly affects at least four persons, often more. Such layoffs affect education in three ways: (1) families who put away money for university or college for their children may now have to use that money to pay other bills because of the reduced wages; (2) students may have to move schools, with the consequent dislocation and loss of continuity of instruction; and (3) students who want to go to college or university may have to find jobs, part time or full time, to pay for their educations. Part time jobs in particular can affect students' marks, and in the case of full time jobs, can delay education so long that it is no longer practical. Further, the layoffs underscore the change in society. Manufacturing jobs are no longer common or well paid. All of these problems are exacerbated by the rapid rise of oil prices that is affecting transportation costs, and is likely to have unforeseen consequences. While the future is, and always will be obscure, the current best thinking is that jobs in the knowledge economy are the way forward.

This transition from industrial economies to knowledge economies is therefore putting a huge strain on the societies and the economies of the countries involved. This paper will detail some of the changes involved in the transition to the Knowledge Age, the need to create an economy of innovation, and a model of education of education, *knowledge building*, that can be used to create students who will function well in an economy that increasingly prizes those who know the innovation process.

2. The Knowledge Age and the Economy of Innovation

In 1991, the U.S. economy shifted from a predominantly industrial economy to a predominantly knowledge economy when its economic activity based on industrial goods (US\$107 billion) was exceeded by economic activity based on knowledge goods (US\$112 billion) (Trilling, 2005). This shift has not been well publicized as such, leaving the general public with the erroneous impression that the manufacturing economy *can* somehow be protected, and that it *should* somehow be protected. This shift is now so well established that UNESCO released a report in 2005 entitled *Towards Knowledge Societies*, in which they note (Bindé, 2005, p. 19),

The values and practices of creativity and innovation will play a major part in knowledge societies, if only through their ability to challenge existing models in order to better meet societies' new needs. Creativity and innovation also lead to promoting new types of collaborative processes that have already proven themselves to be particularly fruitful.

The UNESCO report further notes (p. 45) that the importance of knowledge and innovation is not restricted to the high-tech sectors of the economy: lower-tech sectors have also been transformed, or are being transformed by this shift, as the headline about auto technicians above attests. What do we know about the Knowledge Age?

The Knowledge Age is a global transformation equivalent in magnitude to the transition from the Stone Age to the Agricultural Age, or from the Agricultural Age to the Industrial Age. In order to better understand the shift, we need a theoretical lens to allow us understand the new age we are entering. Such a lens is provided by Pierre Lévy, who has written two seminal books, *Collective Intelligence* (1997) and *Becoming Virtual* (1998) that help to elucidate the changes taking place. There are two key aspects of Lévy's work that deserve attention here: the concepts of *anthropological spaces*, and *virtualization*.

An anthropological space relates to the manner in which humans interact with their environment: the technologies they use, the symbols they use, their culture and conventions and so forth (Lévy, 1998). There are two key concepts here for this paper: duration, and culture. The term 'ages', as used for the Agricultural Age and the Industrial Age imply a duration: the age starts; the age ends. However even a cursory glance at our current civilization reveals that this doesn't happen at all. We are still very much in the Agricultural Age: most of our food is the result of agricultural effort. Likewise, the Industrial Age has not ended : we still have all sorts of industrially manufactured goods in our homes and offices. This is why the view of these 'ages' as anthropological spaces is critical. Ages end, but the spaces continue to exist and to influence each other. Agriculture has been influenced by industry, through agricultural machinery and transport systems (etc.); and industry is being affected by changes in computers and communications, as is agriculture and everything else. The anthropological spaces interpenetrate and influence each other, and in doing so, create new cultures and technologies in a never-ending process. One implication of this is that when we are told that the 'old economy' is dead, it isn't true. It is instead

being radically modified by the new anthropological space created by the Knowledge Age.

The advent of the Knowledge Age has caused an increase in the importance of knowledge (Bindé, 2005), and in the number of persons required to use high-level knowledge in their day to day activities (Lévy, 1998). This has obvious implications for education in terms of the level of basic education required to function effectively in society, and for lifelong learning. As Lévy puts it,

The contemporary laborer, however, no longer sells his labor power but his skill, or rather, a capacity for learning and innovation that is continually maintained and improved and that can be actualized in an unpredictable manner within changing contexts (Lévy, 1998, p. 77, emphasis added).

As well, however, the Knowledge Age is characterized by the virtualization of many aspects of modern culture. Virtualization is a process by which an event, "... is detached from a specific time and place, becomes public, undergoes heterogenesis" (Lévy, 1998, p. 74). A music concert provides a clear example of this principle.

Attending a concert in person is an actual event. One attends at a particular time in a particular place, and the concert lasts for a given duration. However, that concert can be digitally recorded and distributed by various means. This represents a *virtualization* of the event. Suddenly, the concert is no longer tied to a specific geographic location or time. It can be replayed, so the duration changes. The music can be altered, added to, or juxtaposed with other music. The context is changed. It is no longer in a concert hall, but in a home or bar or restaurant. It can be shared with friends or a larger public than could attend the original venue. These attributes of deterritorialization, detachment from the original context, sharing, elevation to a problematic, and heterogenesis (change in a new environment) are the hallmarks of virtualization, and many aspects of Knowledge Age life are virtualized.

The importance of virtualization to this paper is twofold: (1) the economy is becoming virtualized, with effects that are still unclear; and (2) education will, to a certain extent also become virtualized, something for which society in general is unprepared at present. Later we describe a knowledge building environment that has the effect of virtualizing education.

Education has already started to virtualize. This is evident now in many ways. The number of online/virtual courses/schools grew in the U.S. by a factor of twenty in the past seven years, and in 2006, there were at least 700,000 students in virtual high schools (Mehta, 2007; Moser, 2006; Pope, 2006; Robelen, 2007; Tucker, 2007). The genie is out of the bottle, and not likely to return.

3. Education for Innovation: Knowledge Building and Knowledge Forum

Earlier, Bindé (2005) and Lévy (1998) were quoted as to the importance of research, learning and innovation to the modern economy. In education, we must begin as we mean to continue: if we value innovation, we have to educate students for it. Regarding technology, Bereiter notes (2002, pp. 219-220):

To thrive in a modern organization, you need more than the ability to master the software applications used in your work. You need to feel at home in and to know your way around in a world in which computing and network communication are ubiquitous. This is not the matter of a few weeks' training, it is a matter .. of "growing up digital."

This is equally true of education for innovation: it must begin as soon as reasonably possible and continue throughout the students' educations. Students must become not only 'digital natives' but 'innovation natives'. This is something no society has ever done on a large scale. For the few that have established cultures of innovation, it has been the province of small elites (Bereiter, 2002). At present we have very few models of how this can be accomplished. One such is Bereiter and Scardamalia's *knowledge building* model (Bereiter, 2002; Scardamalia & Bereiter, 2003).

3.1 Knowledge Building

Knowledge building is a process by which new knowledge and new understandings are produced by the continual improvement of student ideas in a knowledge building class (Bereiter, 2004; Scardamalia, 2000, 2003; Scardamalia & Bereiter, 1992, 1999). Knowledge building classes work in the manner of research communities, and so a short discussion of these is in order.

For the most part, research communities (of any kind) work in the manner of what Kuhn (1996) calls *normal science*. In normal science, researchers work to solve problems and elaborate and extend the current best paradigm or theory. Their work enhances our understanding of nature. However, over time, normal science finds that anomalous findings build up and eventually the paradigm needs to be replaced, Kuhn's famous *paradigm shift* (1996). It is the aim of the knowledge building process to recreate this in miniature in the classroom. There are three points of note here: (1) the new knowledge created by knowledge building is usually in the manner of normal science—extensions and elaborations of a current paradigm; (2) new ways to understand the current paradigm are a very important step in creating new knowledge; and (3) recent research into the innovation process emphasizes the importance of a *community*, a supportive *network* of collaborators who facilitate and mediate the innovation process (Johansson, 2006; Ogle, 2007; Sawyer, 2007). To the latter point, one of the key goals of knowledge building is to create a classroom culture and community that fosters knowledge building.

3.2 Knowledge Forum

To assist in creating a knowledge building community in the classroom, we have created *Knowledge Forum*[™], a software program designed to foster the knowledge building process. A key idea in the creation of Knowledge Forum was the tight integration of theory and software: the program was crafted so that there are many supports for the knowledge building process built in. Figure 2 shows a Knowledge Forum note (posting) to illustrate some of these features.

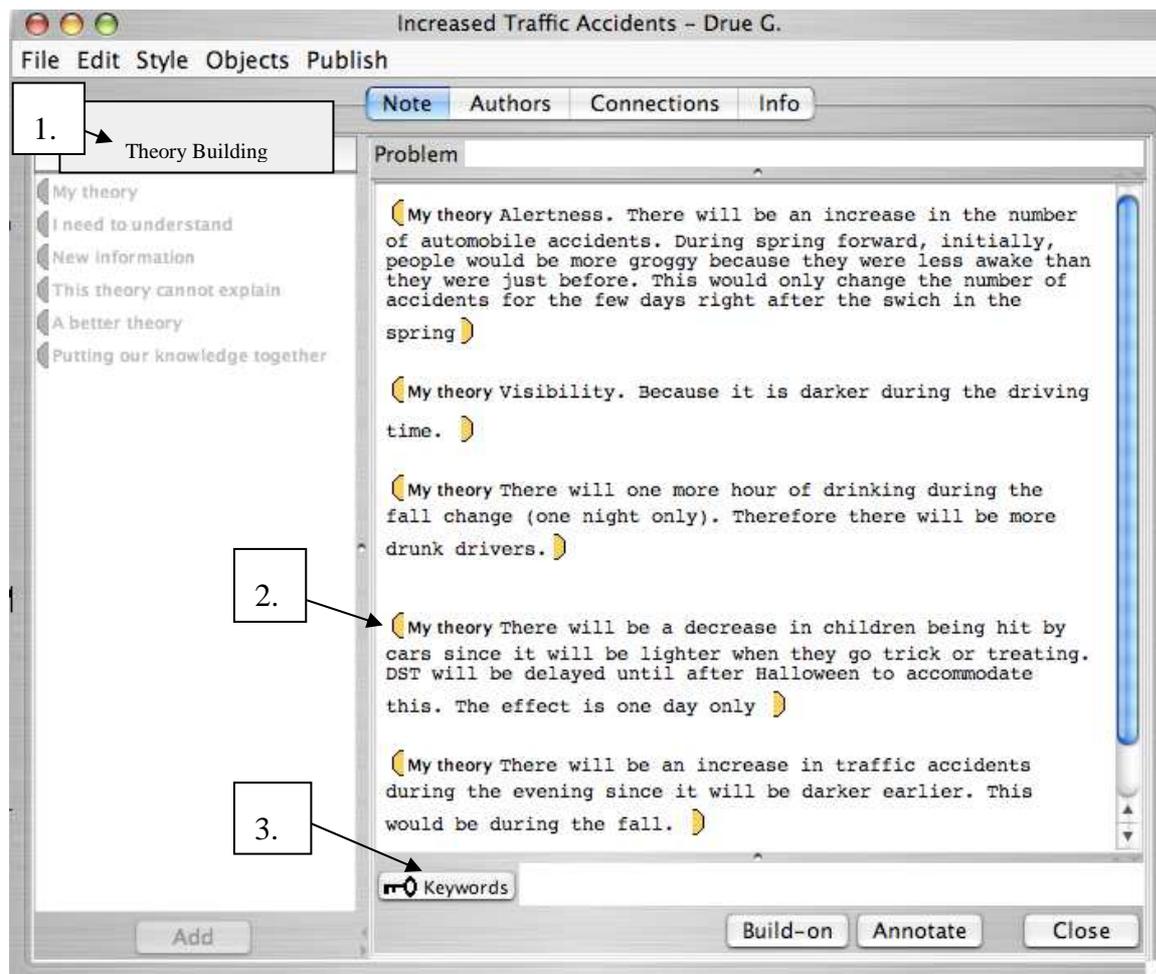


Figure 1. A note (posting) in Knowledge Forum.

Figure 1, Arrow 1, shows the *theory building* metacognitive scaffold and supports, a set of labels for thinking types designed to make the students aware of the kinds of thinking they are engaged in when they create theories. These scaffolds are designed so that the teacher can change them or add to them as needed. Arrow 2 shows what happens when the scaffold supports are added to notes: the supports bracket the portion of the note to which the thinking type applies. Arrow 3 shows the *keywording* tool. By clicking on this button, students can select and automatically select words in the text as keywords. These are then added to the text box to the right of the button, and can be found using the *search tool*, so that students can search all notes in the system for particular

keywords. There are also functions for building-on, for annotating notes, referencing other notes, and many more. Thus, when students post their notes, they also label their thinking types, identify key concepts, can respond to others' notes and annotate them. Notes can have *multiple authors* to facilitate collaboration.

Knowledge Forum has many more functions and features than can be discussed in a paper of this length. For more about Knowledge Forum there is an online introduction available at:

<http://www.knowledgetforum.com/Kforum/products.htm>. At the bottom of the page is a link to an introductory tour of the program, and to a demonstration database. The username is *guest1* and password is also *guest1*.

3.3 Knowledge Building in Practice

In practice, knowledge building begins when the teacher poses the students a real-world problem of understanding such as, *What is the nature of light?* The students are then invited to contribute their ideas about the problem, usually in the forms of notes posted in Knowledge Forum. From there, knowledge building proceeds through a form of *protological control* (see below).

The focus on student ideas allows the students' naïve paradigms to be expressed. Through discourse around these ideas, students find anomalies accumulating, and start to research to support their ideas. During this process, mini-paradigm shifts occur among class members; ideas are changed and improved, and the students generate new ideas. Learning in the traditional sense occurs as a by-product of this process (Scardamalia & Bereiter, 2003). This continual refinement and improvement of ideas continues for as long as time allows, with the inquiry deepening as it progresses. Usually the students exceed curriculum expectations during the process.

The traditional hierarchical model controls most school classes. In this model, a hierarchy is put in place long before the students enter the class, and it is expected that this unchanging hierarchy and set of rules will effectively control the learning process. The teacher is the one in control. They direct all activities, and set what is to be learned, how it is to be learned, and when the learning stops. The kind of protological control needed for knowledge building works quite differently.

Protological control is the manner in which networks are controlled (Galloway & Thacker, 2007). "*Protocol is twofold; it is both an apparatus that facilitates networks and a logic that governs how things are done within that apparatus*" (Galloway & Thacker, 2007, p. 29 original emphasis). Protocols are emergent properties of networks arising from the interactions of autonomous interconnected agents. Key to this concept is that protocols are always both emergent and contingent.

For the teacher this means letting go of traditional control much in the manner described in Kelly's *Out of Control* (1994). Once the inquiry is set in motion, the control of the class is emergent through student interactions, and contingent on the students' path, which they, not the teacher, decide. The teacher monitors the

class closely to see what materials might be needed for the research the students want to undertake, makes connections among inquiry paths, but, and this is key, *does not attempt to direct the students' path*. Everything is focused on the students' ideas. Control is then a delicate interplay between the teacher and the students' ideas, with a discourse environment (usually Knowledge Forum) facilitating the interactions.

4. A Case Study of a Gr. 5/6 Knowledge Building Class

The class was a group of experienced knowledge building students, familiar with both the process and software. The school was located downtown in a large urban centre in Canada, and was co-educational and multi-ethnic. Ten boys and ten girls participated in the study.

4.1 Methodology

The study used a mixed qualitative and quantitative methodology. The researcher conducted ethnographic observations of the students in class, used interviews and questionnaires, and also data mined Knowledge Forum to establish the interaction patterns in the online environment. This paper focuses on the data mining aspect of the study, which was analyzed using social network analysis techniques. UCINET was used to create the network maps or *sociograms* (Borgatti, Everett, & Freeman, 2002). Two networks were closely examined: the note reading network and the responding (building-on) network, with the reading network being reported on here.

4.2 The Reading Network

The reading network proved to be a dense network of interactions, about 92% of the theoretical maximum. Figure 3 shows the *sociogram* (network map) of the note reading network.

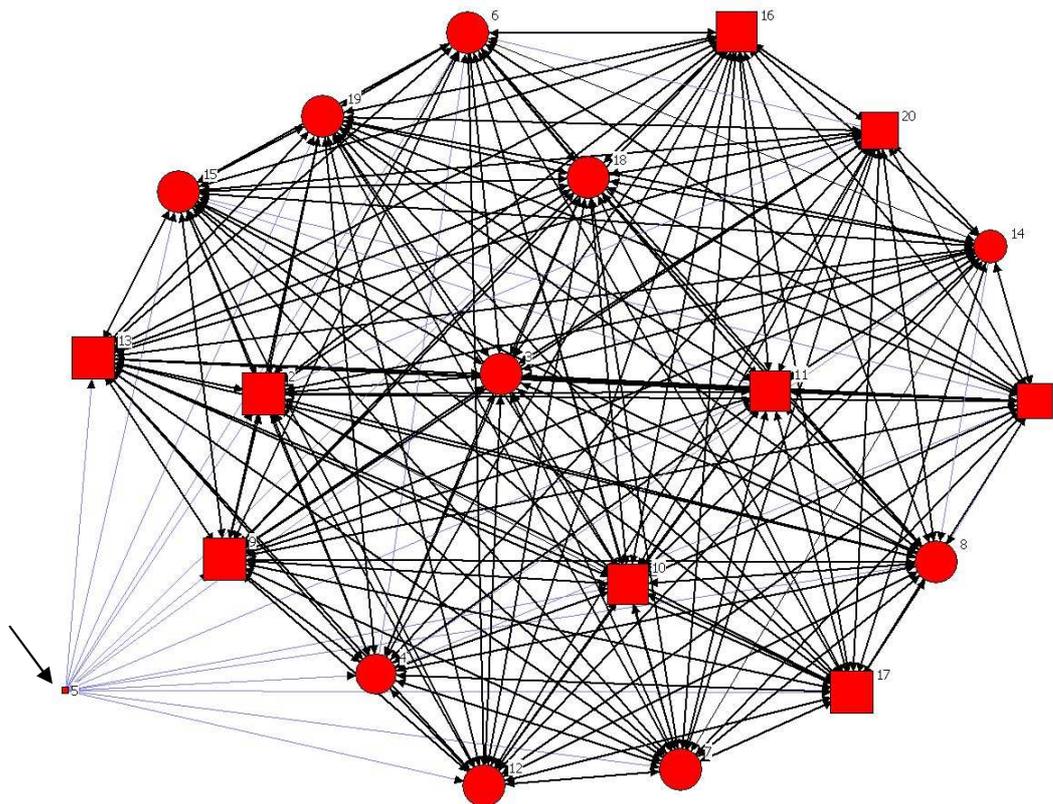


Figure 2. The note reading network

Figure 2 demonstrates how much information can be conveyed by a sociogram. Squares represent boys, circles represent girls, and lines with arrows represent reading events between students. An arrowhead pointing towards a node (circle or square) indicates a student's notes have been read by the student from the origin of the arrow. Double-headed arrows indicate reciprocal reading. The size of a node indicates the frequency with which their notes have been read, and the darkness of a line indicates how often the students have interacted. The figure was created using a spring or force-based algorithm, so that students in the centre are more central to the network and those on the periphery are less so. However, this network is so tightly clustered that only one student (5, arrow) is truly peripheral.

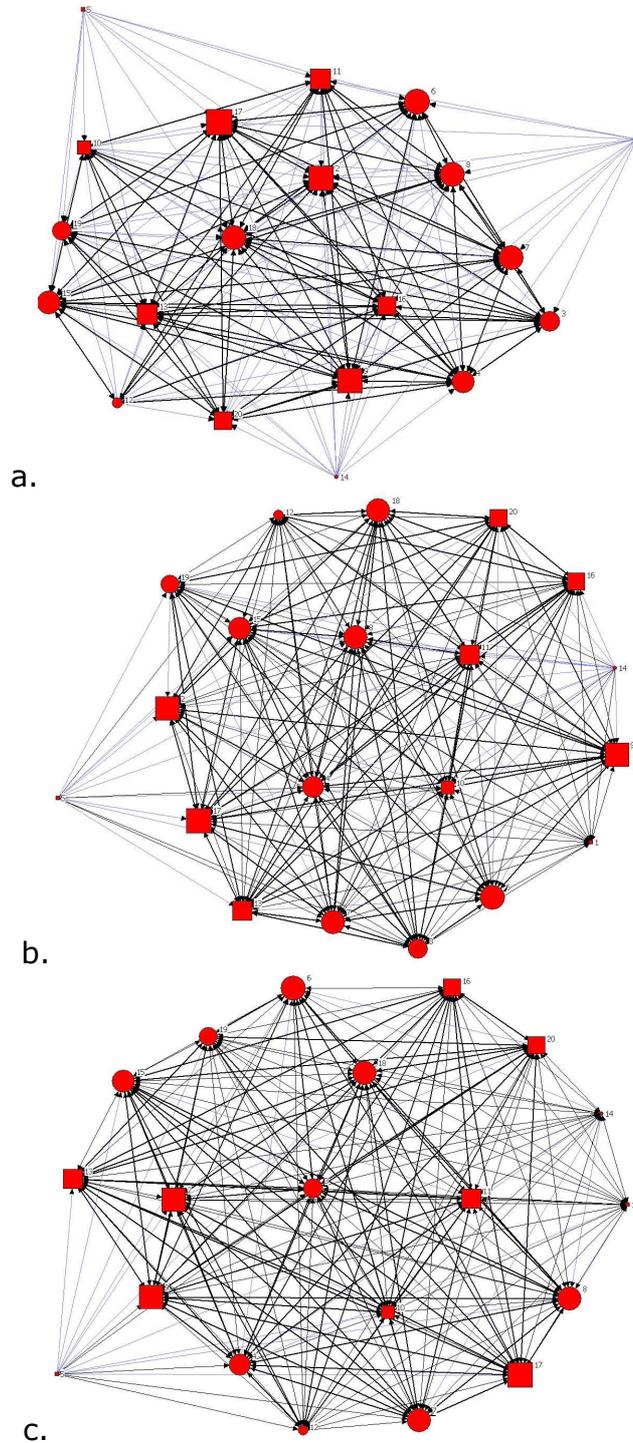
Previous studies suggested that there would be homophilic clustering, with boys interacting more with boys, and girls with girls (Christakis & Fowler, 2007; Hakkarainen & Palonen, 2003). However, as can be seen in Figure 2, no such clustering occurred. In this group, note reading was not affected by gender, although in general, the girls contributed about twice as many notes as the boys.

Student 5 (arrow) is more peripheral to the group than the others. While he read notes by others, no one read his notes, which is why his node is so small compared to the rest. The teacher reported that this was a special needs student and he contributed no notes during the study period.

This is a highly cohesive group, and one would hypothesize that a less-experienced knowledge building class might show a different pattern.

4.4 Longitudinal Patterns in the Reading Network

Time slices of the reading were taken at the end of the first week of work, at the end of the first month and near the end of each month thereafter. Figure 3a-3d shows the results of this study.



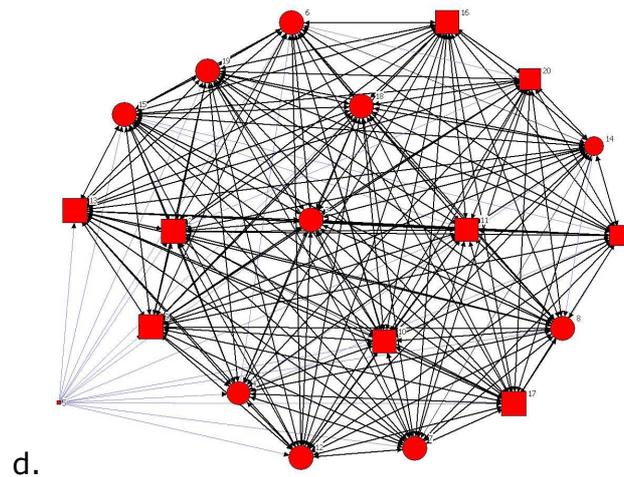
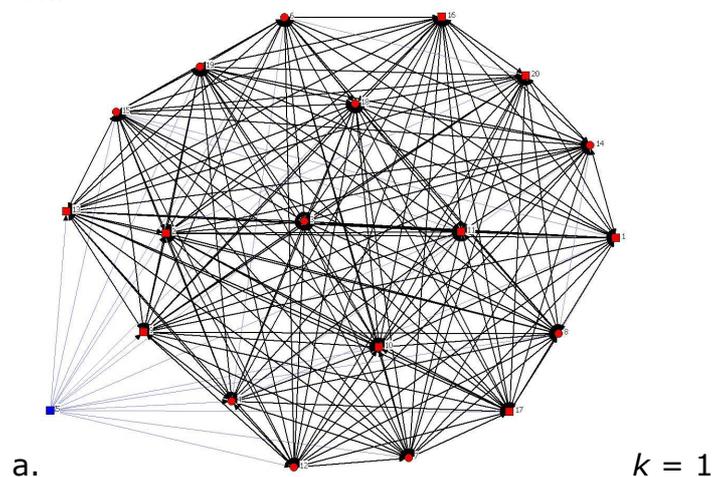


Figure 3. Sociograms a-d show how the reading network developed.

Figure 3 uses the same notational conventions as Figure 2: Squares are boys, circles are girls, etc. Remarkably, in what physicists call a phase transition (Barabási, 2002; Buchanan, 2002), by Figure 3b (the end of the first month), the developing network suddenly snapped into a pattern that remained essentially unchanged. This is one sociological definition of a community (Barabási, 2002), so here we can see a knowledge building community suddenly forming. The network of build-ons (responses) was sparser than the reading, which is to be expected, as responding is less frequent than note posting. Nonetheless, the building-on network showed the same kind of snapping into a pattern by the end of the first month.

4.5 A k -Core Collapse of the Reading Network

A k -core collapse is a social network analysis term for an analysis in which a threshold is used to decide whether or not a line indicating communication appears (DeGenne & Forsé, 1999; Scott, 1991; Wasserman & Faust, 1994). Starting with $k = 1$, indicating that a single communication event is sufficient for inclusion, the researcher raises the threshold in successive iterations, thereby removing communication events. This allows the researcher to see persistent groups and frequent communicators. Figure 4a-4d shows a k -core collapse for the reading network.



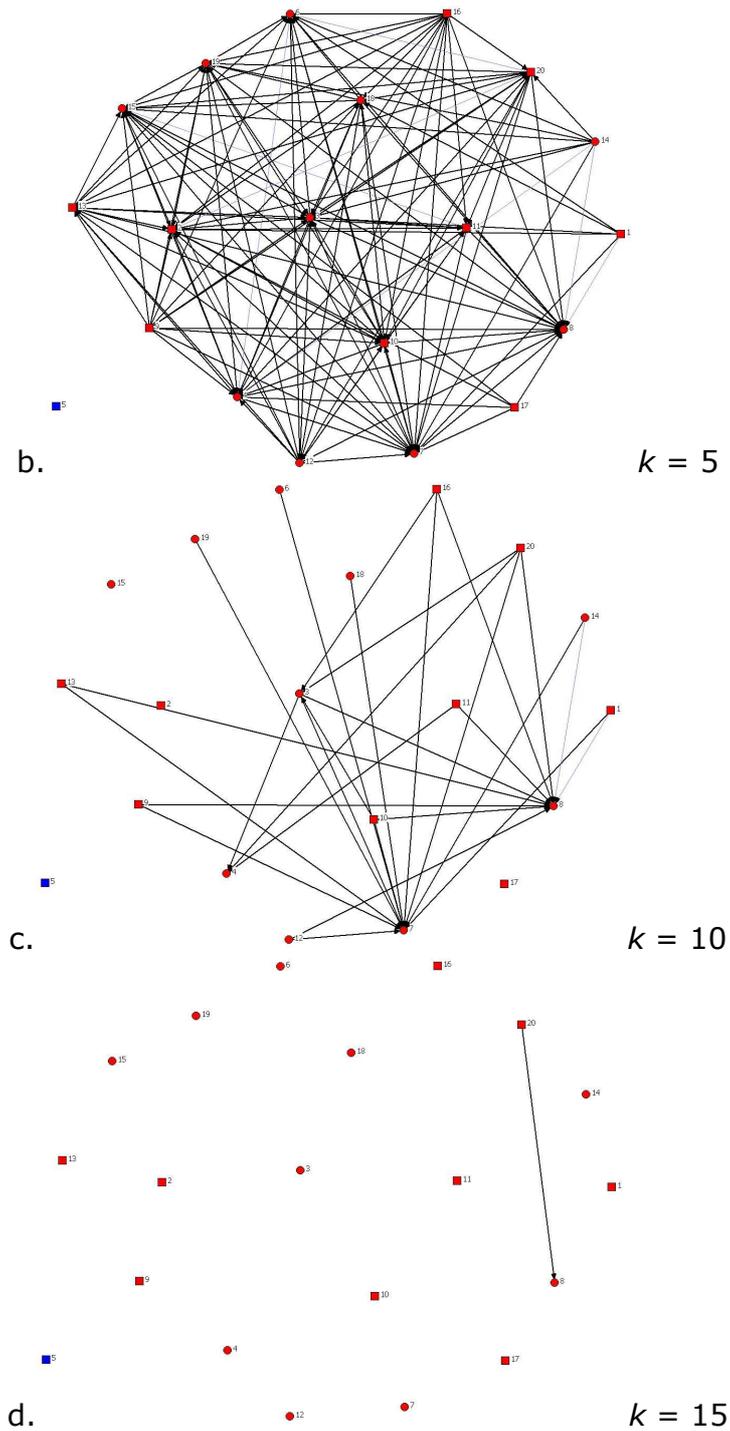


Figure 4. Sociograms a-d show the k -core collapse for the note reading network at the threshold levels indicated.

The k -core collapse sequence shows that the reading network is largely stable up to five reading events, but that it begins to fragment by ten reading events. At $k = 10$, we can see that note reading is largely focused on two students. Note reading at the $k = 15$ level is limited to two students.

This kind of information can tell an instructor who is, and who is not participating at the levels they feel are appropriate. It can also identify collaborating groups, and persons taking leadership in the community.

5. Conclusions

Knowledge building provides a much-needed model for education for innovation, the economic generator of the knowledge economy. Even quite young children (in this case, Gr. 5/6) can engage in knowledge building. This study has focused on the formation of a knowledge building community, showing through sociograms how teachers can identify students who are central and peripheral to the community. As well, the sociograms showed the development of the knowledge building community and how a stable note reading community formed soon after the inquiry started, probably a result of studying an experienced knowledge building class.

Since this study was completed, we have built a social network analysis tool into Knowledge Forum as part of a growing suite of online analytic tools designed to, "... make the invisible visible" (Cross, Borgatti, & Parker, 2003). Using this tool, teachers and students can examine their communication patterns and community formation. Teachers report that this tool is useful, and that both teachers and students have changed their classroom behaviours after using it.

6. References

- Auto Repair? More like rocket science. (2008, Jan. 27). *St. Petersburg Times*, p. 2F.
- Barabási, A.-L. (2002). *Linked. The new science of networks*. Cambridge, MA: Perseus Publishing.
- Bereiter, C. (2002). *Education and mind in the knowledge age*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bereiter, C. (2004). *Knowledge Building and Idea-Centered Education: A Combination for the Knowledge Age*. Paper presented at the Institute for Knowledge Innovation and Technology, Summer Institute 2004: Knowledge Building Discoveries and Innovations, Toronto, Canada.
- Bindé, J. (2005). *Towards Knowledge Societies*. Paris: UNESCO Publishing.
- Borgatti, S. P., Everett, M. G., & Freeman, L. (2002). *Ucinet for Windows: Software for Social Network Analysis*. Harvard, MA: Analytic Technologies.
- Brennan, R. (2007). 239,100 jobs 'gone for good' [Online]. *Toronto Star*.
- Buchanan, M. (2002). *Nexus. Small worlds and the groundbreaking science of networks*. New York: W. W. Norton & Company Inc.
- Christakis, N. A., & Fowler, J. H. (2007). The Spread of Obesity in a Large Social Network over 32 Years. *New England Journal of Medicine*, 357(4), 370-379.
- Chrysler to cut 10,000 more jobs [Online]. (2007). Retrieved Nov. 1, 2007, from <http://news.bbc.co.uk/2/hi/business/7073406.stm>
- Cross, R. L., Borgatti, S. P., & Parker, A. (2003). Making Invisible Work Visible. In R. L. Cross, A. Parker & L. Sasson (Eds.), *Networks in the Knowledge Economy* (pp. pp. 261-282). New York: Oxford University Press.
- Degenne, A., & Forsé, M. (1999). *Introducing Social Networks* (A. Borges, Trans.). London: SAGE Publications.

- Galloway, A. R., & Thacker, E. (2007). *The exploit : a theory of networks*. Minneapolis: University of Minnesota Press.
- Hakkarainen, K., & Palonen, T. (2003). Patterns of female and male students' participation in peer interaction in computer-supported learning. *Computers & Education, 40*(4), 327-342.
- Johansson, F. (2006). *The Medici Effect. What elephants and epidemics can teach us about innovation*. Boston, MA: Harvard Business School Press.
- Kelly, K. (1994). *Out of Control. The New Biology of Machines, Social Systems, and the Economic World*. Cambridge, MA: Perseus Books.
- Kuhn, T. S. (1996). *The structure of scientific revolutions* (3rd ed.). Chicago, IL: University of Chicago Press.
- Lévy, P. (1997). *Collective Intelligence. Man's emerging world in cyberspace*. (R. Bononno, Trans.). Cambridge, MA: Perseus Books.
- Lévy, P. (1998). *Becoming Virtual: Reality in the Digital Age* (R. Bononno, Trans.). New York: Plenum Trade.
- Mehta, S. (2007, Feb. 18). More students across US logging on to online classrooms. *The Boston Globe [Online edition]*.
- Moser, K. (2006, March 30). Online courses aren't just for home-schoolers anymore. *Christian Science Monitor*, Online.
- Ogle, R. (2007). *Smart world : breakthrough creativity and the new science of ideas*. Boston, Mass.: Harvard Business School Press.
- Pope, K. (2006). Some students prefer classes online. *Technology* Retrieved Jan. 14, 2006, from <http://www.canada.com/topics/technology/story.html?id=b71327ac-b02e-4114-b5a2-85ce9baf386f&k=67971>
- Robelen, E. W. (2007, March 29). E-Learning Curve. *Education Week (Online edition), 26*, 34-36.
- Sawyer, R. K. (2007). *Group genius : the creative power of collaboration*. New York: Basic Books.
- Scardamalia, M. (2000, 2000). *Social and Technological Innovations for a Knowledge Society [Electronic Edition]*. Paper presented at the Proceedings of the ICCE/ICCAI.
- Scardamalia, M. (2003). Knowledge Forum (Advances Beyond CSILE). In C. Bereiter (Ed.), *Learning Technology Innovation in Canada. A supplement to Journal of Distance Education Telelearning Special Issue* (Vol. 17, pp. 23-28): Canadian Association for Distance Education.
- Scardamalia, M., & Bereiter, C. (1992). An architecture for collaborative knowledge-building. In E. De Corte, M. Linn, H. Mandl & L. Verschaffel (Eds.), *Computer-based learning environments and problem solving* (pp. 41-46). Berlin: Springer-Verlag.
- Scardamalia, M., & Bereiter, C. (1999). Schools as knowledge building organizations. In D. Keating & C. Hertzman (Eds.), *Today's children, tomorrow's society: The developmental health and wealth of nations* (pp. 274-289). New York: Guilford.
- Scardamalia, M., & Bereiter, C. (2003). Beyond Brainstorming: Sustained Creative Work With Ideas. *Education, 43*, 4-44.
- Scardamalia, M., & Bereiter, C. (2003). Knowledge Building. In J. W. Guthrie (Ed.), *Encyclopedia of Education, Second Edition* (pp. 1370-1373). New York: Macmillan Reference, USA.
- Scott, J. (1991). *Social network analysis : a handbook*. London: Sage Publications.

- Trilling, B. (2005). *Toward Learning Societies and the Global Challenges for Learning-With-IT*. Redwood Shores, CA: Oracle Education Foundation.
- Tucker, B. (2007). *Laboratories of Reform: Virtual High Schools and Innovation in Public Education*. Washington, D.C.: Education Sector.
- Wasserman, S., & Faust, K. (1994). *Social Network Analysis* (Vol. 1). New York: Cambridge University Press.
- Whitnell, T. (2008, Feb. 3). Jobs lost at BCL Magnetics. *Burlington Post*, pp. 1, 5.

Multicultural Issues in Classrooms: Case Studies of Classroom Communication from Thailand

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Abstract

As in any interaction, interlocutors bring with them a system of symbols and meanings which influence the perception of a shared situation. Effective communication in classrooms, to a certain extent, enables students to not only engage in but also understand the topics being discussed. Additionally, several studies suggest that each individual student brings his/her culture into classrooms. Given that, culture plays important roles in the course of learning regardless of any discipline subject. In this symposium, multicultural issues embedded in different educational settings when introducing topics not relevant to their culture will be discussed. Empirical studies in different courses at the tertiary level in Thailand provide the settings for the research.

Keywords: culture – teaching – English – Advertising - Thailand

1. Introduction

As in any interaction, interlocutors bring with them “a system of symbols and meanings” (Schneider, 1976, p. 297) which influence the perception of a shared situation. Effective communication in classrooms, to a certain extent, enables students to not only engage in but also understand the topics being discussed. Additionally, several studies suggest that each individual student brings his/her culture into classrooms. Given that, culture plays important roles in the course of learning regardless of any discipline subject. In this symposium, multicultural issues embedded in different educational settings when introducing topics not relevant to their culture will be discussed. Empirical studies in different courses at the tertiary level in Thailand provide the settings for the research.

2. Theoretical Background, Methodology, and Results

Two studies, "Communicating Culture in EFL Classes: Does It Matter?" by Jantrasakul (2008) and "Teaching Western Ad to Eastern Students: A Case Study of Comparative Advertising and Thai students" by Polyorat and Jaratmetakul (2008), investigate the impact of students' cross-cultural knowledge on learning the class materials (English Language textbook and American advertising textbook, respectively).

Jantrasakul (2008) employs several research methods to examine the impact of target culture knowledge on learning English among Thai students. The study results reveal that the knowledge of British or American culture appears to elicit a more positive attitude toward studying English and a higher level of learning engagement. The study, however, does not observe the influence of culture knowledge on gain in English proficiency among Thai students, hence suggesting an avenue for future research exploration.

Polyorat and Jaratmetakul (2008) suggest that cross-cultural knowledge influences students' understanding of foreign advertisements. More specifically, students reactions to comparative advertising is proposed to be, at least in part, driven from the cultural dimensions of individualism-collectivism (Hofstede 1990), assertiveness-nurturance (Hofstede 1990), and face-saving (Stella and Kurogi 1998). The study results reveal that when an American or European advertising textbook is used with Thai students, more elaboration on cross-cultural differences may be needed so that students will have a better understanding of creative advertising techniques especially those uncommonly used in Thailand.

While Jantrasakul (2008) and Polyorat and Jaratmetakul (2008) focus on the cross-cultural differences between two cultures that are very different from each other, Thai and American or British, in this case, Polyorat and Khantuwan (2008)'s study entitled "Cross-Cultural Advertising Effectiveness between Two Countries That are Culturally Similar: The Case of Sex Appeal Advertising for Laos Students in Thailand" examines the two cultures (Thai and Lao) often viewed as very similar. This study contributes to the field of cross-cultural research by examining Laos which has received scant attention from researchers, partly due to difficulties in conducting primary data. Furthermore, the study suggests that two cultures may produce drastic differences in reactions to communication stimuli. Thus, the study urges the need to consider carefully several cultural dimensions and economic conditions when the selection of class materials for foreign students is being made.

Tipayamontri (2008), in "The Quest for Understanding: English Poetry Class and Student Methods in Thailand," like Jantrasakul (2008) considers the role of social and personal culture in classroom dynamics, and, like Polyorat and Khantuwan (2008), probes the similar surface of students to reveal as yet not frequently-discussed cultural dimensions that affect the learning experience in the classroom. While the interplay between American or British and local cultures have been the subject of many intercultural studies in pedagogy, cultural change brought about by globalization is less often examined and is proposed to be a

factor in this study, creating as it does communities that share tastes, values, behavioral traits, and learning approaches in several aspects that are not necessarily identified by nationality.

3. Conclusions and Discussions

Through the four studies—two from English language and literature classes and the other two from advertising and marketing communication classes, this symposium addresses multicultural issues emerging in the classroom where the students presumably share the same culture, and suggests ways to more successful classroom interaction.

4. References

- Jantrasakul, Prapai (2008), "Communicating Culture in EFL Classes: Does It Matter," *Proceeding of Paris International Conference on Education, Economy & Society*.
- Polyorat, Kawpong and Walee Khantuwan (2008), "Cross-Cultural Advertising Effectiveness between Two Countries That Are Culturally Similar: The Case of Sex Appeal Advertising for Laos Students in Thailand," *Proceeding of Paris International Conference on Education, Economy & Society*.
- Polyorat, Kawpong and Porramate Jaratmetakul (2008), "Teaching Western Ad to Eastern Students: A Case Study of Comparative Advertising and Thai students," *Proceeding of Paris International Conference on Education, Economy & Society*.
- Schneider, D. (1976), "Notes Toward a Theory of Culture," In K. Basso and H. Silby (Eds.), *Meanings in Anthropology*. Albuquerque: University of New Mexico Press.
- Tipayamontri, Puckpan (2008), "The Quest for Understanding: English Poetry Class and Student Methods in Thailand," *Proceeding of Paris International Conference on Education, Economy & Society*.

Teaching Western Advertising to Eastern Students: A Case Study of Comparative Advertising and Thai students

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Abstract

Consumer's responses to advertising are subject to cultural background. Teaching advertising to Thai students is an example of this proposition especially when a Western (i.e., American) textbook is used. While comparative ads are widely used in the US, they are uncommon in several other countries including Thailand. Thai students are thus not familiar with comparative advertising and exhibit surprise with it. In-depth interviews with Thai college students reveal that comparative advertising, while appearing novel as it is uncommonly used in Thailand, could be at odds with Thai culture where face-to-face competition or confrontation is to be avoided. Nevertheless, comparative advertising could provide additional benefits to consumers when providing only true and unbiased information. After explanations regarding cross-cultural differences (individualism vs. collectivism, assertiveness vs. nurturance, and face-saving) are given, students appear to better understand the use of comparative advertising in the US versus in Thailand. This study concludes that this cultural knowledge input is important in teaching cross-cultural advertising.

Keywords: comparative advertising, Thailand, culture

1. Introduction

Advertising and marketing communications are popular courses among Thai college students especially those majoring in business administration. The consumer's perception and understanding of advertising, as a form of communication, could be subject to cultural background which functions as a field of experience or the experiences, perceptions, attitudes, and value the sender brings to the communication situation (Belch and Belch 2007) of the consumer. Teaching advertising to Thai students represents an illustrative example of this proposition especially when a Western (i.e., American) textbook or advertising example is used.

After teaching advertising and marketing communications to Thai college students for four years, one of the researchers recognizes that students are puzzled with certain creative advertising strategies identified in the American textbooks (e.g., Belch and Belch 2007, Duncan 2007). Comparative advertising is a case in point. As comparative advertising is rarely used in Thailand, it is

therefore not surprising that Thai students are not familiar with it. As a consequence, we decided to conduct this research to get a better understanding of students' response to comparative advertising as well as the reasons behind students' perplexity.

This research article is structured as follows. First, literatures in comparative advertising and differences in cultural dimensions are discussed. Next, research questions based on these discussions are offered and then empirically examined using in-depth interviews. Subsequently, data are analyzed and discussed. Finally, research implications are provided and avenues for future research suggested.

2. Theoretical Background

2.1 Comparative Advertising

Comparative ads make reference by mentioning the name of a competitive brand (Grewal et al.1997). They often make a comparison between two or more competitors or comparison brands, usually in the same generic product or service class. Comparative ads usually make such comparisons concerning one or more specific product attributes and clearly state that the sponsoring brand is relatively superior to the comparison brand in terms of the particular attribute(s) (Wilkie and Farris 1975). From this perspective, the format of comparative ads is similar to comparison shopping because they provide information linkages from one brand to another (Droge 1989). Usually it is a relatively unknown brand that attempts to directly compare itself with a well-known marketing leader (Muehling, Stoltman, and Grossbart 1990), although this is not always necessary.

Comparative advertising is widely used in the United States (Grewal et al.1997). One study estimated that it accounts for 30% to 40 % of all advertisements (Donthu 1992). In academia, comparative advertising is one of the most often studied ad execution elements (Pechmann and Stewart 1991).

Despite the common use of comparative advertising, its effectiveness is equivocal, mixed, or even conflicting (Donthu 1992). Literature in the field of comparative advertising provides inconsistent evidence on the issue of whether comparative ads are more effective than noncomparative ads or vice versa. A number of studies find comparative ads to be more effective than traditional noncomparative ads (e.g., Droge and Darmon 1987; Rose et al. 1993). However, others find comparative ads to be no more effective or even less effective than traditional noncomparative ads (e.g., Belch 1981; Goodwin and Etgar 1980). In addition, many moderators appear to play a role, e.g., the intensity of comparative ads (Donthu 1992) and market share of the advertised brand (Pechman and Stewart 1991). Inconsistency in the impact of comparative ads, nevertheless, does not discourage use of this format by consumer goods and services corporations especially in the US (Grewal et al. 1997). Advertising practitioners continue to heavily employ this kind of ad despite uncertainty about its effectiveness under varying conditions (Rogers and Williams 1989) and

possible ethical and legal issues (e.g., deception or misrepresentation; Beck-Dudley and Williams 1989).

Although comparative ads are widely used in the US, they are rarely used or even illegal in several other countries (Donthu 1998). Yet the internationalization of American companies suggests the possible introduction or increased use of comparative ads in other countries. Furthermore, how consumers in those countries will react to comparative ads remains unclear given probable interactions with various cultural influences.

Despite an increasing interest in cross-cultural consumer behavior, little work has examined the differential effect of comparative versus noncomparative ads on persuasion in different cultures. There could be several reasons for the lack of cross-cultural studies, including methodological complexities and an ethnocentric belief that psychological principles are universal (Maheswaran and Shavitt 2000).

The scarcity of research on this topic exists in spite of the extensive debate over globalization versus standardization of marketing and advertising practice (Levitt 1983). A growth of the global marketing strategy in general and the cross-cultural use of standardized ads in particular (Onkvisit and Shaw 1999) make this gap in the literature even more pronounced. It has been noted that virtually every consumer behavior and advertising theory is culturally bound to a Western conceptualization of the world (Cote and Tansuhaj 1989). That is, most of consumer behavior and advertising theories such as those covered in American textbooks are based on evidence from Western cultures, primarily the US (Aaker and Maheswaran 1997). Since the US is the birthplace of these theories, it is thus not surprising that American cultural assumptions might be implicitly or explicitly included in such theories. In other words, American culture may have influenced the standard by which the consumer behavior is measured and the basis for philosophies of how advertising works (Mooij 1997). As a consequence, future work to develop pan-cultural models of consumer behavior and advertising is obviously needed (McCarty 1989).

The fact that comparative ads are uncommon or even illegal in some countries suggests that comparative ads may not be a universally accepted advertising practice. The advertising community in these countries may adhere to an implicit notion that comparative ads will not be used. This underlying assumption implies that comparative ads are not effective (Donthu 1998). However this assumption may or may not be true and, therefore, warrants systematic verification.

As we attempt to propose that cross-cultural background has an influence on the consumer's perception and comprehension of comparative advertising, the following section will briefly discuss three cultural dimensions that we suggest to be relevant to the use of this advertising tactic.

2.2 Cultural Dimensions

2.2.1 Individualism versus Collectivism

Individualism-collectivism (Hofstede 1990) is one of the most central dimensions in international marketing research (Aaker and Maheswaran 1997). Individualism refers to a social orientation in which individuals tend to see themselves as relatively autonomous and independent, while collectivism involves viewing oneself as an integral part of one or more groups (Triandis 1995). Individualists, found predominantly in the West such as the US (Aaker and Maheswaran 1997), tend to have an *independent self-construal*, which emphasizes the separateness from the social context and uniqueness of the individual. In collectivist cultures, located predominantly in the East such as Japan, China or Thailand, consumers tend to have an *interdependent self-construal*, which emphasizes social connectedness and group relations (Singelis 1994).

Normative expectations of individualists include: being unique, expressing oneself, promoting one's own goals, and being direct in communication. Collectivists, on the other hand, are expected to be more concerned with fitting-in, promoting group goals, and using indirect communication. Individualism stresses the role of others as benchmarks for social comparison and self-evaluation. Collectivism focuses on the role of others for self-definition via relationships in specific contexts. While self-expression is crucial for individualists, ability to maintain harmony with social in-groups is critical for collectivists (Markus and Kitayama 1991). From the literature, it appears that while individualism may favor the use of comparative advertising, the reverse could be true for collectivism.

2.2.2 Assertiveness versus Nurturance

Assertiveness versus nurturance (also known as masculinity versus femininity; Hofstede 1990) cultures emphasize achievement and success versus caring for others and quality of life, respectively. According to Mooij (1997), in an assertiveness culture (e.g. the US), performance, achievement, result, winning, and success are important. In addition, there is an inclination to polarize. Big and fast are beautiful. In contrast, a nurturance culture (e.g. Thailand) is more service-oriented, is oriented toward people (as opposed to "task") and value modesty. Small is beautiful. Further, there is an inclination to attain consensus (rather than polarization). Winning is less important than quality of life. In an assertiveness culture, being a winner is positive and children are taught to admire the strong. In a nurturance culture, children are taught sympathy for the underdog or the loser. In this culture, a person is not supposed to hurt other people's feelings, but rather to have respect for the underdog so that their feelings would not be hurt. Aggressive behaviors related to an explicit winning are more valued in an assertiveness culture than in a nurturance culture Mooij (1997). Therefore, it is likely that an assertive culture may encourage the use of comparative advertising whereas a nurturance culture may discourage it.

2.2.3 Face-Saving

"Face" refers to the projected image of one's self in a relational situation (Gudykunst 1998). Face is a vulnerable identity and can be threatened in any social situation (Ting-Toomey and Kurogi 1998). Face-losing or the deterioration of one's face is a critical issue in Asian cultures (e.g. Thailand) because face is fundamentally a social self and associated with respect, honor, status, reputation, credibility, competence, connection, and trust (Ting-Toomey and Kurogi 1998). In other words, the fact that external or public features such as status, role, and relationship are critical in collectivist cultures where interdependent self-construal predominates (Markus and Kitayama 1991) makes the concept of "face" important in such cultures. Attacking the "face" is therefore a very serious issue in Asian cultures. As a consequence, a culture that does not emphasize "face" may be more comfortable with comparative advertising while this may not be the case for a culture that emphasizes "face-saving."

Based on the foregoing discussions, our research questions formally state:

RQ1: What are Thai consumers' attitudes toward comparative advertising?

RQ2: What are the roles of cross-cultural knowledge in shaping Thai consumers' response to comparative advertising?

3. Methodology

This research is conducted in Thailand with Thai college students. The use of Thai consumers results in a number of advantages. Thailand and the US, respectively, represent collectivist/nurturance and individualist/assertiveness cultures according to Hofstede (1990). In cross-cultural advertising research, the US is by far the most-studied country (Samiee and Jeong 1994). Therefore, it is a good benchmark for comparison purposes (Donthu 1998) in addition to the fact that the US is the country where most consumer behavior and advertising theories are generated. Thailand has attracted attention from researchers (e.g. Alden et al. 1999), although to a lesser extent than other Asian cultures such as Japan, China, and Korea. In fact, Oyserman et al. (2002) point out in their meta-analysis of cross-cultural research that the cross-cultural literature is seriously limited because of the disproportionately heavy focus on four East Asian countries: Japan, Korea, PR China, and Hong Kong. As a consequence, the use of Thailand would respond to their call for more empirical evidence from other underrepresented countries. Furthermore, in addition to the cultural aspect, Thailand and the US also differ in terms of technological, political, and economic development (Polyorat et al. 2008).

Moreover, the global economy has gone through considerable change as Southeast Asian countries have assumed increasingly important roles. Financial and economic crises sparked by concerns about the purchasing power of consumers in Southeast Asia reflect the importance of this once-small market (Briley and Williams 1998). As a result, from a managerial perspective, the study

of comparative advertising with Thai college students would reveal if there is a possibility of using comparative advertising as a new marketing communication strategy in the region.

In-depth interviews are conducted with five undergraduate business students. The research subjects are first greeted and asked general questions. Subsequently, they are informed of the study objectives and descriptions. Next, they are asked about their attitudes toward comparative advertising and then are given explanations regarding cross-cultural differences (i.e. individualism vs. collectivism, assertiveness vs. nurturance, and face-saving). Subjects are then asked again what they think about comparative advertising. Finally subjects are thanked and debriefed.

4. Results and Discussions

Based on the content analysis of the data, the results are broadly classified into three categories: novelty response, negative attitudes, and positive attitudes.

4.1 Novelty response

Subjects indicate that they are seldom exposed to comparative advertising. It therefore looks novel to them. The use of this creative approach in Thailand would be interesting and generate much attention from Thai people. This view is related to Donthu's (1998) explanations for the more favorable attitude towards advertising in the US and Canada in comparison with those in Britain and India. Specifically, he suggests that consumers from countries with higher levels of national innovativeness would have a more positive attitude toward comparative advertising because comparative advertising is considered relatively novel. Since the U.S. and Canada exhibit higher levels of measured innovativeness than either Britain or India (Lee 1990), it can be expected that Americans and Canadians (vs. Britons and Indians) will have a more positive attitude toward comparative advertising.

Jeon and Beatty (2002) also offer that "novelty effect" account for the attitude toward comparative advertising. Specifically, in Korea, as comparative advertising format is considered very novel; as a result, they are more persuasive than noncomparative advertising. Direct evidence of novelty effects, nevertheless, is not reported in either study.

4.2 Negative Attitudes

Subjects also have negative attitudes toward comparative advertising. Specifically, they express that comparative advertising is a way to show off. This direct confrontation approach could lead to conflict between the advertised brand and the comparison brand. In addition, in a comparative advertising context, a sponsoring brand of a comparative ad can be considered as attacking the "face" of a comparison brand when the sponsoring brand claims its superiority over the comparison brand, resulting in face-losing. "Face" is a critical issue in Thailand

where people are very concerned or obsessed with their social face or the perceived respect, honor, status, reputation, credibility, competence, and trust. Attacking face is thus considered a serious insult and could lead to a major conflict. Some subjects are disgusted by this type of advertising and argue that comparative advertising is unfair for the comparison brand as it is a one-sided attack which does not allow the comparison brand to defend itself. Or the comparison brand must spend additional ad budget to run an ad to counter the claims.

In this line, the subjects' opinions are consistent with one of Thailand's laws which specify that advertisements broadcast through radio and television must not insult, despise or disparage any person, product, or service. In addition, the Thai government seems to believe that the use of comparative advertising could likely result in disparagement and deceptions (Chirapravati 1995). Furthermore, these opinions are also consistent with television stations in Thailand which consider comparative advertising totally unacceptable (Chaisuwan 2003).

4.3 Positive Attitudes

Research subjects also indicate interest in comparative advertising. They have an impression that comparative ads could provide consumers with more and better information in a relative format which could assist consumers in making their choice and evaluation of products and services. Further, the research subjects indicate that comparative advertising suggests the potential delivery of information which was not previously available to consumers. They also suggest that mentioning a competitor by name would help the consumer evaluate a claim of superiority. However, these claims must be true, based on facts, and not be misleading. Moreover, when possible, the ad claims should be backed by scientific evidence.

The existence of these three types of attitudes suggests that culture may not be the sole explanation for consumers' response to comparative advertising. There could be other influencing factors which could be considered in future research. Alternatively, there could be some consumers who deviate from the mainstream culture of their society. Future research may specify segments of consumers that may behave differently from their society norm (cf. Jung, Kellaris, and Polyorat 2008).

4.4 Cultural Explanations

Overall, subjects are surprised with this ad type as it is not common at all in Thailand. In addition to positive and negative attitudes toward comparative advertising, subjects also wonder what the *raison d'être* of comparative advertising are. In other words, they wonder if there is any particular reason for this advertising type not being widely used in Thailand. To this end, we offer the research subjects some explanations regarding the possible cultural roles on the use of comparative advertising. More specifically, descriptions of cultural dimensions in terms of individualism versus collectivism, assertiveness versus nurturance, and face-saving, as well as how these cultural dimensions could be relevant to the use of comparative advertising are provided to research subjects.

As expected, subjects appear to better understand why this type of advertising is more popular in the US than in Thailand. Subjects, however, are reluctant to indicate the potential effectiveness of this advertising type in Thailand. They suggest that, as Thai society is different from US society in many respects, this type of advertising must be used with caution in Thailand. Nevertheless, some subjects speculate that, as globalization and westernization trends are now pervasive in Thai culture, Thai consumers, especially younger ones, could be more receptive to the use of this novel creative approach.

4.5 Additional Analysis

Some subjects also wonder if this type of ad is legal in Thailand. Thai law does not explicitly ban the use of comparative advertising. However, Thai social customs of conflict avoiding, harmony seeking, and face-saving make this type of advertising uncommon. In addition to Thai culture, the Thai government has not encouraged the use of comparative advertising. The government perhaps believes that the use of comparative advertising could cause disparagement and deception (Chirapravati 1996).

Two key Thai laws are related to comparative advertising. One is the Radio and Television Act of 1978, issued by the Broadcasting Directing Board of Thailand. This law states that advertisements disseminated through radio and television must not insult, despise, or disparage any person, product, or service. The other is the trademark law which prohibits any public use of another trade name. In Thailand, the brand names of a company's products are registered as trademarks—thus constituting a piece of property and part of the company's goodwill. The brand names, therefore, cannot be used by others for commercial purposes without the permission of the owner. Both enacted laws, though not directly prohibiting the use of comparative advertising, make it very difficult for advertisers to employ the comparative strategy (Chirapravati 1996).

5. Conclusions

5.1 Summary and Research Implications

Our study results reveal that the use of comparative advertising could generate novelty thoughts, negative attitudes, and positive attitudes among Thai consumers. Furthermore, cultural dimensions (e.g. individualism vs. collectivism, assertiveness vs. nurturance, and face-saving) appear to have some explanatory role regarding the use of this type of advertising. The results, therefore, suggest that, in a classroom, instructors may consider including cross-cultural background elements into the content when different creative advertising approaches are discussed. This is especially relevant when Western or American textbooks are used. The cross-cultural knowledge could bridge the gap between the message sender's field of experience and that of the receiver, resulting in more effective communication and teaching of creative advertising strategies. Also, our study results can be extended to a broader area and provide managerial implications for advertising and marketing practitioners. For example,

cultural differences should be taken into consideration prior to the implementation of standardized or global advertising strategies as consumers in different countries may have different responses to the use of comparative advertising.

5.2 Study Limitations and Directions for Future Research

Our study has a number of limitations which suggest avenues for future research. For example, in addition to in-depth interviews, other research methods including experiment, focused group, projective techniques, and content analysis may provide additional explanations of the possible consequences of comparative advertising among Thai consumers. Next, besides the roles of culture, future research may examine the consequences of legal conditions (Donthu 1998) on the use of comparative advertising as some of our research subjects suggest. On one hand, laws and regulations often reflect norms or what is generally accepted in a given culture. On the other hand, cultural changes such as the influx of Western or American cultures may precede legal changes. As a consequence, it would be interesting to examine both cultural and legal issues, as these two may not have similar impact on the use of comparative advertising. Further, other creative advertising approaches also should be examined in a cross-cultural context. For instance, the use of sexual ad appeal such as the use of nudity or semi-nudity (cf., Polyorat and Khantuwan 2008) among Thai consumers could elicit responses different from those documented in the Western literature.

6. References

- Aaker, Jennifer L. and Durairaj Maheswaran (1997), "The Effect of Cultural Orientation on Persuasion," *Journal of Consumer Research*, 24 (December), 315-328.
- Alden, Dana L., Jan-Benedict E.M. Steenkamp, and Rajeev Batra (1999), "Brand Positioning through Advertising in Asia, North America, and Europe: The Role of Global Consumer Culture," *Journal of Marketing*, 63 (January), 75-87.
- Beck-Dudley, Caryn and Terrell G. Williams (1989), "Legal and Public Policy Implications for the Future of Comparative Advertising: A Look at U-Hual v. Jartran," *Journal of Public Policy and Marketing*, 8 (1), 124-142.
- Belch, George E. (1981), "An Examination of Comparative and Noncomparative Television Commercials: The Effects of Claim Variation and Repetition on Cognitive Response and Message Acceptance," *Journal of Marketing Research*, 18 (August), 333-349.
- Belch, George E. and Michael A. Belch (2007), *Advertising and Promotion: An Integrated Marketing Communications Perspective*, McGraw-Hill/Irwin, New York.

- Briley, Donnel and Jerome D. Williams (1998), "Special Session Summary: Emotive and Cognitive Effects of Culture," in *Asia Pacific Advances in Consumer Research*, Vol. 3, eds. Kineta Hung and Kent Monroe, Provo, UT: Association for Consumer Research, 26-29.
- Chaisuwan, Bu-Nga (2003), "Unacceptable Advertising within Thai Society," *Journal of Communication Arts*, 21 (1), 79-95.
- Chirapravati, Vittratorn (1996), "The Blossoming of Advertising in Thailand," *Advertising in Asia: Communication, Culture, and Consumption*, ed. Katherine T. Frith, Iowa: Iowa State University Press, 223-240.
- Cote, Joseph A. and Patriya S. Tansuhaj (1989), "Culture Bound Assumptions in Behavior Intention Models," in *Advances in Consumer Research*, Vol. 16, ed. Thomas Srull, Provo, UT: Association of Consumer Research, 105-109.
- Donthu, Naveen (1992), "Comparative Advertising Intensity," *Journal of Advertising Research*, 32 (6), 54-61.
- _____ (1998), "A Cross-Country Investigation of Recall and Attitude toward Comparative Advertising," *Journal of Advertising*, 27 (2), 111-122.
- Droge, Cornelia (1989), "Shaping the Route to Attitude Change: Central Versus Peripheral Processing Through Comparative Versus Noncomparative Advertising," *Journal of Marketing Research*, 26 (May), 193-204
- _____ and Rene Y. Darmon (1987), "Associative Positioning Strategies through Comparative Advertising: Attribute versus Overall Similarity Approaches," *Journal of Marketing Research*, 24 (November), 377-88.
- Duncan, Tom (2007), *Principles of Advertising & IMC*, Upper Saddle River: NJ, Prentice-Hall.
- Goodwin, Steven and Michael Etgar (1980), "An Experimental Investigation of Comparative Advertising: Impact of Message Appeal, Information Load, and Utility of Product Class," *Journal of Marketing Research*, 17 (May), 187-202.
- Grewal, Dhruv, Sukumar Kavanoor, Edward F. Fern, Carolyn Costley, and James Barnes (1997), "Comparative versus Noncomparative Advertising: A Meta-Analysis," *Journal of Marketing*, 61 (October), 1-15.
- Gudykunst, William B. (1998), "Individualistic and Collectivistic Perspectives on Communication: An Introduction," *International Journal of Intercultural Relations*, 22 (2), 107-134.
- Hofstede, Geert (1990), *Culture and Organization: Software of the Mind*, London: McGraw-Hill.

- Jeon, Jung Ok and Sharon E. Beatty (2002), "Comparative Advertising Effectiveness in Different National Cultures," *Journal of Business Research*, 55 (November), 907-913.
- Jung, Jae Min, James J. Kellaris, and Kawpong Polyorat (2008), "A Cultural Paradox in Authority-Based Advertising Appeals," Manuscript under Review at *International Marketing Review*.
- Lee, Chol (1990), "Determinants of National Innovativeness and International Market Segmentation," *International Marketing Review*, 7 (5), 39-49.
- Levitt, Theodore (1983), "The Globalization of Markets," *Harvard Business Review*, 61 (May-June), 92-102.
- Maheswaran, Durairaj and Sharon Shavitt (2000), "Issues and New Directions in Global Consumer Psychology," *Journal of Consumer Psychology*, 9 (2), 59-66.
- Markus, Hazel Rose and Shinobu Kitayama (1991), "Culture and the Self: Implications for Cognition, Emotion, and Motivation," *Psychological Review*, 98 (2), 224-253.
- McCarty, John A. (1989), "Current Theory and Research on Cross-Cultural Factors in Consumer Behavior," in *Advances in Consumer Research*, Vol.16, ed. Thomas Srull, Provo, UT: Association for Consumer Research, 127-129.
- Mooij, Marieke de (1997), *Global Marketing and Advertising: Understanding Cultural Paradoxes*, Thousand Oaks, CA: Sage.
- Muehling, Darrel D., Jeffrey J. Stoltman, and Sanford Grossbart (1990), "The Impact of Comparative Advertising on Levels of Message Involvement," *Journal of Advertising*, 19 (4), 41-50.
- Onkvisit, Sak and John J. Shaw (1999), "Standardized International Advertising: Some Research Issues and Implications," *Journal of Advertising Research*, 39 (6), 19-24.
- Oyserman, Daphna, Heather M. Coon, and Markus Kemmelmeir (2002), "Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta-Analyses," *Psychological Bulletin*, 128 (1), 3-72.
- Pechman, Cornelia and David W. Stewart (1991), "How Direct Comparative Ads and Market Share Affect Brand Choice," *Journal of Advertising Research*, 31 (December), 47-55.
- Polyorat, Kawpong and Walee Khantuwan (2008), "Cross-Cultural Advertising Effectiveness between Two Countries That Are Culturally Similar: The Case of Sex Appeal Advertising for Lao Students in Thailand," *Proceeding of Paris International Conference on Education, Economy & Society*.

- Polyorat, Kawpong, Walee Khantuwan, Porramate Jaratmetakul and Natthakarn Boonnon (2008), "Dimensions of Brand Personality in Thailand: Some Empirical Evidence," in *Proceedings of Global Marketing Conference*, Korean Academy of Marketing Science.
- Rogers, John C. and Terrell G. William (1989), "Comparative Advertising Effectiveness: Practitioners' Perception versus Academic Research Findings," *Journal of Advertising Research*, 29 (October/November), 22-37.
- Rose, Randall L., Paul W. Miniard, Michael J. Barone, Kenneth C. Manning, and Brian D. Till (1993), "When Persuasion Goes Undetected: The Case of Comparative Advertising," *Journal of Marketing Research*, 30 (August), 315-30.
- Samiee, Saeed and Insik Jeong (1994), "Cross-Cultural Research in Advertising: An Assessment of Methodologies," *Journal of the Academy of Marketing Science*, 22 (3), 205-217.
- Singelis, Theodore M. (1994), "The Measurement of Independent and Interdependent Self-Construals," *Personality and Social Psychology Bulletin*, 20 (October), 580-591.
- Ting-Toomey, Stella and Atsuko Kurogi (1998), "Facework Competence in Intercultural Conflict: An Updated Face-Negotiation Theory," *International Journal of Intercultural Relations*, 22 (2), 187-225.
- Triandis, Harry C. (1995), *Individualism and Collectivism*, Boulder, CO: Westview Press.
- Wilkie, William L. and Paul Farris (1975), "Comparison Advertising: Problems and Potential," *Journal of Marketing*, 36 (October), 7-15.

Cross-Cultural Advertising Effectiveness between Two Countries That Are Culturally Similar: The Case of Sex Appeal Advertising for Laos Students in Thailand

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Abstract

Most cross-cultural studies appear to compare two or more cultures that are very different from each other; for example, East versus West. Our study attempts to demonstrate that communication barriers do exist even between two countries that have similar religions and cultural values. The use of sexual appeal is common in Thailand especially for products such as clothes and cosmetics. Although Thailand and Laos share several similar cultural dimensions (e.g., individualism-collectivism and power distance) commonly studied in cross-cultural advertising literature, the two are different in terms of traditionalism and degree of exposure to Western culture as well as level of economic development. Depth interviews are conducted with Lao students. The results indicate this advertising appeal is not favorably viewed by the respondents because the sex appeal challenges Lao tradition which discourages women from exposing their body in public. Our study results thus suggest that several cultural and economic differences must be also taken into consideration when cross-cultural communication is conducted.

Keywords: sex appeal advertising, Laos, Thailand

1. Introduction

Most cross-cultural marketing and advertising studies appear to compare and contrast two or more cultures that are very different from each other; mostly East versus West (e.g., Aaker 2000, Aaker and Mahesawarn 1997). The results of these studies often suggest the need to localize marketing and advertising practices because the East and the West are quite different in several cultural dimensions.

Our study attempts to demonstrate that communication barriers do exist even between two countries that have similar traditions, religions, cultures and value systems. Specifically, our study attempts to contribute to the literature by comparing two similar Asian cultures: Thailand and Laos. Furthermore, we seek to propose that, in addition to several cultural dimensions (e.g., individualism-collectivism and power distance, Hofstede 1990) commonly studied in cross-cultural marketing and advertising research, other cultural aspects (i.e.,

traditionalism and degree of exposure to Western culture) as well as the level of economic development should also be taken into consideration for more effective cross-cultural communication.

The idea for this research is also, in part, based on observation of teaching Thai to Lao students. Much of the class material comes from the original language used in Thai mass media (e.g., print ads in magazines). Quite often it appears that Lao students are disturbed by some of these materials: sex appeal ads, in particular. As a consequence, it is possible that Lao consumers could have different responses to sex appeal ads from Thai consumers.

Laos is a difficult country in which to conduct research. Few researches on its social and cultural dimensions have been carried out in Laos, especially empirical research that is theoretically grounded. Research available to foreigners on Lao culture is, therefore, scant, (Fox 2003). Given the shortage of secondary sources about this relatively closed country, this study is exploratory in nature.

This research article is structured as follows. First, literatures in (1) sex appeal advertising, (2) Laos, and (3) similarities and differences between Thailand and Laos are discussed. Next, a research question based on these discussions is offered and then empirically examined using depth interviews. Subsequently, data are analyzed and discussed. Finally, research implications are provided and avenues for future research suggested.

2. Theoretical Background

2.1 Sex Appeal Advertising

Sex appeal advertising uses messages that are associated with sexual information (Reichert, Heckler, and Jackson 2001). Five major approaches are used to convey sexuality in advertising (Clow and Baack 2007): subliminal advertising, nudity or partial nudity, overt sexuality, sexual suggestiveness, and sensuality. Out of these five, nudity or partial nudity appear to be the most popular form

A comprehensive literature review of sex appeal advertising by Reichert (2002) indicates that sexual content (vs. non-sexual content) is better at attracting consumers' attention to the ad and it elicits more favorable product evaluations (e.g., Dudley 1999) and generates more arousal. Furthermore, product relevance (the appropriateness of the link between the product category and the use of sex) and individual difference variables (e.g., consumer gender, model gender, consumer age, and personality variables including erotophobia/erotophilia, sex guilt and sexual-self schema) appear to moderate the consumers' response to sex appeal ads.

2.2 Laos

Laos (or formally Lao People's Democratic Republic) is situated between Vietnam to the east, Thailand to the West, Cambodia to the south, China to the North and Myanmar to the northwest. Laos has a land area of 236,800 square kilometers and is a landlocked country. About two-thirds of the country is mountainous which creates transportation difficulties but, at the same time, is the source of many rivers and vast hydro power potential (Fox 2003). Laos has the lowest population density (4.5 million) in East Asia.

The Lao economy is heavily dependent on investment and trade with its larger and richer neighbors: Thailand, Vietnam, and, especially in the north, China. The country, nevertheless, still depends largely on agriculture (Goh 2000). Communication and transportation links are particularly poor in Laos (Dana 1995). In addition, Laos is among the countries with least competitiveness in Southeast Asia especially in terms of economic, technology, and management performances (Kao et al. 2008)

In 1986, the policy of the New Economic Mechanism was adopted (Fox 2003), with the introduction of some private enterprise, and an opening up of borders to the West and the world community. With globalization and the introduction of a market economy (Rehbein 2005), more foreign corporations are conducting their businesses in Laos. As a consequence, there is an urgent need to explore whether advertising practice imported from other countries could be used in Laos.

2.3 Thai and Lao Similarities and Differences

These two Southeast Asian countries are neighbors. Based on the literature in cross-cultural studies (e.g. Hofstede 1990, Ting-Toomey and Kurogi 1998. Hall 1976, Boase 1997), the two countries are collectivistic (vs. individualistic), have high (vs. low) power distance, tend to employ high- (vs. low-) context communication, emphasize nurturance (vs. assertiveness), and are quite concerned with face-saving.

2.3.1 Individualism versus Collectivism

Individualism-collectivism (Hofstede 1990) is one of the most central dimensions in international marketing research (Aaker and Maheswaran 1997). Individualism refers to a social orientation in which individuals tend to see themselves as relatively autonomous and independent, while collectivism involves viewing oneself as an integral part of one or more groups (Triandis 1995). Individualists, found predominantly in the West such as the US (Aaker and Maheswaran 1997), tend to have an *independent self-construal*, which emphasizes the separateness from the social context and uniqueness of the individual. In collectivist cultures, located predominantly in the East such as Thailand and Laos, consumers tend to have an *interdependent self-construal*, which emphasizes social connectedness and group relations (Singelis 1994).

The normative expectations of individualists include: being unique, expressing oneself, promoting one's own goals, and being direct in communication. Collectivists, on the other hand, tend to be more concerned with fitting-in, promoting group goals and using indirect communication. Individualism stresses the role of others as benchmarks for social comparison and self-evaluation. Collectivism focuses on the role of others for self-definition via relationships in specific contexts. While self-expression is crucial for individualists, ability to maintain harmony with social in-groups is critical for collectivism (Markus and Kitayama 1991).

2.3.2 Assertiveness versus Nurturance

Assertiveness versus nurturance (also known as masculinity versus femininity; Hofstede 1990) cultures emphasize achievement and success versus caring for others and quality of life, respectively. According to Mooij (1997), in an assertiveness culture (e.g., the US), performance, achievement, result, winning, and success are important. In addition, there is an inclination to polarize. Big and fast are beautiful. In contrast, a nurturance culture (e.g., Thailand and Laos) is more service-oriented, is oriented toward people (in comparison with "task"), and value modesty. Small is beautiful. Further, there is an inclination to attain consensus (rather than polarization). Winning is less important than quality of life. In an assertiveness culture, being a winner is positive and children are taught to admire the strong. In a nurturance culture, children are taught sympathy for the underdog or the loser. Also in a nurturance culture, a person is not supposed to hurt other people's feelings, but rather to have more respect for the underdog. Aggressive behaviors related to an explicit winning are more valued in an assertiveness culture than in a nurturance culture Mooij (1997).

2.3.3 Face-Saving

"Face" refers to the projected image of one's self in a relational situation (Gudykunst 1998). Face is a vulnerable identity and can be threatened in any social situation (Ting-Toomey and Kurogi 1998). Face-losing or the deterioration of one's face is a critical issue in Asian cultures (e.g., Thailand and Laos) because face is fundamentally a social self and associated with respect, honor, status, reputation, credibility, competence, connection, and trust (Ting-Toomey and Kurogi 1998). In other words, the fact that external or public features such as status, role, and relationship are critical in collectivist cultures where interdependent self-construal predominates (Markus and Kitayama 1991) makes the concept of "face" important in such cultures. Attacking the "face" is therefore a very serious issue in Asian cultures.

2.3.4 High versus Low Power Distance

The cultural dimension of power distance (Hofstede 1990) reflects the degree to which power within a society is equally or unequally distributed. In other words, this cultural dimension influences the way people accept and give authority. Countries low on power distance (e.g., the US) tend to be more egalitarian (Alden, Hoyer and Lee 1993) and authority could have a negative connotation as these countries assume equality in rights and opportunity in the work place. On the other hand, national cultures high on power distance (e.g., Thailand and Laos) are likely to have hierarchical interpersonal relationships and decision-making. Each person has and knows his or her rightful place in the social hierarchy, and as a consequence, he or she naturally accepts or give authority (de Mooij 1997).

2.3.5 High versus Low Context

This concept was first proposed by Hall (1976). In a low-context culture (e.g., the US), message is very clearly communicated and specific (Andersen 1994) and verbal (vs. nonverbal) communication is a more prominent form. Words contain most of the information to be sent. Messages must be explicitly stated or the meaning will be lost. Members in this culture depend less on using non-verbal communication codes. Senders can depend less on the receiver inferring the message from the context. In addition, the focus is on words or on what is said, not who says it or how, when, or where it is said.

In a high-context culture (e.g., Thailand and Laos), in contrast, verbal message is considered merely one source of information. The members of this culture consider non-verbal communication more important than verbal communication (De Mooij 1994). That is, for high-context communication, very little information is transmitted in the verbal mode (Porter & Samovar 1994) and consequently words are not regarded as the only main source of information. How, when, where, and by whom something is said are considered important and thus contribute to the real intention of that communication. In other words, a message is interpreted based not only on its contents but also on the situation or context in which the message occurs. The hidden or suggestive meaning that may be indirectly alluded to in the message may be important (Cundiff and Hilger 1984). Therefore, a recipient of a message is likely to derive meaning from the context in which communication occurs.

2.3.6 Differences between Thailand and Laos

As Thailand and Laos share at least five major cultural aspects often extensively examined in cross-cultural research in addition to the fact that the two countries share a border of several hundred kilometers, a long history that precedes the modern nation-state demarcation, and genealogical ties among their peoples, it could be reasonably expected that the advertising practices between these two countries are similar. That is, advertisements from Thailand could be used in Laos with no need for modifications (except for the language). However, our

study proposes that there could be other cultural and economic aspects that may influence decisions in using standardized advertising strategy.

In Thailand, sex appeal ads are widely used (Junroongmaneekul 2006). Several television commercials employ sex appeal. For example, in a commercial of a brand of snack, a woman is eating the snack and later feels warm. She then decides to take off her outer clothes, revealing her perfect body. In another commercial for a brand of anti-perspirant deodorant, a female student raises her arm several times to answer the teacher's question although she does not know the answer. Later, it turns out that she wants to show her white armpit to her classmates after using the product. One lamp commercial depicts a housemaid asked by her master to replace the lamp in the master's bedroom. Before going to the bedroom, the maid gets changed from her usual clothes to a sexy nightgown and says "the chance to change does not often take place" which, in this case, is a double-entendre or rather, a triple-entendre of what is being changed: a lamp or a sexy nightgown or perhaps from her status as a mere maid to a potential upgrade to the master's girlfriend (Khantuwan 2004).

In print ads, the sex appeal is more outrageously used than in television. For example, an underwear ad depicts a bikini-clad woman wearing top boots. Further, an ad for a mobile phone operator uses a picture of a woman wearing a long evening dress fully displaying her naked back. Or, in a hotel ad, one picture shows a man and a woman, both in swimming suits, playfully hugging each other.

Whereas sex appeal ads are quite common in Thailand, we propose that this ad appeal may not work in Laos. We suggest that the degree of traditionalism and exposure to Western culture as well as degree of economic development are, at least in part, influencing factors as these reflect major differences between Thailand and Laos. In our perspective, these three factors are interwoven.

In Laos, the infrastructure is limited (Ardrey, Pecotich and Shultz 2006) with inadequate transportation networks. The road system is relatively underdeveloped. The country has continued need for foreign assistance. The Lao economy still depends largely on agriculture. Further, the struggle for survival is still common in present-day Laos (Fox 2003). Although the country appears to be less economically prosperous than other Southeast Asian neighbors, Laos is on the way to economic development. The current level of economic development is, nevertheless, much different from that in Thailand.

Despite global modernization, much of Lao culture is still profoundly influenced by Buddhist thinking, attitudes, and behavior. Lao culture is still conservative, extremely sophisticated in several regards, and is blessed with enduring traditions, customs, and systems. Western cultures could be perceived as a possible threat to the Lao culture and a potential source of "spiritual pollution" leading to more decadence (Boase 1997). In other words, Lao people are still proud of their long and well-established traditions

National principles taught in Lao schools include a sense of responsibility to preserve the strong values of former generations (Fox 2003). Furthermore, the 2001-2020 vision of education states the policy of having good moral and ethical behavior, good discipline, good health, and being civilized in emotional reactions

and thinking (Fox 2003). In Laos, there is an emphasis on moral behavior, with an inclination toward traditional values. Power tends to be used in a traditional, patriarchal way. Teachers and students are expected to follow strict disciplines. Children must follow the directions of their elders, as complete obedience to older people is stressed in Lao norms. The stories in Lao culture books use moral lessons to emphasize values of cooperation, unity, the importance of labor, the family, and friendship (Boase 1997).

Furthermore, strict dress codes are enforced, particularly for women. Little or no deviation is allowed. Physical contact of any sort in public between the two sexes could cause embarrassment and is forbidden. Physical contact in public is not accepted traditionally, even between husband and wife, although this is changing slowly among younger urban people (Boase 1997).

Moreover, one should not assume that Laos' need for Western expertise, technology, and capital extends to an acceptance of Western cultural values. History and the official prevailing attitudes tends to resist "cultural pollution" (Boarse 1997). From our in-depth analyses of Lao culture discussed thus far, it appears that Laos (compared to Thailand) is more traditional and has less exposure to Western influence.

Based on the foregoing discussions, our research question formally states:

RQ: What are Lao consumers' attitudes toward sex appeal advertising?

3. Methodology

This research employed depth interviews conducted with five Lao graduate students who are currently studying at a major northeastern university in Thailand because the access to Lao consumers in Laos is difficult. The research subjects are first greeted and asked general information. Subsequently, they are informed of the study objectives and descriptions. Next, they are asked about their attitudes toward sex appeal advertising and the extent to which they want to see this ad appeal more widely used in Laos. They are also shown three sex appeal print ads from Thai popular magazines. These ads are the ones identified in the theoretical background section. Finally subjects were thanked and debriefed.

4. Results

Based on content analysis of the data, the results are broadly classified into the following categories: the current use of sex appeal advertising in Laos, the attitudes toward sex appeal advertising, the rationale for the use of sex appeal advertising, the role of product relevance, and the prospect of sex appeal advertising in Laos in the future.

4.1 The Current Use of Sex Appeal Advertising in Laos

The research subjects indicate that they have never seen this type of advertising in Lao media. It is very uncommon. In fact, one subject indicates that she would be shocked if she saw these ads in Laos. She would not, however, be shocked if she saw them in Thailand. Another subject indicates that, the sex appeal ad, if it exists, would probably not be evident. That is, the picture would be blurred and occupy only little space in the ad and function as a background only. However, this kind of advertising might exist in foreign media such as foreign magazines donated from abroad. A research subject who is a librarian in Laos indicates that Lao libraries do not buy magazines that have content or advertising incongruent with Lao culture and tradition.

4.2 Attitudes toward Sex Appeal Advertising

All subjects express negative attitudes toward this type of advertising. The major reasons are based on Lao culture and tradition. Although Lao law may not explicitly ban the use of sex appeal advertising, it is evidently against the long-established Lao tradition. That is, women are not supposed to expose their uncovered or unclothed body in public. People would be offended by the use of sexually suggestive advertising to sell products or services as this advertising appeal seems to exploit women in general as sex objects. In this sense, Lao culture could be viewed as being more respectful of women than “developed” American/Western culture that objectifies women. In addition, the use of sex appeal portraying blatant nudity for arousal is considered bad taste. Another subject indicates that, personally, he does not like this kind of ad appeal and does not want to see it in Lao culture. He is afraid that if this kind of ad appeal (e.g., nudity or semi-nudity) was frequently broadcast in television or other media, Lao teenagers might think that it is acceptable in Laos and would thus follow suit.

4.3. The Rationale for the Use of Sex Appeal Advertising

The research subjects understand that sex appeal is one creative approach in advertising. And the purpose of advertising is to sell products or services or to draw consumers’ attention to the products or services. However, there are also several other creative approaches in addition to the use of sex appeal. These other alternatives in advertising should be used instead of sex appeal.

4.4 The Role of Product Relevance

Research subjects are also offended by ads involving sexual objectification where the models are used as adornments to capture viewer or reader attention especially when they have little or no relevance to the products. This gratuitous sex appeal in advertising (Sengupta and Dahl 2008) is viewed to be unethical or manipulative. For example, the hotel ad, instead of using a man and a woman in swimming suits in a pool as in the sex appeal ad presented to the research subjects, the hotel may consider using beautiful natural landscapes or exotic cuisine or tourist attractions in the area rather than bikini-clad models. The ad for underwear, similarly, does not need to show the underwear on the almost

naked woman's body. It could feature the product alone and demonstrate fine or fashionable sewing craftsmanship, instead. In summary, the selling point should focus on the product's benefit rather than sex.

4.5 The Prospect of Sex Appeal Advertising in Laos in the Future

All subjects strongly voice their concern over the future use of sex appeal ads in Laos. With the influx of not only Western culture but also Thai culture, it is possible that ads with nudity or other sexual suggestiveness will be more common in Laos. This is especially troublesome since Laos is attempting to open its economy to foreign investment. These foreign investors, either intentionally or unintentionally, could bring the advertising practice from their home countries to use in Laos.

5. Conclusions

5.1 Summary and Research Implications

Our study results reveal that the use of sex appeal in advertising intended for Lao consumers must be done with care. Furthermore, in addition to the typical cultural dimensions examined in cross-cultural studies (e.g., individualism vs. collectivism, high vs. low power distance, high- vs. low-context communication, assertiveness vs. nurturance, and face-saving), other cultural and economic factors such as degree of traditionalism and exposure to Western culture as well as the extent of economic development should also be taken into consideration as these can also have complementary explanatory roles regarding the use of this type of advertising in another culture.

The results, therefore, suggest that, in a classroom, instructors may consider the cultural and economic differences of the home country of the students when the selections of class materials for Thai language are made so that the students would not be uncomfortable or offended. This is particularly important when the culture of the teachers and students are close as the slight differences may not be recognized or easily detected. Being aware of culture and economy of the message receiver could, thus, bridge the gap between the message sender's field of experience (Belch and Belch 2007) and that of the receiver, resulting in more effective communication such as in the teaching of Thai as a foreign language.

Our study results can also be extended to a broader area and, therefore, provide managerial implications for advertising and marketing practitioners. For example, several different cultural and economic differences should be taken into consideration prior to the implementation of standardized or global advertising strategy as consumers around the globe may have different feedback to the use of sex appeal advertising.

5.2 Study Limitations and Directions for Future Research

Our study has a number of limitations which suggest avenues for future research. For example, in addition to depth interviews, other research methods including experiments, focused groups, projective techniques and content analyses may provide additional explanations on the possible consequences of sex appeal advertising among Lao consumers. Next, besides the roles of culture and economic development, future research may also examine the consequences of legal conditions on the use of sex appeal advertising especially in countries where governments exercise power for tight control. On one hand, laws and regulations often reflect norms or what is generally accepted in a given country. On the other hand, cultural changes such as the influx of western or foreign cultures may precede legal changes. As a consequence, it would be interesting to examine cultural, economic and legal issues as these three interwoven factors may have different influences on the use of sex appeal advertising. Further, other creative advertising approaches also should be examined in the Lao context. For instance, the use of narrative versus factual ad copy (cf., Polyorat, Alden and Kim 2007) among Lao consumers could elicit different responses from those documented in Western literature.

6. References

- Aaker, Jennifer L. (2000), "Accessibility or Diagnosticity? Disentangling the Influence of Culture on Persuasion Process and Attitude," *Journal of Consumer Research*, 26 (March), 340-357.
- Aaker, Jennifer L. and Durairaj Maheswaran (1997), "The Effect of Cultural Orientation on Persuasion," *Journal of Consumer Research*, 24 (December), 315-328.
- Alden, Dana L., Wayne D. Hoyer, and Chol Lee (1993), "Identifying Global and Culture-Specific Dimensions of Humor," *Journal of Marketing*, 57 (April), 64-75.
- Andersen, Peter (1994), "Cues of Culture: The Basis of Intercultural Differenced in Nonverbal Communication," *Intercultural Communication: A Reader*, eds. Larry A. Samovar and Richard E. Porter, Belmont, CA: Wadsworth, 258- 269.
- Ardrey, William J., IV, Anthony Pecotich and Clifford J. Shultz, II (2006), "Entrepreneurial Women as Catalysts for Socioeconomic Development in Transforming Cambodia, Laos, and Vietnam," *Consumption, Marketing and Culture*, 9 (4), 277-300.
- Belch, George E. and Michael A. Belch (2007), *Advertising and Promotion: An Integrated Marketing Communications Perspective*, McGraw-Hill/Irwin, New York.
- Boase, Bob (1997), *Working with Your Lao Partner*, Canadian International Development Agency, Vientiane: Laos.
- Clow, Kenneth E. and Donald Baack (2007), *Integrated Advertising, Promotion, and Marketing Communications*, Upper Saddle River: NJ, Prentice Hall.
- Cundiff, Edward W. and Marye Tharp Hilger (1984), *Marketing in the International Environment*, Englewood Cliffs, NJ: Prentice-Hall.
- Dana, Leo Paul (1995), "Small Business in a Non-Entrepreneurial Society: The Case of the Lao People's Democratic Republic (LAOS)," *Journal of Small Business Management*, 30 (3) 95-102.

- Dudley, Sid C. (1999), "Consumer Attitudes Toward Nudity in Advertising," *Journal of Marketing Theory and Practice*, 79 (4), 89-96.
- Fox, Christine (2003), "No Place for Girls? Gender, Ethnicity and Citizenship Education in the Lao People's Democratic Republic," *Compare*, 33 (3), 401-412.
- Goh, Mark and Argus Ang (2000), "Some Logistics realities in Indochina," *International Journal of Physical Distribution and Logistics Management*, 30 (10), 887-911.
- Gudykunst, William B. (1998), "Individualistic and Collectivistic Perspectives on Communication: An Introduction," *International Journal of Intercultural Relations*, 22 (2), 107-134.
- Hall, Edward T. (1976), *Beyond Culture*, New York: Doubleday.
- Hofstede, Geert (1990), *Culture and Organization: Software of the Mind*, London: McGraw-Hill.
- Junroongmaneekul, Unaloam (2006), "Introduction to Media Literacy," in *Open Door to Media Literacy*, Amornrut Thiplert. Ed., Thai Health Organization, 1-35.
- Kao, Chiang, Wann-Yih Wu, Wen-Jen Hsieh, Tai-Yue Wang, Chinho Lin, and Liang-Hsuan Chen (2008), "Measuring the National Competitiveness of Southeast Asian Countries," *European Journal of Operational Research*, 187, 613-628.
- Khanthuan, Walee (2004), "Discourses of Thai Women and Changes," *Journal of Humanities and Social Sciences*, 21 (2), 24-40.
- Markus, Hazel Rose and Shinobu Kitayama (1991), "Culture and the Self: Implications for Cognition, Emotion, and Motivation," *Psychological Review*, 98 (2), 224-253.
- Mooij, Marieke de (1994), *Advertising Worldwide: Concepts, Theories and Practice of International, Multinational and Global Advertising*, New York: Prentice-Hall.
- Mooij, Marieke de (1997), *Global Marketing and Advertising: Understanding Cultural Paradoxes*, Thousand Oaks, CA: Sage.
- Polyorat, Kawpong, Dana L. Alden and Eugene S. Kim (2007), "Impact of Narrative versus Factual Ad Copy on Product Evaluation: The Mediating Role of Ad Message Involvement," *Psychology & Marketing*, 24 (6), 539-554.
- Porter, Richard E. and Larry A. Samovar (1994), "An Introduction to Intercultural Communication," in *Intercultural Communication: A Reader*, eds. Larry A. Samovar & Richard E. Porter, Belmont, CA: Wadsworth.
- Rehbein, Boike (2005), "The Lao Economic Field," *Sojourn*, 20 (1), 23-38.
- Reichert, Tom, Susan E. Heckler, and Sally Jackson (2001), "The Effects of Sexual Social Marketing Appeals on Cognitive Processing and Persuasion," *Journal of Advertising*, 30 (1), 13-27.
- Reichert, Tom (2002), "Sex in Advertising Research: A Review of Content, Effects, and Functions of Sexual Information in Consumer Advertising," *Annual Review of Sex Research*, 13, 241-73.
- Sengupta, Jaideep and Darren W. Dahl (2008), "Gender-related Reactions to Gratuitous Sex Appeals in Advertising," *Journal of Consumer Psychology*, 18, 62-78.
- Singelis, Theodore M. (1994), "The Measurement of Independent and Interdependent Self-Construals," *Personality and Social Psychology Bulletin*, 20 (October), 580-591.
- Ting-Toomey, Stella and Atsuko Kurogi (1998), "Facework Competence in

Intercultural Conflict: An Updated Face-Negotiation Theory,"
International Journal of Intercultural Relations, 22 (2), 187-225.
Triandis, Harry C. (1995), *Individualism and Collectivism*, Boulder,CO:
Westview Press.

Digital Inclusion in the Languages Undergraduate Course at Pontifical Catholic University of São Paulo

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Abstract

This paper is based on a case study research that intends to discuss the experience of digital divide in an undergraduate course on the grounds of the Activity Theory (Engeström, 1999; Leontiev, 1977). Some of the main research objectives are: a) to analyse the impact of the ICT tools in Language Graduate students enrolled in blended-learning disciplines and b) to investigate what the students' interaction can reveal from the point of view of digital divide. The first analysis reveal there are differences between morning and evening students as far as behavior towards blended-learning approach, ICT tool use and communication interests.

Keywords: activity theory - digital divide - language learning - Internet

1. Introduction

The information and communication technologies (ICT), as we all know, have started to cause cultural and important transformations and they are now important tools for research, education and social relationships. The computer and the Internet have revolutionized our lives. Knowledge can be built from information that is easily found everywhere and the so-called user can participate, interfere, redirect and handle not only content but also the means by which content is conveyed. Besides that, there is a possibility of surfing on information in a rizomatic way, following non-linear pathways according to one's own rhythm and availability.

It is our main concern the educacional area where, for a fact, ICT has had an important influence and impact. According to the Brazilian Internet Steering Committee [CGI.BR]ⁱ, there are 54,7 million houses with Internet access and almost 156 million Internet users in Brazil. The majority of users (70%) is formed by young people ranging from 16 to 24 years old. Nowadays, 73% of the Internet users claim they use it for educational purposes, among the activities mentioned we have : a) school research ; b) book or aticle search in libraries ; c)

ⁱ Numbers can be found at <http://www.nic.br/indicadores/usuarios/tab02-05.htm>

undergraduate and Graduate course information ; d) online course. However, we should not ignore that we are still a developing country where technology is not completely accessible for everybody. Besides, there is an incipient use of ICT technology to enhance pedagogical practices (Queiróz, 2003) if we compare to the increasing number of researches in the area that points at the innumerable ICT pedagogical possibilities of use.

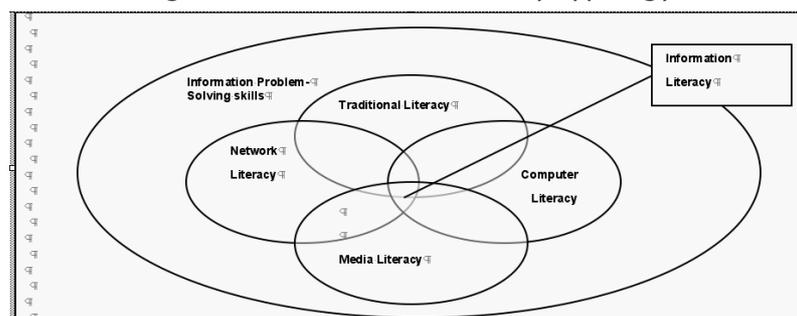
In Brazil, interest in this topic has considerably increased and many works have contributed to the understanding of the instructional processes based on the ICT's supportⁱⁱ. Including people in the digital culture – the matter of this article - has been one of the issues in all educational levels. Our paper aims at analysing the impact of the ICT tools in Undergraduate Language students enrolled in blended-learning disciplines and investigating what the students' interaction can reveal from the point of view of digital divide, on the grounds of the Activity Theory. Before we proceed to discuss our experience in an undergraduate course, it is worth having a look at what we mean by digital literacy. This is what we intend to do in the following section.

2. The digital literacy concept

As society has changed, the skills needed to negotiate in life also change. Reading, writing and calculating skills are not enough nowadays. In the information age, we have seen the need of other skills, consequently various subtleties are now involved in the word *literacy*. Initially, researchers refer to literacy in association with terms such as *computer*, *network*, *technology*, *information*, *visual media*, etc. Later, the expression *digital literacy* is coined.

For example, McClure (1994) proposes the following diagram in an attempt to recognize and fuse some of the literacy categories

Diagram 1: Information literacy typology



Source: McClure, C. R. (1994)

ⁱⁱ It is impossible to name all the researches that have been developed in Brazil. More recently, we have had studies about the following issues, among others : online teaching and the teacher's formation (Almeida, 2000; Geraldini, 2003); the digital environment potentialities (Martins Fontes, 2002); the students' engagement in distance course activities (Quevedo, 2005) and the role of the teacher (Freire, 2003; Ramos & Freire, 2001).

Tyner (1998) mentions – **computer, network** and **technology** – as *tool literacies*, and three others – **information, visual** and **media** – as *literacies of representation*. Tyner (1998, p. 94) defines each literacy as

- *computer literacy* – “a general understanding of the ways computers work, including knowledge about the computer's CPU, operating principles, and the principles of networks so that computer users can move around in a computing environment with relative ease” .
- *network literacy* – “Knowledge: 1. awareness of the range and uses of global networked information resources and services; 2. understanding of the role and uses of networked information in problem solving and in performing basic life activities; and 3. understanding the system by which networked information is generated, managed, and made available.”
- *technology literacy* – “a complex, integrated process involving people, procedures, ideas, devices, and organization for analyzing problems and devising, implementing, evaluating, and managing solutions to those problems, involved in all aspects of learning”.
- *information literacy* – “the ability to find, evaluate, and use information effectively in personal and professional lives, the ability to locate, analyze, evaluate, synthesize, and use information from a variety of sources.”
- *media literacy* – “concerned with helping students develop an informed and critical understanding of the nature of the mass media, the techniques used by them, and the impact of these techniques. More specifically, it is education that aims to increase students' understanding and enjoyment of how media work, how they [media] produce meaning, how they are organized, and how they construct reality. Media literacy also aims to provide students with the ability to create media products.”

Shetzer & Warschauer (2000, p. 173) state that electronic literacy can imply “the way we use the computer to interpret and express meanings”, and together with specialists like Hobbs, 1996; Lemke, 1998 and others mention competences and skills according to three important areas:

- *communication* – contact individuals and groups, provide and get information, give opinions and suggestions, understand audiences, use argumentation devices, use symbols efficiently, write in different formats, registers and styles, edit and format texts.
- *construction* – (besides the ones above) write hipertexts and integrate hipermedia resources to create pages and sites in the Web, manage and update files, know how to cite.
- *Research* – (besides the ones above) search, organize and keep information, use boolean techniques in search engines, metasearch engines, directories and data banks, evaluate, integrate and analyse information.

All the definitions above tend to show us that there are several aspects involved in literacy; thus, in our view and for this paper literacy will be defined as a social, cultural, historical practice that allows the individual to appropriate the mechanisms and participate effectively and decide, as a citizen of his time, the destiny of the community he belongs and identifies with the tradition and habits. It is the ability to understand and create written language and to operate a series of social or cultural representations, that is, the ability to access, analyze, evaluate and communicate messages in a variety of forms (Hobbs, 1996).

Esthet-Alkalai (2004, p. 01) who uses the expression digital literacy states that it "includes a large variety of complex cognitive, motor, sociological, and emotional skills, which users need in order to function effectively in digital environments", with which we agree. We already see the pervasiveness of technology as textual interactions permeate more and more all aspects of ordinary citizens' lives. Being able to interact critically in this new textual environment as well as to produce meanings that can affect culture itself is one of the demands of modern information society.

The view of ICT as a cultural artefact, as it is put in our researches, points to the need for digital literacy be seen as a functional element of society, connected to the culture and contexts in which reading and writing are used. And when we deal with learning mediated by computers, the use of the activity theory (AT) has been relevant to help understand the whole activity. In fact, AT has spread internationally and is applied to develop an understanding of human practice in computer supported learning environments. In the following section, we briefly present some notions about this theory.

3. Activity Theory

AT origins traces back to Vygotsky who contributed to the basis of the theory. Vygotsky asserted that human behaviour could be seen in two ways: a) inferior natural acts that had evolved throughout the evolution period and that were shared with superior animals and b) artificial instrumental acts that had evolved throughout human history. The second point raised by Vygotsky (1978: 40) focused on the oriented action mediated by cultural tools and signs. Later, Leontiev (1978) asserted that human activity was always social and cooperative, thus collective and happening according to a division of labour.

According to AT, it is necessary to analyse the context in order to understand the situation. Briefly speaking, «Activities are goal-oriented or directed at objects (plans, ideas, etc.) and are motivated by the need to transform the object into an outcome. The activity happens within a community that is governed by a set of rules and organized through a division of labour» (Quevedo, 2006). It is this system that becomes the unit of analysis.

In AT, mediation is a fundamental aspect since man does not act directly on the world. Actions are mediated by social-semiotic tools as well as material artefacts and technologies. Thus, mediating artefacts are products of a socio-cultural evolution to which man has access by being actively engaged in the community practices. Artefact or tool use is mediated by culture. Each individual has the

chance to assimilate and appropriate tools when he relates to other human beings and to the physical environment. Throughout this process of appropriation, he can face problems, ruptures, breakdowns and clashes that emerge from the activity he is in. When this happens, activity theorists refer to it as contradictions.

Thorne (2003) demonstrates how the learners' relationship with physical contexts and computers may facilitate the occurrence of contradictions. He argues that online activities emerge on the "intersection of **histories of use** with the contingencies of **emergent practice**" (our emphasis) and represents the "culture-of-use" of an artefact (p.40). In his study, the activity of online interaction was different for the French than it was for the Americans, in part because the Internet communication was used differently in each case. Although we are not dealing with different nationality students, the different histories of use of ICT may have interfered as we will see ahead in this paper.

4. Incorporating ICT in Education in Brazil

In Brazil, ICT experiences have started around the seventies and they have been characterized by being based on researches and concrete experiences in the public school level. A series of actions has been put in place since then. In the nineties, the Brazilian government started to offer incentives to the ICT use in schools and research developments. PROINFOⁱⁱⁱ was launched with the aim of disseminating ICT in Brazilian public schools to support the teaching and learning processes.

In 1996, the Lei de Diretrizes e Bases para a Educação Nacional^{iv} (LDB) recognized distance learning as a valid educational modality for all levels of education in Brazil. In 1996, post-graduation courses started to be offered nationwide and in 1998, the Ministry of Education authorized distance undergraduate courses. In 2001, the National Education Council (CNE) authorized all universities, faculties and technological centres to offer online courses up to 20% of the curriculum load of their ongoing recognized undergraduate courses. Besides, other official documents show the urgency of incorporating ICT in the curriculum. The National Languages Undergraduate Course Directives (CNE, 2001) and the National Course Directives for Teacher's Formation (CNE, 2002) have demanded the inclusion of ICT in an attempt of an education renewal that leads to the integration of the individual into modern society.

ⁱⁱⁱ <http://www.proinfo.mec.gov.br/>

^{iv} Law of Directives and Bases for Education.

5. Blended-learning at PUC-SP

The Communication and Philosophy Faculty of the Pontifical Catholic University of São Paulo (PUC-SP) has introduced blended-learning disciplines^v in the curriculum of the undergraduate Languages (English, French, Spanish and Portuguese) courses for three reasons^{vi}, among them we emphasize the fact that we understand the development of the necessary skills for the use of ICT in education is not only an issue of improving technical abilities; we should emphasize reflecting upon the learning process and the conception of technology as a socio-cultural tool created on the basis of historical human knowledge accumulation.

As a tool, ICT mediates man and his relationship with the world in a material and/or symbolic way (Lantolf, 2000) and it shapes the way we interact with reality. We also consider that ICT, as material tools, can help us regulate the actions upon the objects and control nature whereas as psychological tools, ICT can help us represent the concrete world, communicate our ideas and thoughts, share meanings and interpret situations.

Thus, by integrating the students as autonomous and active individuals responsible for their own learning processes, we are including them in the digital world and we hope the students will be better prepared for the challenges imposed by society in their professional lives.

As our discussion and analysis were based on the first blended-learning discipline of the curriculum, in the next section, we describe the discipline and the context of our research

6. Digital Technologies and our research context

Once literacies evolve historically and are learnt by participating in social relationships, we have chosen to develop digital literacy in the Language undergraduate course based on the principles of socio-cultural-historical cognitivism of Vygotsky because we think many of his ideas are pertinent to the pedagogical processes mediated by Internet. So, for example, in his Vygotsky's theory, mediation is of extreme importance. We have artefacts or tools mediating the relationship between man and world, and causing external

^v Disciplines that mix distance and traditional education practices. The adoption of blended disciplines [face-to-face and virtual] is based on interaction and engagement principles to be observed among participants (students, teachers and tutors).

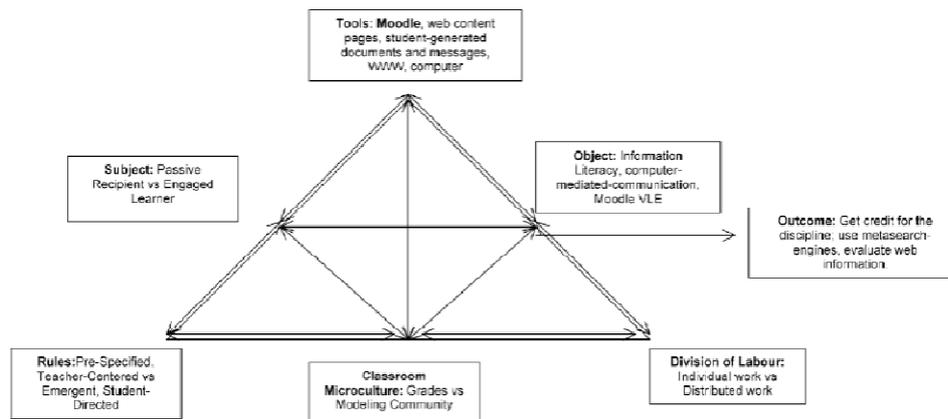
^{vi} The other two reasons were : 1) due to all above-mentioned official documents that demanded the urgent incorporation of ICT in the Teachers' Formation undergraduate courses; 2) one of the basic characteristics of distance education is that teacher and students do not need to be in the same physical place to communicate and that communication may occur by any means, such as, telephone, letters, fax, television, radio, video, email, etc. Due to the advances in ICT, we can now state that communication between teacher-student and student-student can be fully accomplished.

changes by man's intervention in nature. We have signs (psychological tools) mediating man and his intellectual activities.

Language, as we see it, is the utmost mediating sign in the formation of thought and identity. Vygotsky (1978) pointed two fundamental functions: (a) generalizing thought that allows analysis, elaboration, categorization and conceptualization of things and events of the world; (b) social interaction that allows communication among individuals and knowledge transmission and preservation of the history of man across all times.

The activity structure of our research activity system is shown in Diagram 02.

Diagram 02: Activity Structure



Its components are : **subjects** – first-year students (from 2006 and 2007) who attended Digital Technologies [a total of 12 groups], **object** - information literacy, development of computer-mediated-communication and virtual learning environment appropriation, **artefacts/ tools** – Moodle, web-content pages, student-generated documents and messages, WWW, computer and Portuguese Language (used in the instructions and for communication among the participants), **rules** – established by the teacher, the university, by the participants of the activity system, **community** – the members of the digital classes, and **division of labour** – individual work vs distributed work.

It is important to note that in our study, we deal with many tools in our mediation as the tasks are mediated not only by the instructional language used but by the material tools [Moodle's working spaces: profile, diary, assignment, forum and the computer itself].

Digital Technologies is the first blended-learning discipline of the Languages undergraduate course. Since 2006, it has been delivered twice. Its syllabus offers the students the opportunity of learning how to:

- come up with questions to investigate, develop keywords for their search;
- find information using online Web indices, search engines and directories;
- evaluate and analyze the source of information and tools;
- determine authority and expertise;
- interact in a virtual learning environment (discussion forums and digital diaries).

It has also helped reflect on the use of ICT in the students' own learning process. If we consider the digital literacy concept mentioned earlier in this paper^{vii}, Digital Technologies aim at information literacy and at developing computer-mediated-communication.

The course was organized into eighteen weekly themes and topics, totalling 36 hours. The virtual learning environment used for the course was Moodle and its working spaces were:

- **Agenda** – to organize content throughout the 18 weeks of the course.
- **Profile** – to register information provided by the participants of the digital classrooms.
- **Diary** – to register information based on written assignments.
- **Discussion forum** – to register information based on several types of tasks:
 - To solve doubts about the course or about the learning environment
 - To be a place for interaction for general topics
 - To discuss about topics related to the content of the course.
- **Tasks** – to register individual assignments (comprehension of theoretical texts, individual searches).
- **Glossary** – to register sites of common interests for the students (provided by the students and the teacher).

The web site for the discipline included a syllabus, reading assignments, weekly discussion topics and questions, supplementary reading material and related links.

Instructional components

To connect to the course Web site, most of the students used a commercial Internet and e-mail provider besides the Internet facilities available at PUC-SP. Each topic of the course was organized for an asynchronous discussion based on assigned readings and experiential individual searches during a specific week. The teacher had a student-monitor to assist him/her in the management of the course as well as to work with the teacher as a discussion facilitator. Once the discussion of a topic started on a Saturday, any student could contribute to the discussion, ask a question to another student or the teacher or monitor. After a period of time (7 to 10 days), the teacher or the monitor would summarize the topic or add additional notes and comments. Besides the discussions related to the content of the course, a Café forum was available for the students to interact on a variety of issues of their choice. It is worth mentioning that the instructional model used for this online course was highly dependent on teacher-student and student-to-student interactions via discussion forums and diaries.

^{vii} « A social, cultural, historical practice that allows the individual to appropriate the mechanisms and participate effectively and decide, as a citizen of his time, the destiny of the community he belongs and identifies with the tradition and habits.»

7. Analysis and Initial Considerations

Our analysis will focus on the contradictions that emerged in the 18-week long interaction on the Moodle Help Discussion Forums among students, teachers and monitors. All the students and teachers had well-defined existing relationships of power. However, before we start, it is worth mentioning that contradictions show the capacity of an activity to develop because they reveal the spots that are able to expand in the activity system. They can be classified as: a) **primary** – reflect the socio-economic formation characteristic and reveal the internal conflict between the exchange and use values in each corner of the triangle ; b) **secondary** – appear between the corners of the triangle and they happen between the components of the activity system; c) **tertiary** – happen when a higher motive (from another activity system) is introduced into the current activity, and d) **quaternary** – emerge from the interaction between the central activity system and neighbouring activity systems.

Due to the scope of this paper, our focus will be restricted to the secondary contradiction, the most frequent type of contradiction found in the activity. We are going to discuss the most frequent secondary contradiction of our activity system.

Subject – Tool: it is worth mentioning that there were differences in students' access to computer technology. A total of 72% of the students had computer at home against 26% who did not. From all the students, 95% had access to Internet in the following way: (a) 61% accessed from home, (b) 17% from various places such as lan-houses, university labs, library computers, etc, (c) 13% from their workplaces, (d) 4% from friends' houses; 4% did not answer the question and only 1% did not access the Internet. All of the students had never had any experience with a web-based learning using the Internet and other current technological tools. Their use of Internet aimed at fun and entertainment before starting a blended-learning discipline and the change of attitude, that is to use the Internet to study, brought some disturbances to the activity. Most students mentioned that they felt obliged to access the Internet and it took them twice the time they would need if they were in a traditional classroom to accomplish with their duties.

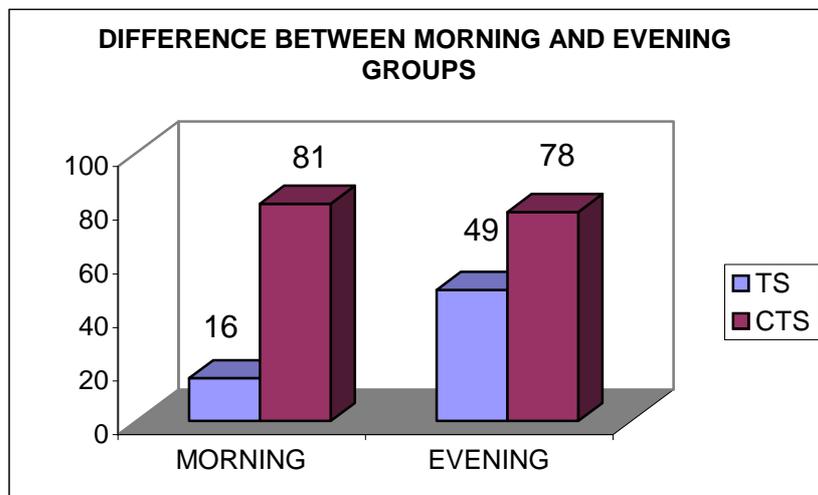
Subject – Tool (Moodle's working spaces): All groups reported having difficulties to find the Diary, some texts and tasks in Moodle. Moodle itself and its working spaces do not belong to what we could call a **tradition of practice**, they still have to be appropriated by the learner and sometimes, we may be referring to appropriation of operations – the most basic level of an activity. For example, the operation of how to upload a photo to the Profile, upload files to the Task, unzip files and to deal with pop-up windows were frequently mentioned. More than tool use, there is a need of understanding the technology of practice to provide a connection with the learner's technology history of use, since computer use is the primary method for participating in distance and blended-learning activities. This finding has helped develop the course, we have inserted a computer literacy workshop prior to their engagement in the discipline, open to the students who feel the need for having basic instructions as to how computer works and about operations they have to know to participate in the discipline.

Subject – Object: In our activity, appropriation of Moodle itself (tool) became object in the beginning of the course. To understand its working spaces was fundamental to guarantee the students' presence and promote social interaction. In the first 3 weeks, messages related to how and what to write in the Diary and in the Profile were frequent. We understand that engaging individuals in digital culture is possible once we insert them in culturally mediated collective practical activities. How to behave in the discussion forums was another issue that emerged in the first 6 weeks as object. How to start topics, how to reply someone's post, how to configure the discussion forum in order not to receive all messages in the email box were the most frequent questions in the Help Discussion Forums. The use of Internet as a tool for searching, selecting and evaluating information was initially seen as tool for most of the students; however, when they faced their first search task, they failed. From the seven specific items of information they had to search, 95% of the students could only find two items. They did not know how to carry out searches in online databases, library resources, use thematic search engines, find specific information (eg. Malta Island population in 2005), use boolean strategies, etc. They did not have criteria for assessing information found in the web as well. Thus, the students started to face searching using the Internet as object from the middle of the course onwards.

Subject – Rules: Because blended-learning was a novelty for all students, some rules had to be commonly agreed. The most difficult one was the delivery of their works according to a prior established schedule, because of that, for several times, the teachers had to set new dates throughout the semester. In contrast, having the opportunity to discuss the assessment criteria in advance was considered a very positive experience among the students and helped to make them more reflexive and critical. They also mentioned the discipline forced them to be more organized.

Subject – Community: The morning groups (5 classes) were mostly formed by younger students who only studied whereas in the evening groups (7 classes), most of the students balanced full-time jobs, families and higher education in a carefully planned day, that is, rushing for subways and buses to meet the next commitment. Consequently, they posted more asking-for-help messages as we can see in Graph 1.

Graph 1



The graph shows the difference between the number of messages posted in the Help Forums. It seems clear that the morning groups (99 students) needed less technical support than the evening ones (165 students), probably due to the fact they came from different socio-economic background. The evening groups represent 62.5% of our student population and the majority comes from public schools where the use of ICT technologies is not consistently implemented. Nevertheless, as far as Content/Task Support, there is a tiny difference in the number of posts. On the overall, their doubts in the CTS Forum involved clarification of the instructions used in the tasks, asking for more time to hand-in the tasks, the assessment criteria used by the teacher, etc.

8. Concluding remarks

Learning activity is a part of many other human activities; nevertheless, in our activity system the goal of learning itself is to make the individual a competent learner in online and blended-learning situations and a citizen capable of using the digital tools. As Kaptelinin (1996: 53) notes, "Tools and culturally developed ways of using tools shape the external activity of individuals and through the process of internalisation influence the nature of mental processes (internal activity). The role of tools is not limited to transmission of operational aspects of human interaction with the world ... tools also shape the goals of the people who use them."

Our activity system demands a certain degree of tool appropriation mainly related to the learning environment. Thus, the learning actions required are partially available to the learner, for example, if the student does not know how to enable the cookies in his browser, he cannot access many of the content pages of the course and this lack of knowledge will contribute to a low performance in the course.

In a virtual learning environment, the learner has to understand the content, the rules, the tasks, the function of the tools and the culturally accepted

communication form to develop his or her identity in the course community. The way the students assimilate the VLE tools may interfere and guide their own mental processes. The students mentioned that a) they felt that their reading and writing skills had improved, b) the course helped them develop study skills, c) their searches had become less time-consuming, d) they were more conscious in selecting the information they needed and e) they had discovered new forms of interaction.

Our participants also learn to trust in the fact that learning also occurs through the experience of interacting with one another towards a common goal. As we consider learning a process of meaning making, we have to consider we learn because we interact with our peers and with the artefacts of our learning environment. And when we interact, both the individual and the collective subject learn in a direct way because they are part of the changes in the system, and learn in an indirect way because the new object is going to cause new actions.

At the end of the course, most of the students understood that blended-learning is as valid as, and sometimes much more relevant than, the one which takes place in traditional classroom. We believe that this research needs to continue to increase the understanding of online and blended-learning systems.

9. References

- ALMEIDA, M. E. B. de. **O computador na escola: contextualizando a formação de professores: praticar a teoria, refletir a prática.** Doctoral Thesis. São Paulo, PUC-SP. 2000
- ESTHET-ALKALAI, Yoram. Digital Literacy: A Conceptual Framework for Survival Skills in the Digital Era. In *Journal of Educational Multimedia and Hypermedia*. Vol. 13: 1, p.93. 2004
- FREIRE, M. Preparação e concretização de um curso de leitura instrumental na Internet. In: COLLINS, H. & FERREIRA, A. (ed. e org.). **Ensino e aprendizagem de línguas na Internet.** Campinas, Mercado de Letras. 2003.
- GERALDINI, A. F. S. **Docência no contexto digital: ações e reflexões.** Doctoral thesis. São Paulo: PUC-SP /LAEL. 2003.
- HOBBS, Renne. "Expanding the concept of literacy". In KUBEY, Robert (org.). *Media literacy in the Information Age*. Nova York: Transaction Press, 1996. Disponível em: <<http://rennehobbs.org/default.htm>>. Acesso em 08.01.07
- LANTOLF, J. P. *Sociocultural theory and second language learning*. Oxford: Oxford University Press. 2000.
- LEMKE, Jay. "Multimedia literacy: transforming meaning and media". In REIKING, D. et al. *Literacy for the 21st century: transformations in a post-typographical world*. Hillsdale, NJ: Earlbaum, 1998. Disponível em: <<http://www.schools.ash.org.au/litweb/page500.html>>. Acesso em 08.01.07.
- LEONTIEV, A. N. **Activity, Consciousness and Personality.** Englewood Cliffs: Prentice – Hall, 1977.

- MARTINS FONTES, M. C. **Aprendizagem de inglês via Internet: descobrindo as potencialidades do meio digital.** Tese de Doutorado. São Paulo, PUC-SP. 2002.
- MCCLURE, Charles R. Network literacy: A role for libraries? In **Information Technology and Libraries**, 13 (2), 118. 1994.
- QUEIRÓZ, Terezinha Zélia P. de. Tecnologias de Groupware para a Educação: Aprendizagem Colaborativa Semipresencial na Universidade. Masters Dissertation. Florianópolis. 2003
- QUEVEDO, A . G. *Atividades, contradições e ciclo expansivo de aprendizagem no engajamento de aluno em um curso online.* PhD Dissertation. PUCSP. São Paulo, 2005.
- QUEVEDO, A. G. *Listening Comprehension Online Course for EFL Public School Teachers.* In **International Journal of Technology, Knowledge and Society**, vol. 2, Issue 6: 45-54. 2006.
- RAMOS, R. de C. & M. M. FREIRE Do presencial para o Virtual: Um desafio para o professor de inglês. Online [Available]: http://www.abed.org/br/antiga/htdocs/paper_visem/rosinda_de_castro.htm. 2001. Accessed 03/09/2004.
- SHETZER, Heidi e WARSCHAUER, Mark. "An electronic literacy approach to network-based language teaching". In WARSCHAUER, Mark e KERN, Richard (org.). *Network based language teaching: concepts and practice.* Cambridge: CPU, 2000. Disponível em < <http://www.elitnet.at/Docs/An%20Electronic%20Literacy%20Approach%20to%20Network-Based%20Language%20Teaching.pdf> > Acesso em 08.01.07.
- THORNE, S. (2003). Artefactss and cultures-of-use in intercultural communication. *Language Learning & Technology*, 7(2), 38-67.
- TYNER, K. *Literacy in a Digital World: Teaching and Learning in the Age of Information.* Mahwah, NJ.: Lawrence Erlbaum Associates. 1998.
- VYGOSTKY, L. S. **Mind in Society: The development of Higher Psychological Processes.** Cambridge, MA: Harvard University Press, 1978. [Available] <http://www.marxists.org/archive/vygotsky/works/mind/> Accessed 26/01/2005.

L'essor d'une gymnastique médicale. Pratiques éducatives et thérapeutiques dans des maisons de santé spécialisées (première moitié du XIX^e siècle)

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Résumé

Le champ médical au XIX^e siècle est traversé par plusieurs processus d'évolution déterminants, la spécialisation mais aussi la professionnalisation. Le projet de cette contribution est de scruter une intrication des discours gymniques médicaux – proposant une éducation rationnelle des corps – et des discours médicaux à visée tant hygiénique que thérapeutique. La constitution d'un corpus empirique de « discours gymniques médicaux » (doctorat en cours) m'a amené à fréquenter de nombreux types de sources révélant l'intensité du questionnement éducatif – particulièrement de l'éducation physique – au sein d'établissements médicaux, orthopédique et gymnastique. Il s'agit ici d'illustrer l'essor de ces établissements, leur institutionnalisation à Paris principalement et les pratiques éducatives proposées en leur sein. L'essor de ces établissements résulte d'un triple processus. D'une part il procède d'une invention de la gymnastique, d'autre part du développement de la spécialité orthopédique, et enfin de l'apparition d'un appel à l'institution éducative dans la première moitié du XIX^e siècle.

Mots-clés : Maisons orthopédiques - Exercices corporels - Genre - Médecine - Education.

1. Introduction

Entre une réflexion sur la « dégénération » et une autre sur la « dégénérescence », nous observons dans l'ordre du discours gymnastique, dans les années 1820 à 1850, le déploiement d'un discours orthopédique techniciste qui investit et cherche à redresser les corps humains^{viii}. Cet investissement scientifique, physiologique aboutit à la formulation de la loi suivante « la fonction fait l'organe », exprimée par Jules Guérin un chirurgien orthopédiste qui transforme par là, l'intelligibilité des mouvements corporels. « Ses conclusions concernant la subordination de l'organe à sa fonction, sont, certes, déduites d'une foule de faits tirés de diverses sciences mais elles sont inspirées, au premier chef, par ses observations spécifiques du praticien sur "le mécanisme de formation fibreuse du muscle par rapport à sa portion charnue" ; et ceci en

^{viii} Vigarello, Georges (2001). *Le corps redressé. Histoire d'un pouvoir pédagogique*. Paris : Armand Colin.

fonction de la nature des mouvements que cet organe effectue habituellement (..). »^{ix}. C'est dans cette configuration, postérieure aux bouleversements révolutionnaires, que nous scrutons l'essor d'une gymnastique médicale, systématisée en fonction de besoins hygiéniques et thérapeutiques. La découverte de la fibre musculaire - et de ses propriétés - au XVIII^e siècle^x, est alors opérationnalisée au sein de pratiques d'exercices corporels, et au sein de dispositifs thérapeutiques plus proprement orthopédiques. Nous scrutons dans les décennies 1820 à 1850, un réel moment orthopédique dans la formulation de pratiques d'exercice corporel. A côté de la construction et du développement d'une gymnastique davantage militaire, notamment sous la tutelle du colonel Francisco Amoros^{xi}, des médecins engagés dans la spécialisation orthopédique vont ainsi apporter de nouvelles modalités à la mise en mouvement des corps.

L'archéologie de cette nouvelle gymnastique médicale, nous amène à dessiner les contours d'un marché du redressement des corps, et en particulier à construire une cartographie du Paris orthopédique. En effet, cette gymnastique médicale se construit pour partie dans des lieux de santé dans le Paris de la première moitié du XIX^e siècle, et ce sont certains de ces lieux dont nous nous attacherons à analyser l'essor. Ces maisons, orthopédique et gymnastique, sont de réels réservoirs à observations pour des médecins qui, comme Jules Guérin, s'attachent à penser le corps dans une perspective de perfectionnement et d'enrichissement des méthodes de la physiologie. Néanmoins, ces lieux ne peuvent pas être considérés exclusivement comme des lieux d'une compréhension des corps, ce sont aussi les espaces d'une éducation et d'une norma(lisa)tion des corps. Généalogiquement liés aux maisons d'éducation^{xii} et aux maisons de santé, ces lieux témoignent de l'intrication de deux ordres du discours, le médical et le pédagogique, depuis la seconde moitié du XVIII^e siècle. Et comme très souvent, la volonté de normalisation corporelle passe prioritairement par le corps féminin. Si, les femmes et les filles ne sont pas les seules personnes concernées par les établissements orthopédique et gymnastique, elles semblent constituer la plus grande part des pensionnaires, et les corps féminins constituent un véritable impensé dans la structuration d'un savoir.

Considérant l'orthopédie - spécialité médicale en voie de structuration^{xiii} - comme un champ de position et de prises de position, nous nous attacherons à décrire

^{ix} Pociello, Christian (1999). *La science en mouvement*. Paris : PUF, p. 58.

^x Vignais, Pierre (2001). *La biologie, des origines à nos jours. Une histoire des idées et des hommes*. Paris : EDP Science, pp. 114-115.

^{xi} Le gymnasiarque et colonel, Francisco Amoros, donne une dimension nationale aux pratiques d'exercice corporel en France, à travers la diffusion de ses exercices dans les casernes militaires dans les années 1820 et 1830. L'appui de l'armée sera décisif pour son œuvre, « laquelle ne peut [toutefois] être tenue pour le produit d'un génie individuel ». Defrance, Jacques (1987). *L'Excellence corporelle*. Rennes : Presses Universitaires de Rennes, p. 58.

^{xii} Grandière, Marcel (1986). « L'éducation en France à la fin du XVIII^e siècle : quelques aspects d'un nouveau cadre éducatif, les « maisons d'éducation », 1760-1790 ». *Revue d'Histoire Moderne et Contemporaine*, XXXIII, 3, p. 440-462.

^{xiii} Pinell, Patrice (2005). « Champ médical et processus de spécialisation ». *Actes de la recherche en sciences sociales*, tome 156-157, n°1-2, p. 4-36.

l'essor des maisons orthopédique et gymnastique comme l'inscription d'un processus en spécialisation de la médecine dans le monde social. A partir des prospectus de ces établissements, des traités orthopédiques produits par certains directeurs et des parutions dans les revues médicales, il s'agira de dépasser à la fois une interprétation internaliste qui ne verrait dans l'essor de ces établissements qu'une conséquence d'un processus en spécialisation d'une partie de la médecine moderne ; et une interprétation externaliste qui ne retiendrait alors que des effets de contexte pour expliquer cet essor (rénovation pédagogique post-révolutionnaire, révolution industrielle, montée de la bourgeoisie). Ainsi avec Michel Foucault, nous voudrions « essayer ici l'analyse d'un type de discours - celui de l'expérience médicale - à une époque où, avant les grandes découvertes du XIX^e siècle, il a modifié moins ses matériaux que sa forme systématique. La *clinique*, c'est à la fois une nouvelle découpe des choses, et le principe de leur articulation dans un langage où nous avons coutume de reconnaître le langage d'une "science positive" »^{xiv}. Ces établissements sont aussi - même modestement - des lieux d'une diffusion sociale de savoirs scientifiques en train de se construire, ils sont les instruments d'une certaine popularisation^{xv} des savoirs médicaux.

Nous étudierons à travers ces établissements l'intrication des discours médicaux et pédagogiques ; au cours d'une première moitié du XIX^e siècle souvent mal connue des spécialistes des pratiques d'exercice corporel en dehors des trajectoires des « grands » pédagogues-gymnasiarques du temps.

Nous verrons successivement des éléments d'une institutionnalisation de l'orthopédie qui se produit dans des établissements de santé et d'éducation, sur un marché du redressement des corps aux contours plus lisibles en ce début du XIX^e siècle. Nous scruterons ensuite plus avant l'éducation transmise au sein de ces mêmes établissements.

2. Les acteurs de l'institutionnalisation des établissements orthopédique et gymnastique

L'institutionnalisation des établissements orthopédique et gymnastique après 1815, est d'abord un phénomène parisien, qui se diffuse lentement à la province comme en atteste les prospectus d'établissements installés à Lyon, Dijon, Rouen, Toulon, Aix-en-Provence ou Montpellier. Phénomène parisien, il s'agit aussi d'un processus dirigé principalement par des médecins diplômés d'un doctorat en médecine^{xvi}, même si le marché du redressement des corps demeure encore largement fréquenté par des acteurs sociaux non-docteurs (pédagogues, directeurs d'établissement, bandagistes ou mécaniciens). Différents groupes sociaux prennent part aux fondations d'établissements, nous nous proposons de les présenter en trois groupes :

^{xiv} Foucault, Michel (1963). *Naissance de la clinique*. Paris : PUF, p. xiv. Souligné par moi.

^{xv} Poirier, Jacques (1983). « La vulgarisation médicale : considérations philosophico-historiques ». *Revue d'éducation médicale*, n°6, pp. 184-190.

^{xvi} Depuis 1803, le doctorat en médecine est la principale voie d'entrée dans la pratique médicale, même si un diplôme secondaire - l'officiat de santé - perdure jusqu'en 1892.

- les médecins-orthopédistes. Ce premier groupe assez réduit^{xvii}, accorde tout son temps (ou presque) à l'orthopédie ; au cours de la première moitié du XIX^e siècle, les médecins de ce groupe vont tendre à accumuler les deux formes de capital propre à tout champ scientifique, à savoir un capital temporel (ou politique), « lié à l'occupation de positions éminentes dans les institutions scientifiques (..) »^{xviii} et un capital spécifique acquis « par les contributions reconnues au progrès de la science, les inventions ou les découvertes (..) »^{xix}. Ils sont tous directeurs d'établissements, parfois co-directeurs ; et ces directions contribuent largement à irriguer leurs savoirs et au développement d'un discours orthopédique. Enfin, ils suivent tous des trajectoires ascendantes au sein du champ médical, au moins jusqu'à la fin des années 1840.

- les « Grands noms » du champ médical forment le second groupe circonscrit, leur action doit davantage être considérée comme légitimante pour l'ensemble de la production discursive et particulièrement pour l'installation et la direction d'établissements par des non-médecins. Ces « grands noms » produisent également des discours généraux sur l'utilité de la gymnastique et de l'éducation du physique en général, qui tendent à s'articuler avec (et à légitimer donc) les entreprises plus concrètes des acteurs des premier et troisième groupes.

- les acteurs secondaires forment le dernier des trois groupes, ceux-ci loin d'être minimisés par l'appellation « secondaires » sont parfois docteurs (Jalade-Lafond, Maisonabe, Tavernier, etc.), parfois gymnasiarques (Amoros, Clia), parfois simple directeur d'établissements (Mme Masson de la Malmaison) ou encore bandagistes, herniaires, fabricants de corsets (Duvour, Hossard, etc.). Ils sont au contact direct avec le terrain, ce sont les petites mains du marché du redressement des corps. S'ils développent et utilisent des méthodologies mécaniques anciennes, ils permettent une certaine diffusion des savoirs médicaux, même si les médecins des deux premiers groupes ne voient pas d'un bon œil cette concurrence.

Les acteurs de ces trois groupes ne s'investissent pas tous de la même manière sur le marché du redressement des corps. Mais ce qui semble les lier entre eux, est leur investissement dans l'essor des maisons orthopédique et gymnastique sur un marché du redressement des corps, et par extension leurs tentatives pour développer une éducation corporelle. Pour autant, ces établissements ne sont pas les seuls lieux de la construction des savoirs orthopédiques ; il existe également - notamment par le fait d'acteurs « secondaires » - des ateliers de corseteurs, d'herniaires-bandagistes, mais aussi l'Hôpital, qui s'impose de plus en plus comme la structure première dans le champ médical^{xx}.

Le docteur Guillaume Jalade-Lafond appuie très clairement son argumentation, dans un traité sur *les principales difformités du corps humain*, sur les résultats des traitements orthopédiques entrepris dans son établissement ; ses buts sont

^{xvii} Il réunit les docteurs Bouvier, Delpech, Pravaz, Guérin et Duval.

^{xviii} Bourdieu, Pierre (1997). *Les usages sociaux de la science*. Paris : INRA Editions, p. 28.

^{xix} Bourdieu, Pierre (1997). *Les usages sociaux..* Ouvr. cité, p. 29.

^{xx} L'orthopédie pénètre la structure hospitalière à la fin des années 1830, alors que la gymnastique y entrera à l'hôpital en 1847.

les suivants : « servir [...] à la guérison de quelques infortunés affectés de difformités, [alors] je me croirai amplement dédommagé de mes longs travaux, et je recevrai la principale récompense que doit désirer le médecin. [...] Un autre but que j'ai en donnant au public cet ouvrage, c'est de lui faire connaître les principaux moyens mis en usage dans le traitement des difformités, et particulièrement ceux que j'emploie dans mon établissement à Chaillot et que je dirige de concert avec mon gendre, M. Duval, docteur en médecine de la Faculté de Paris. »^{xxi}. La seconde partie de son ouvrage présente des observations de trente cas traités - avec le docteur Duval - dans leur établissement, et plusieurs points méritent d'être soulignés. D'une part, et comme souvent, 90% des observations^{xxii} concernent des filles ou des femmes. D'autre part, la durée des traitements est extrêmement longue, puisque plusieurs mois, parfois plus d'une année, semblent nécessaires au redressement complet des corps difformes au sein de l'établissement orthopédique de Chaillot.

Par ailleurs, il faut souligner que la plupart des contributions des directeurs d'établissements orthopédiques sont marquées - dans les années 1820 à 1850 - par leur pratique de terrain, par leur contact avec les corps déviés. Les cours publics, les traités, les enseignements cliniques construisant l'orthopédie sont emplis de descriptions et d'observations réalisées dans les établissements orthopédiques.

3. Des établissements inscrits sur un marché du redressement des corps

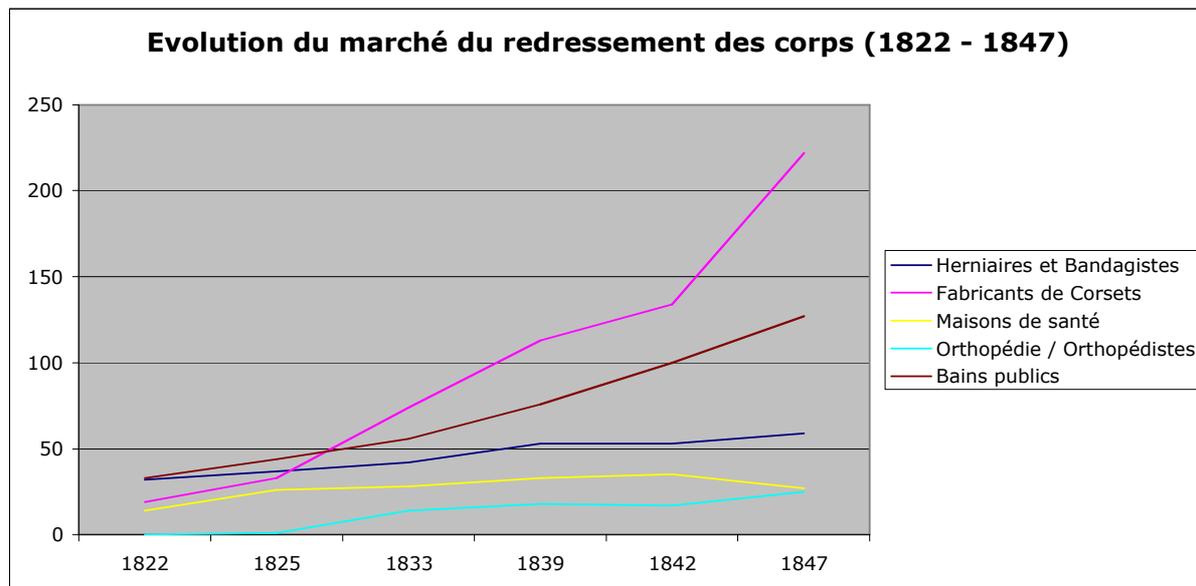
Les recherches des médecins-orthopédistes, des « grands noms » de la médecine et des acteurs secondaires construisent un corpus de savoirs sur les corps. Nous avons vu comment les établissements orthopédique et gymnastique participaient de ce mouvement de compilation de savoirs ; ceux-ci doivent aussi être vus comme des lieux d'une expérimentation thérapeutique, d'une opérationnalisation de ces savoirs. En effet, différentes modalités thérapeutiques distribuent ces acteurs et leurs établissements sur un marché du redressement des corps qui prend de la consistance au cours de la première moitié du XIX^e siècle. Redressement mécanique horizontal ou en décubitus, chirurgie musculaire et tendineuse, ceinture orthopédique ou exercices corporels, il n'existe pas de consensus entre les acteurs, sauf à propos de la portée hygiénique des exercices corporels. Articulées avec le développement d'un hygiénisme à la française, les pratiques orthopédiques ou de redressement voient le nombre de leur contributeurs exploser entre 1822 et 1842^{xxiii}. Et, cette croissance des acteurs du procès orthopédique ne peut pas exclusivement se penser par rapport à une causalité interne ; pour la plupart, ces acteurs sont engagés dans des démarches privées - y compris dans la fondation d'établissements orthopédique et gymnastique - et de ce fait, ils doivent compter sur une clientèle pour pérenniser leurs entreprises. Les stratégies de séduction de la clientèle inscrites dans les

^{xxi} Jalade-Lafond, Guillaume (1827). *Recherches pratiques sur les principales difformités du corps humain et sur les moyens d'y remédier*. Paris : Baillière, p. 2.

^{xxii} Trois observations (sur trente au total) seulement concernent des garçons.

^{xxiii} Comparaison des référencements dans les *Almanach du commerce de Paris* en 1822 et 1842.

prospectus des établissements orthopédique et gymnastique (bon air, gymnase bien aménagé, bonnes mœurs, éducation complète, traitements orthopédiques efficaces) est un élément important pour l'intelligibilité du marché ; mais qui dit marché, dit rencontre d'une offre et d'une demande, or la demande est difficile à circonscrire, car elle demeure faible, localisée, éparse mais au demeurant elle existe, sans cela comment expliquer les chiffres suivants pour la seule ville de Paris :



Plusieurs indicateurs ont été retenus pour illustrer l'évolution d'un marché du redressement des corps, et notamment le nombre de contributeurs directs de ce redressement. On remarque que le nombre de « fabricants de corsets »^{xxiv}, tout comme le nombre de bandagistes et d'herniaires croît dans les années 1820, 1830 et 1840, ce qui ne peut pas aller sans réelle demande sociale. Si les médecins ne représentent pas la majorité des acteurs de ce marché, encore faut-il souligner leur rôle important dans l'institutionnalisation des maisons de santé, et leur prédominance au sein de la rubrique « orthopédie/orthopédistes » durant ces mêmes années. Dans les *Almanachs de commerce* consultés, les notices des établissements orthopédique et gymnastique sont dispersées, et parfois elles reviennent plusieurs fois dans différentes rubriques, ce qui atteste de la complexité du processus en structuration du champ scientifique orthopédique. La rubrique « bains publics » a été retenue davantage pour illustrer la croissance d'une pensée hygiéniste et l'existence d'une demande sociale d'hygiène. Enfin tout ces chiffres issus des *Almanachs de commerce de Paris* doivent être articulés avec deux autres indicateurs, à savoir l'augmentation du nombre d'étudiants en médecine et de médecins dans les années 1820 - 1830^{xxv}, et l'accroissement de la population parisienne qui passe de 714'000 au début de la Restauration (1817) à 1'053'000 à la veille du Second Empire (1846).

^{xxiv} On devrait davantage écrire « fabricantEs de corsets » tant les femmes sont majoritaires dans cette profession.

^{xxv} Voir, Léonard, Jacques (1966). « Les études médicales en France entre 1815 et 1848 ». *Revue d'histoire moderne et contemporaine*, tome 13, n°1, p. 87-94.

Les établissements orthopédique et gymnastique procèdent bien évidemment de toutes ces évolutions, et proposent des thérapeutiques issues des quatre familles que compte la médecine et particulièrement l'orthopédie : mécanique - chirurgicale - chimique - gymnastique. Lieux d'expérimentation thérapeutique, ils sont aussi et surtout les terrains d'une innovation orthopédique galopante dans les années 1830 particulièrement. Intégrés dans un processus biopolitique, les établissements participent de cette nouvelle gouvernementalité qui intègre la « population » dans ses préoccupations : « non pas [pour] obtenir l'obéissance des sujets par rapport à la volonté du souverain, mais [pour] avoir prise sur des choses apparemment éloignées de la population dont on sait, par le calcul, l'analyse et la réflexion, qu'effectivement elles peuvent agir sur la population. »^{xxvi}. Les établissements et les acteurs afférents proposent un discours techniciste d'investigation et de redressement des corps, à partir d'une concentration sur les affections de la colonne vertébrale ; malgré tout ils n'en restent pas moins des vecteurs d'une norma(lisa)tion des corps, dans des lieux d'une (ré)éducation des corps. Ces établissements sont de réels laboratoires d'expérimentations médicales ; et nous allons voir que cette expérimentation intègre des préoccupations pédagogiques d'ordre moral, intellectuel et surtout physique.

La participation des femmes à l'essor des établissements orthopédiques demeure relativement faible, en dehors des tentatives de Madame Masson de la Malmaison^{xxvii}. Pourtant largement présentes parmi les pensionnaires des établissements, les femmes et les filles en sont les principaux objets de savoirs. Les pratiques et stratégies éducatives qui s'inscrivent en elles participent d'une éducation bourgeoise et d'un appel à l'institution éducative - publique et privée -, lequel est largement orchestré par l'affirmation d'une moyenne bourgeoisie dans les premières décennies du XIX^e siècle.

4. Les pratiques éducatives

Les discours produit au sein des établissements n'est pas exclusivement un discours techniciste, nous y scrutons des traces du processus très polymorphe de (ré)articulation des relations encore corps et âme, entre le physique et le moral de l'homme, en continuelle réactualisation depuis le milieu du XVIII^e siècle. Et, la croyance dans les rapports étroits entre physique et moral se généralise au début du XIX^e siècle, au moins parmi les acteurs de la médecine et de l'éducation, même si les réalisations en ce sens demeurent lacunaires.

4.1. D'une éducation intellectuelle et morale..

Les pensionnaires des établissements orthopédiques ont la possibilité pendant la durée de leur traitement, de poursuivre leur éducation intellectuelle et morale. Les traitements sont souvent longs - plusieurs mois, comme nous l'avons vu

^{xxvi} Foucault, Michel (2004). *Sécurité, territoire, population. Cours au Collège de France. 1977-78*. Paris : Gallimard-Seuil, p. 74.

^{xxvii} Madame Masson de la Malmaison dirigera à partir de 1833, les traitements orthopédiques et gymnastiques au sein de la maison d'éducation de la Légion d'honneur.

précédemment - aussi, il est bon que les pensionnaires puissent poursuivre leurs études.

Ceci est aussi un témoignage du profil du public accueilli dans l'enceinte des maisons, et cela inscrit ces établissements dans une généalogie des maisons d'éducation bourgeoises. Lorsque l'on sait qu'il faut déboursier autour de 2000 francs pour une année de soins orthopédiques dans l'établissement du docteur Maisonabe^{xxviii}, seules les moyenne et haute bourgeoisies peuvent avoir accès à de tels établissements, à une époque un ouvrier gagne encore moins de 500 francs par année. Moyennant finance, les établissements proposent donc des cures complètes, dans lesquelles il faut aussi souligner importance de l'intendance, de la situation géographique, à côté de la continuité d'une éducation bourgeoise, qui trouve là des lieux d'expression à une époque où elle demeure encore majoritairement « cachée » dans les familles, et notamment pour les filles. Pour les directeurs, la bonne situation géographique constitue un élément déterminant - complémentaire des traitements orthopédiques et de l'éducation - pour une (ré)éducation réussie, ainsi en va-t-il pour le docteur Tavernier : son « établissement (..) possède un vaste jardin laissé tout entier à la disposition des pensionnaires ; il ne laisse pas plus à désirer sous le rapport de la salubrité et de l'agrément, que sous celui non moins important du régime alimentaire, de l'ordre et de la tenue, auxquels président immédiatement M. et Madame Tavernier. »^{xxix}

Très souvent - comme dans d'autres maisons d'éducation -, la femme du directeur assiste son mari médecin ou orthopédiste dans l'entretien et dans les tâches annexes, et parfois même s'occupe-t-elle personnellement de l'éducation donnée aux petites et aux petits pensionnaires. Toujours dans l'établissement du docteur Tavernier, note-t-on que : « l'éducation [...] est continuée, et peut être aussi complète que possible, le traitement n'y apportant jamais d'obstacle. Une dame institutrice et des professeurs attachés à la maison y enseignent soit en commun, soit en particulier, les connaissances usuelles et les arts d'agrément. Une attention toute particulière et constante est apportée à l'entretien des jeunes personnes dans les principes religieux où elles ont été élevées et dans l'observation exacte et régulière de leurs devoirs de piété. Des instructions spéciales sont données régulièrement par un ecclésiastique. »^{xxx}. Les notices de l'établissement du docteur Tavernier dans les *Almanachs de commerce de Paris* précise aussi que « l'éducation est continuée avec soin », or pour apparaître à cet endroit et à ce moment, cela ne peut être que quelque chose d'important.

La notice relative à l'établissement du docteur Bouvier dans l'*Almanach-Bottin de commerce de Paris* de 1839 précise aussi cet aspect : « Bouvier (Dr^{xxx}), institut orthopédique de Chaillot qui réunit tous les moyens de traitements de difformités de la taille et des membres, l'éducation est continuée suivant la méthode de Levi, les enfants du sexe masculin sont reçus dans une maison séparée, rue

^{xxviii} Maisonabe, Charles-Amédée (1831). *Etablissement destiné au traitement des difformités et des paralysies*. Paris : l'auteur.

^{xxix} Tavernier (1841). *Notice sur le traitement des difformités de la taille au moyen de la ceinture à inclinaison*. Paris : Germer-Baillière, p. 31.

^{xxx} Tavernier, Alphonse (1841). *Notice sur le traitement..*, Ouvr. cité, p. 31.

^{xxxi} La « * » correspond au titre de « chevalier de l'ordre de la Légion d'Honneur ».

Saint-Pierre à Chaillot, 14. ». On voit donc toute l'importance de la pérennité de l'éducation ; ainsi que celle du caractère sexué des pensionnaires, les garçons faisant figure de pensionnaires « spéciaux ».

4.2. .. à une éducation physique raisonnée

« La gymnastique est la science des exercices auxquels on soumet le corps pour en régler les mouvements, pour en augmenter les forces, l'agilité et la stabilité. Ces exercices sont propres à corriger les difformités, à prévenir un grand nombre de maladies ou à en arrêter les progrès, c'est à dire à améliorer la santé et prolonger la vie »^{xxxii}.

C'est ainsi que Joseph Pinette - directeur du Gymnase de l'Observatoire - débute son traité sur la *gymnastique moderne*, paru en 1842. Il faut souligner toute la diversité des modalités pratiques de la gymnastique envisagées par ce médecin. L'usage de la gymnastique est ici plus large que simplement éducatif et hygiénique, il devient thérapeutique, par le truchement d'une utilisation menée au sein de ces lieux bien particuliers que sont les établissements orthopédique et gymnastique. Et il s'agit clairement d'un dispositif d'amélioration de la santé et de prolongation de la vie.

Les établissements offrent souvent la possibilité de continuer l'éducation intellectuelle et morale comme nous venons de le voir, mais ils proposent aussi tous en leur sein un gymnase, et parfois deux gymnases, pour l'éducation physique : ainsi dans l'établissement du docteur Bouvier : « Le gymnase principal est établi en plein air, dans un quinconce de tilleuls élevés, qui le protègent de leur ombrage contre les ardeurs de l'été. Les exercices se pratiquent, pendant la mauvaise saison, dans des salles de gymnastique chauffées l'hiver et présentant les mêmes constructions que le gymnase extérieur. »^{xxxiii} Les pratiques d'exercice corporel ne sont jamais pratiquées en tant que méthodologie thérapeutique prioritaire ou première, néanmoins ils possèdent une certaine aura hygiénique et curative et semblent bien ancrés dans les cartographies mentales des médecins et des orthopédistes dirigeant les établissements. Ces pratiques secondent les démarches chirurgicales ou les redressements opérés sur des lits mécaniques, en contribuant tout particulièrement à pérenniser, à consolider les résultats obtenus par ailleurs.

Il faut souligner que ces établissements comptent parmi les rares lieux où l'on donne un enseignement d'éducation corporelle dans la première moitié du XIX^e siècle, et tout particulièrement une éducation corporelle féminine. Si l'ensemble des établissements ne propose pas de thérapies homogènes, on distingue entre les différents médecins et directeurs une sorte de *modus vivendi* - au moins hygiénique - sur l'utilisation des exercices corporels, et cela à destination

^{xxxii} Pinette, Joseph (1842). *Précis de la gymnastique moderne, et application de cet art aux déviations de la taille, au développement des forces, etc. [..]*. Paris : Librairie militaire Gaultier Laguionne, p. 1.

^{xxxiii} Bouvier, Sauveur Henri Victor (1840). *Institut orthopédique de Chaillot, pour le traitement des difformités de la taille et des membres, dirigé par le docteur Bouvier*. Paris : Pillet, p. 4.

des deux sexes. Par exemple, le prospectus de l'établissement de M. Duval précise que son établissement est « sans contredit le mieux situé de Paris. Des bains et des douches de toutes espèces, des exercices gymnastiques variés et appropriés aux différentes difformités, la promenade dans un magnifique parc, un jardin, un air pur, une nourriture saine, contribuent à affermir ce que la médecine a opéré »^{xxxiv} ; de même à l'institut orthopédique de Paris, les « exercices gymnastiques (..) sont regardés (..) comme les moyens les plus puissants de guérison, secondant les appareils orthopédiques, ils en consolident les résultats, en donnant au système osseux et musculaire une densité et une force convenables. »^{xxxv}.

Soulignons encore que les exercices physiques ne sont jamais donnés en commun aux filles et aux garçons, ceci pour deux raisons, d'une part pour ne pas engendrer de promiscuité, et d'autre part par souci d'adaptation des traitements à chacun des sexes. Charles Londe, dans sa *Gymnastique médicale*^{xxxvi}, - dont les préceptes vont faire autorité longtemps, notamment auprès d'orthopédistes comme Bouvier - propose déjà des éléments de systématisation des pratiques d'exercice corporel, notamment en fonction des différents tempéraments (sanguin, encéphalique, encéphalico-bilieux, avec exaltation des qualités affectives (mélancolique)), et du sexe.

^{xxxiv} Duval, Vincent (post-1839 et pré-1850). *Institut orthopédique dirigé par le docteur Vincent Duval*. Paris : l'auteur, p. 3.

^{xxxv} Réveillé Parisse (1835). « Feuilleton – Visite à l'institut orthopédique de Paris ». *Gazette médicale de Paris*, p. 401 et suiv.

^{xxxvi} Londe Charles (1820). *Gymnastique médicale ou l'exercice appliqué aux organes de l'homme d'après les lois de la physiologie, de l'hygiène et de la thérapeutique*. Paris : Croullebois.

5. Conclusion

L'essor des établissements orthopédiques et gymnastiques - et l'essor conjoint des pratiques d'exercice corporel - résulte d'un triple processus. D'une part il procède de l'invention de la gymnastique^{xxxvii}, d'autre part du développement d'un champ médical et de la spécialité orthopédique, et enfin de l'apparition d'un appel à l'institution éducative dans la première moitié du XIX^e siècle.

Miroir de la maison bourgeoise, les établissements orthopédiques offrent une éducation très sensiblement hétéronome des valeurs et des normes sociales de la bourgeoisie. Les programmes d'éducation manifestent le souci de la bonne conformation des filles ; une certaine répulsion pour l'oisiveté par la sensibilité à l'éducation du physique ; et enfin le souci de développer - même encore modestement - l'éducation intellectuelle et morale des femmes qui deviennent les dépositaires privilégiés de l'éducation des enfants et de la transmission de la culture et de la morale chrétienne.

A travers l'essor d'une gymnastique médicale, et au-delà de la gymnastique - en tant que système rationnel d'exercices physiques - c'est le mouvement musculaire qui pénètre clairement dans les cartographies mentales médicales au sein même des établissements orthopédique et gymnastique ; de la même manière que les médecins peuvent, là, pénétrer l'ordre du discours gymnastique, et asseoir leur pouvoir dans l'espace social. Ce pouvoir est en quelque sorte une première concrétisation sociale du positivisme - opérationnalisé dans des pratiques d'exercice corporel - ou du développement de sciences comme l'anthropologie^{xxxviii}.

6. Références

- Blanckaert, Claude (1995). « Fondements disciplinaires de l'anthropologie française au 19^{ème} siècle. Perspectives historiographiques ». *Politix*, n°29, pp. 31-54.
- Bourdieu, Pierre (1997). *Les usages sociaux de la science*. Paris : INRA Editions.
- Defrance, Jacques (1987). *L'Excellence corporelle*. Rennes : Presses Universitaires de Rennes.
- Foucault, Michel (1963). *Naissance de la clinique*. Paris : PUF.
- Foucault, Michel (2004). *Sécurité, territoire, population. Cours au Collège de France. 1977-78*. Paris : Gallimard-Seuil.
- Grandière, Marcel (1986). « L'éducation en France à la fin du XVIII^e siècle : quelques aspects d'un nouveau cadre éducatif, les « maisons d'éducation », 1760-1790 ». *Revue d'Histoire Moderne et Contemporaine*, XXXIII, 3, p. 440-462.

^{xxxvii} Vigarello, Georges (2004). « Le corps et ses représentations dans l'invention de la gymnastique ». Dans Pociello, Christian (sous la direction). *Entre le social et le vital. L'éducation physique et sportive sous tension (XVIII^{ème}-XX^{ème} siècle)*, Grenoble, PUG, p. 27-41.

^{xxxviii} Blanckaert, Claude (1995). « Fondements disciplinaires de l'anthropologie française au 19^{ème} siècle. Perspectives historiographiques ». *Politix*, n°29, pp. 31-54.

- Léonard, Jacques (1966). « Les études médicales en France entre 1815 et 1848 ». *Revue d'histoire moderne et contemporaine*, tome 13, n°1, p. 87-94.
- Pinell, Patrice (2005). « Champ médical et processus de spécialisation ». *Actes de la recherche en sciences sociales*, tome 156-157, n°1-2, p. 4-36.
- Pociello, Christian (1999). *La science en mouvement*. Paris : PUF.
- Poirier, Jacques (1983). « La vulgarisation médicale : considérations philosophico-historiques ». *Revue d'éducation médicale*, n°6, pp. 184-190.
- Vigarello, Georges (2001). *Le corps redressé. Histoire d'un pouvoir pédagogique*. Paris : Armand Colin.
- Vigarello, Georges (2004). « Le corps et ses représentations dans l'invention de la gymnastique ». Dans Pociello, Christian (sous la direction). *Entre le social et le vital. L'éducation physique et sportive sous tension (XVIII^e -XX^e siècle)*, Grenoble, PUG, p. 27-41.
- Vignais, Pierre (2001). *La biologie, des origines à nos jours. Une histoire des idées et des hommes*. Paris : EDP Science.

A Simplified CASE Tool for Educational Software

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Abstract

This paper proposes a simplified CASE Tool for development educational software. With this system we are able to develop easily educational software, which will permit to help the teacher in the teaching/learning process.

This tool is a CASE (Computer Aided Software Engineering) and supports X-TEC (Techno-Didactical Extension for Instruction/Learning Based on the Computer) model. The architecture is composed for two main parts: a graphic editor and a code generation editor. The graphic editor makes possible the edition of the diagrams of model X-TEC, which are stored in a data repository. The code generation editor will be responsible for the automatic creation of educative software for the web environment. The software is created based in the specifications of the domain of the problem, internal specifications of the X-TEC model and in a set of templates.

I believe that use of this tool will to produce didactic material in education systems aided by computer of larger quality.

Keywords: X-TEC model - Instructional Strategies - Software Architecture - Data Repository - Code Generation - Windev Software

1. Introduction

The dramatic evolution, during the last decade, on electronics, computer systems and information technologies, together with the worldwide accessibility to the internet opened a tremendous opportunities to implement some projects. Particularly, on the educational area, the possibility to easily reach an extremely large number of web users with significantly low costs in the long run, has been the motivation factor for the increasing number of web environments being developed for learning purposes, e.g., WebCT[1], Blackboard[2]. However these environments aren't supported with a method, which provides a special notation (graphic and literal) and a set of criteria of quality of software.

So, to solve this problem, I have been conducting a project to construct a system to help the designer in the different phases of the lifecycle of the software, as well as, in its management and documentation.

This study aims to offer a tool that allows the construction of educational software easily and efficiently to:

- ✓ Meant to support the educator in the structuring of E-learning content in the creation of flexible ways for navigating it on the Internet and in the monitoring of course execution. The content thus created might be used

as auxiliary material to support teaching of traditional classroom courses or for delivering fully distance learning courses;

- ✓ Brings, as an answer to some problems faced while developing and using interactive learning environments, which are related to numerous viewpoints: cooperation, collaboration, pedagogical approaches, and software engineering. Thus, an architecture aiming building an integrated, customized and multi-paradigmatic context.
- ✓ Offer a dynamic tool where we can have many strategies that are possible to select appropriate learning styles.

This paper first presents the tool architecture and his components; the system implementation is described in the next section; finally, some conclusions are draws;

2. Architecture

2.1. Overview

The tool works with models of system. The corresponding set of models to an educational system is called project. Each project in a distinct directory, or be, is not possible store information of several projects in the same directory. All the information about the project is storied in systems of file or databases.

The system is supported by a three tiered architecture [8]: User Interface, Rules and Persistence, as shown in Fig.1.

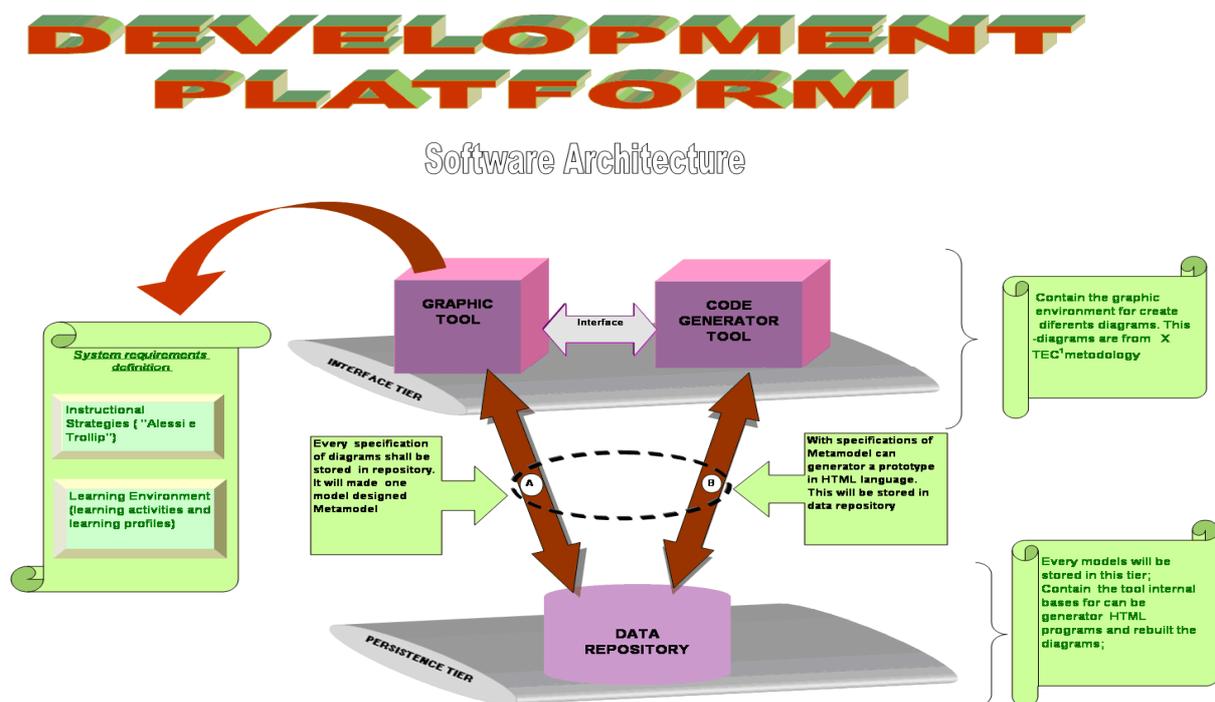


Fig.1. the tool architecture

In user interface (1st tier) we find the graphic tools and of generation of code. The graphical tool contains some graphical publishers who support the different diagrams that compose methodology X-TEC (Techno-Didactical extension for Instruction/Learning Based on the Computer) [3].

The diagrams created depend on the definition of the requirements of the system: the instruction strategy and the environment of learning, Bibarra [4].

All the specifications of the diagrams will be stored in a repository of data in a metamodel.

The tool of code generation automation the process all, using the information stored in the repository to generate the modules of code of prototype.

The Rules (2nd tier) has the Instruction/Learning Management Systems (ILMS); that supply the service to the designers, is acceding the available data in the persistence layer. Finally, the persistence (3rd tier) contains the repository of data that is the base of system of development; all the information that is defined by intermediary of the different phases of the development cycle meet stored here.

The different tiers are related, because:

- ✓ In repository all the contents, rules and interface specifications being stored ;
- ✓ The graphical tool opens appropriate forms, when specific information cannot be included us diagrams. With this forms we can include more information.
- ✓ The tool of code generation uses the information stored in the repository of data to generate the prototype.
- ✓ We can to provide increased performance, flexibility, maintainability, reusability and scalability while hiding the complexity of distributed processing from the end user.

2.2. Environment

2.2.1. Graphics Editor

With graphic editor we can create the diagrams which have a constructors and stereotype that suggest the X-TEC model. These diagrams are: use case diagram, action table, functional diagram, interaction diagram.

Before the graphic edition the EduCase have an interface where the designer answers a set of questions about problem domain specification.

The specifications are:

- ✓ Instructional strategies defined by Alessi and Trollip [5]. The instructional strategies are tutorials, drills, test, simulation, and educational games.
- ✓ Learning Environment: learning activities and learning profiles, Bibarra [2].

On the basis of these specifications will be presented graphic palettes, which contain the constructors of the methodology X-TEC, related with the previous points; These diagrams will be stored in the call repository of data diagrams will be storage in persistence tier , in called data repository. That is found in the 3rd tier layer: the persistence.

2.2.2. Code Generation Editor

Here we can generate educative software. It's based in the internal specifications that had been stored in persistence tier to the long one of the different phases of the lifecycle of development and the association of templates.

The code generation process is shown in fig. 2.

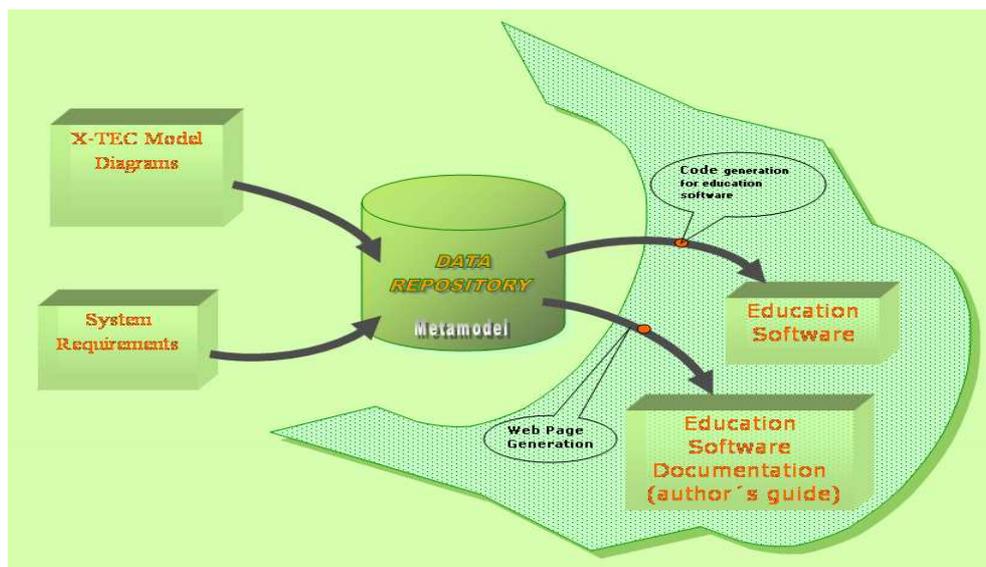


Fig.2 code generation process

The code generation, is based on a model for the software process. A new specification can be obtained through the transformation rules application that mapped the description for the code in the language HTML or specifications in SQL for creation of the system database.

During the implementation process it is presented a set of forms and templates that they allow the personalization of the product to generate.

The developers can only create the prototype education software or the author's guide. Therefore these two forms to generate products are independent.

If the developer wants to create the author's guide, alone it must to specify the system requirements and draw the diagrams of the model X-TEC. For otherwise

go directly to the RAD tool that contains all the forms and templates described above.

The figure 4 shows the process of building the author's guide.

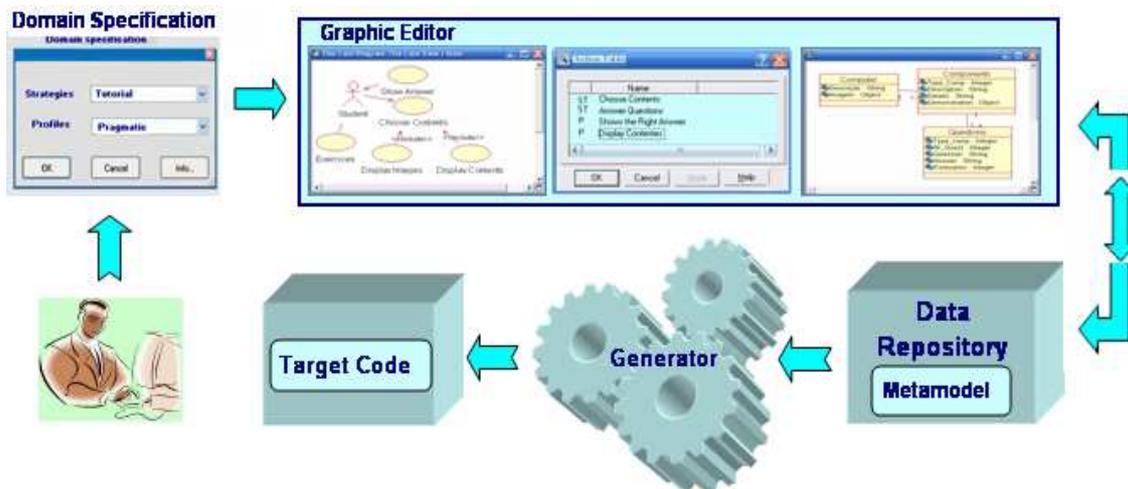


Fig.4 Process for create the author's guide

Figure 4 illustrates the four modules that are required for the product:

- ✓ **Domain specification**, allows the developer writes the type of education software and the desired learning profile of the student, for example a tutorial and pragmatic learning profile.
- ✓ **Graphic editor** allows the design the diagrams of the X-Tec Model. They are displayed according to the type of educational software chosen.
- ✓ **Data Repository**, once described the specifications of the domain and the diagrams of the X-TEC model, these are stored in a database. There we have a Metamodel [9].
- ✓ **Generator** allows the transformation of the conceptual schema stored in the data repository into a logical schema.
- ✓ **Target Code** is a program described in HTML language that can be accessed by a browser

A code generation editor is easy to use, and we can:

- ✓ Create a Education Software;
- ✓ Publisher our work by extracting information from our model and creating the necessary HTML and related files needed to view it in a browser. When you publish a model, you're prompted for the name of a root file. This is the file users open with the browser to display the model. If you

open any of the other HTML files, only a limited view of the model is available.

2.2.3. Data Repository

The repository contains the project of data created by designer. A project possesses two types of data, the graphical data (drawing) and the semantic data. The semantic data are stored in the repository in a metamodel and the graphical data in a file.

The designer is able to in any height recuperate the belonging diagrams to the system and reused in others systems.

The EduCase repository will be supported by a SGBD relational, and presents a complex model of data to support of flexible form the storage and management of a variety of elements, nominated: (1) the constituent elements of metamodel; e (2) the elements of support to the proper process of generation.

3. System Implementation

The EduCase environment prototype will be developed in Windev [6], which provides a reliable way to implement the required Web applications. The core of the project will be developed in W-Language and the supporting database management system will be used is SQL server.

4. Conclusion

The presented work proposes a new system for support to the development of educative software. The main difference between the existing tools in the market is the graphic tool that possessed the builders and the stereotypes of the X-TEC model. So, the designer will be able to more easily communicate with the team.

The system is going to give support to the construction of the author guide and conception of prototypes that will be able to involve from successive alterations for a final product. That will serve of support to the process education learning of any tutor with or without great knowledge of computer science.

This is an interactive system that, being possible of be utilized in diverse contexts. He makes possible that teachers can create environments that support the activities of education and the situations of learning planned, through the use of the resources of contained work in the environment.

Through interfaces the system makes possible to the teachers' access the tools of work that support specific activities of the educational trial (educational process), such as: the construction of educational software and the educational planning.

The system is presently in the phase of conception and analysis and as future work intends to develop a prototype

5. References

- [1] Burgess, L. A. "WebCT as an E-Learning Tool: A Study of Technology Students' Perceptions", *Journal of Technology Education*, 15(1), 2003.
- [2] NII Penny, H. "The blackboard model of problem solving", 1995
- [3] Escudeiro, P., Bibarra, J., "X-TEC: Techno-Didactical Extension for Instruction/Learning Based on the Computer", Actas da Conferência SITE 2006, Orlando, FL, E.U.A., 20-24 de Março de 2006 Bibarra.
- [4] Bibarra, "Contempt's Construction Support", Bidarra 2005.
- [5] Alessi and Trollip, "Computer Bases Instruction: Methods and Development", Prentice-Hall, Inc., Englewood Cliffs, New Jersey, USA. 1985.
- [6] Windev, <http://www.Pcsoft.com>
- [7] Windev, <http://en.wikipedia.org/wiki/windev>
- [8] J. Edwards, "3-Tier Client/Server at work", Wiley, 2002.
- [9] John Poole, Dan Chang, Douglas Tolbert and David Mellor, "Common Warehouse Metamodel", OMG Press.

Ethical Challenges and Distance Education

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Abstract

Ethical challenges arising from the use of pedagogies and techniques in distance education are linked to globalisation and market-driven approaches to higher education. The notion that harm or good to a society can result from the use of particular pedagogies or tools prompts a reflection on the unintended consequences of distance education for society. Some alternatives involving ethical choices open to distance education practitioners remain invisible, and the contribution of null curriculum and foregrounded objects of attention are explored as reasons for this situation. A solution is proposed that involves the use of an ethical paradigm. This paradigm incorporates recognition of inbuilt biases in the tools and pedagogies used in Distance Education, the role of Instructors in recognising students' emotional states, and a research approach that utilizes a disinterested or detached perspective. The paper concludes that distance education tools and techniques contribute to the shaping of society.

Keywords: Globalization - ethics - education - pedagogies - paradigms

1. Introduction

An important but often overlooked ethical question is the way that distance education contributes to good or harm in situations other than the immediate educational context for which it is designed. This paper argues that the use of globalisation and market-driven approaches to higher education can potentially contribute to a reduced emphasis on community and society. Some of the reasons why more ethical choices remain invisible are explored and an ethical paradigm is proposed as an initial step in addressing this problem

2. Ethics, globalisation and market-driven approaches to higher education

The underlying conceptualization of the purposes of higher education can be seen in the various ways in which distance education is implemented. These ways can be compared to the threads from which cloth is woven; in some institutions one variety of thread will predominate, and at other institutions the characteristics of the cloth may be quite different. The two principal strands that are combined in varying amounts may be referred to as the liberal-humanist strand and the market-driven globalised strands respectively. There is an uneasy tension between the ideas represented by these strands as there is a ceaseless contestation for predominance. It is not, however, appropriate to refer to these conceptualizations as competing paradigms, as they are not always mutually exclusive.

The liberal humanist tradition derives from writers such as Newman, who argued for the ideal of the university as cultivation of the intellect for its own sake (Hamilton 2001). The present-day interpretation of this approach to higher education includes the “development of the whole person, the cultivation of character and citizenship, and the achievement in learning and living in balance and harmony” (Axelrod et. al 2001, p. 50). For Hinchcliff (2006), changes in recent years have undermined this understanding of the university and should be resisted:

The post-industrial university must recommit itself to all of the altruistic and venerable purposes of scholarship so that the campus can once again be a place –real and/or virtual- where knowledge and wisdom are pursued; a place where innovative ideas are tested freely among scholars – both students and professors- and where educated and responsible activists openly prepare themselves to change the world. (p. 83).

The tradition of market-driven globalization in higher education and in distance education is a more recent phenomenon. Increasingly, higher education and distance education is characterised by globalized market forces. This is an environment in which, as Day and Schuler (2004) argue, the driving forces of competition and increased profit in a globalised market place has resulted in a perception of people primarily as consumers of goods and services rather than citizens who might want to be consulted about issues of civil society and community. Such an approach fosters the development of an instrumental approach to education that valorizes education as a commodity. Henry et. al. (1999) maintain that this transformation is at the expense of broader purposes of education:

The most obvious impact of the new global policy environment on the purposes of education is the dominance of instrumentalism to the detriment of other and broader purposes of education. Education in both industrialized and ‘developing’ countries is increasingly focused towards economic and vocational goals with the aim of producing skilled workers to assist countries to compete in the globalized economy. Education is increasingly being commodified and transformed into a service. (p. 91).

3. Globalisation and ethical challenges

Globalisation has been criticized for its potential to undermine basic human needs (Yang 2003), for reducing humans to consumers (Milojevik 2005), and for representing “the hegemony of capital over all other domains of life” (Kellner, 200, p. 307). These observations, together with the preceding discussion related to liberal-humanist and market-driven approaches to higher education suggest that the implementation of distance education presents an ethical dilemma for educators, because some approaches are more likely to contribute to benefits or harm to society than others. This dilemma can be understood in terms of a moral obligation for distance educators. DiBiase (2000) has argued that “...professional educators have a moral obligation to students, and to society, to provide the highest quality education possible by means of the most effective means

available.” (p. 132). Distance educators may find, in practice, that their ethical choices are circumscribed by institutional policies or a lack of knowledge about the societal impact of available alternatives. Nevertheless, both the tools used by distance educators and the pedagogies of distance education are likely to embody ethical choices.

4. The Aims of Distance Education and the Ethical Dimension.

When reflecting on the nature of Distance Education, it is useful to consider whether the aims of those involved in the field are, or should be, different from those involved in conventional modes of education. Garrison (1989) maintains that it should not be regarded as unique:

Distance education is a species of education characterised by one structural characteristic – the noncontiguity of teacher and student. There is nothing uniquely associated with distance education in terms of its aims, conduct, students or activities that need affect what we regard as education. (p. 8).

It is interesting, then, that writers who are involved in conventional education are more likely than their Distance Education counterparts to emphasise the qualities that students should exhibit. These qualities include honesty, respect for self and others, responsibility and citizenship (Wagner, 1993), and civic behaviours (Cuban 2001). Shale (1990) has suggested that Distance Education should be understood as education at a distance, an interpretation that focuses attention on the concept of education rather than distance. Nevertheless, the combination of the concepts of distance and education appears to have resulted in a narrowing of conceptualizations of education. Distance education has become increasingly instrumental, and this has resulted in a preoccupation with issues such as comparisons between face-to-face and online learning (Russell 1999) and discussions about how greater interaction might be achieved, or how the available tools can be best utilised. Wider issues such as theoretical interpretations of Distance Education are conceived within the constraints of present and past practices, while the role of distance educators in ethical and moral issues, and the place of Distance Education in society, are rarely discussed.

Theories are nevertheless important in understanding Distance Education and its interrelationship with society. For Gunawardena and McIsaac (2004), theories in Distance Education need to take into account changes in technology:

One of the critical challenges the field of distance education has faced is the need for the continuous development of theory necessitated by the rapid changes brought about by the development of new communications technologies used as delivery media. (p. 359).

Despite such observations, the technology in Distance Education has often driven practice, and theory has played little part in it (Ascough 2002). One explanation for this situation is that the world-view of many Distance Educators has been an instrumental one in which means and ends have predominated. This approach, however, seems increasingly inappropriate, and it seems timely for the consideration of a new paradigm. Such a paradigm for Distance Education should include a moral or ethical dimension to reflect what happens in the “real world”. While Distance Educators have a defined task (that of educating students at a distance), there is also a concurrent obligation to ensure that the direct or indirect benefits arising from this process outweigh any harm. An appropriate

paradigm for Distance Education should therefore incorporate such moral obligations. Presumably, this paradigm would also include the responsibility for not knowingly implementing any pedagogy or tool that may result in harm.

5. The Three Stages of an Ethical Paradigm in Distance Education

The paradigm referred to in the preceding section can be better understood by considering an Ethical Paradigm. This theory, which is represented by Figure 1, has three components. These components are the Instrumental, Ethical Consideration Level and Reflection stages, respectively. These stages are outlined briefly here and detailed later in this paper.

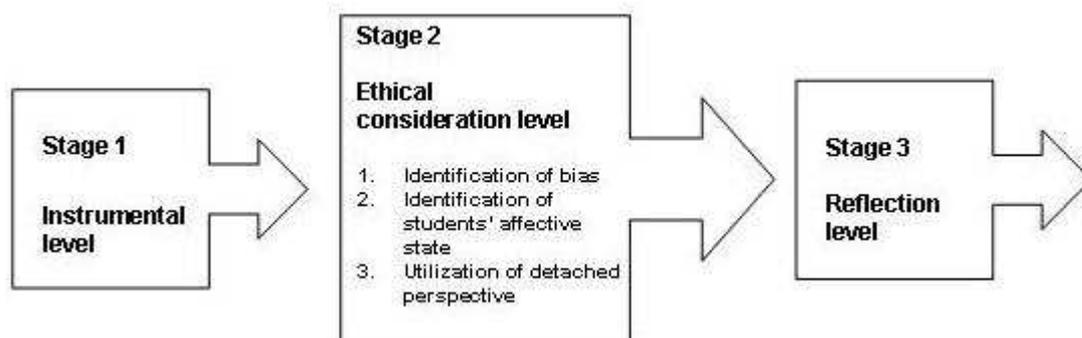


Figure 1: The Three Stages of an Ethical Paradigm in Distance Education

5.1. Stage One: The Instrumental Level

In this level, the Distance Educator chooses the pedagogy and tools required to teach the students. Characteristically, this is a primarily cognitive step in the process, although affective elements may be included. Relevant theory may be used where appropriate. The Distance Educator asks questions such as “what tools are appropriate to achieve these ends?”, and “what teaching methods should I use?”

5.2. Stage Two: The Ethical Consideration Level

Level Two in the Ethical Paradigm asks the Distance Educator to use a conceptual “lens” to examine and modify the pedagogy and tools resulting from Level One. The Distance Educator asks questions such as “will these choices result in a more harmonious society?”, and “will these techniques promote qualities such as honesty, tolerance and compassion in the students that I teach?” There is also an opportunity for enquiries into the specific areas outlined in Stage Two of figure 1. These are also detailed later in this paper.

5.3. Stage Three: The Reflection Level

At this level, the Distance Educator reflects on the revised pedagogy and planned use of tools to ensure that it now satisfies both Instrumental and Ethical needs. If there are uncertainties the process can be repeated as often as necessary before implementation

6. Stage Two Ethical Considerations

Stage Two of the model outlined above is considered in more detail in this section. This stage identifies three elements or areas for distance educators to consider. These are:

1. identification of bias
2. identification of students' affective states
3. utilization of a detached perspective

6.1. The identification of bias in distance education

Globalization and market forces operate in a broad but predictable manner, in that the objectives of market forces are valorised at the expense of humanistic concerns, issues of social justice and interpersonal relationships. For distance education, this means that concerns such as the long-term effects of a particular combination of distance education tools and pedagogies on a community is seen as less important than achieving instrumental aims such as certification or cognitive objectives. The concept of hegemonic valence used to describe market forces in this paper is derived from Bush (1983), who argued that tools and technologies possess a valence or bias analogous to that of atoms that have lost or gained electrons through ionization, resulting in a tendency for a given technological system to interact in similar situations in identifiable and predictable ways. The valence or tendency becomes hegemonic when alternative ways in which a technological system could operate become invisible or cannot be readily chosen. Hence distance educators in higher education have a choice between liberal-humanist tools and pedagogies, and those related to globalization and market forces, but the existence of this choice is either not apparent, or there are factors preventing distance educators from choosing between the available alternatives.

The concept of bias in a technology is illustrated in an historical example. In a Nineteenth Century treatise on the game of bowls, the author (Ayers 1894) noted that the bias gave the bowl "a tendency to run more or less out of the straight line when delivered" (p.24), and explained that:

The bowls are spheres of *lignum vitae*, or any other hard and heavy wood; and as they are generally made of the side of the tree, the heart being heavier than the outside, which makes one side of the ball heavier than the other, the consequence is that each ball has a bias of its own, and every player must learn its peculiarities before he can play it successfully (p. 24).

The evidence of the bias in other technologies is often less obvious, but it nevertheless remains important. Apple (1986) argues that computers "embody a

form of thinking that orients a person to approach the world in a different way” (p.171), while Streibel (1988) suggests that the technical structure of computer delivery systems shapes the form and function of the human culture and the physical artefacts. Similarly, Bromley (1997) maintains that technologies have built-in propensities to be used in certain ways, and Boal (1995) discusses the concept of artefacts representing congealed ideology

Distance Education also uses tools. Virtual Learning Environments are likely to contain tools or enable procedures in which the “bias” in the technology has a propensity to result in some outcomes rather than others. Because some outcomes resulting from the use of a tool have a greater potential for good or harm than others, they can also be considered to have an ethical component. Verbeek (2005) maintains that artefacts can be considered to have morality, and that there is a consequent obligation to use them ethically:

Things carry morality because they shape the way in which people experience their world and organize their existence, regardless of whether this is done consciously and intentionally or not. The very fact that they do this shaping charges designers with the responsibility to make sure that things do this in a desirable way (pp. 216-217).

The bias in artifacts, online tools and pedagogies can be latent or hidden, and it can be expected that while some tendencies are more likely, others become less so. In the example of the bowls described earlier, the propensity of a bowl to perform an arc when cast is accompanied by an absence of bowls that travel in a straight line. However, as Russell (2007) points out in his discussion of hegemonic valence in distance education, understandings of the theoretical underpinnings and everyday practices of Distance Education are dependent on not only the characteristics of learners or particular technologies but on the ways that market forces have operated in past and contemporary contexts, in combination with the technology and culture prevalent at the time. Hence the bias that is associated with the technologies employed in distance education is not a function only of that technology, but of the context within which they operate.

The question of identifying bias in the tools and pedagogies employed in distance education is related to the phenomena in which the effects of online interaction outside the immediate area of intended instruction are often overlooked. Anderson and Simpson (2007) query how the merits of online interaction should take into account the impact of interaction beyond the course, while Al-Saggaf (2004) notes that researchers have been too busy arguing about the characteristics of online communities and have ignored how these online communities and their culture affect people’s lives offline. Observations such as these suggest that although hegemonic valence indicates a degree of predictability in the way that distance education operates for instrumental purposes, the manner in which it acts as a long term factor in interpersonal relationships or civic engagement are often unexplored

Two theoretical perspectives provide insights into the ways that a given pedagogical approach in distance education can benefit or harm society. The first of these perspectives, that of the null curriculum, recalls discussion of assumptions about the dominant ideologies of technology (Mayers and Swafford

1998). Accounts of the way that the null curriculum may operate in Virtual Learning Environments (VLEs) has been outlined by Weiss (2006), who has noted that choices made in VLEs exclude other possibilities. This interpretation suggests that although one pedagogy or implementation of distance education is chosen, it too may be at the expense of alternatives which although freely available are not widely recognised. The choices associated with globalisation and market-driven approaches similarly exclude more socially relevant alternatives. For Stromquist (2002), increased levels of production and trade are associated with an emphasis on the dynamics of the market and the technological revolution, and these in turn are related to the emergence of new values in which personal material success is valued more than the promotion of sensitivity to the needs of others. It is in this sense that Burbules (1996) outlines the role of new technologies in actively shaping educational communities, and observes that this includes the drawing of boundaries which include some and exclude others. The consequences of technology use can be unintended (Burbules and Callister 2000), indirect (Sharma and Malayeff 2003), and sometimes unwelcome.

The second perspective relates to the ways in which some objects of our attention are understood as foreground, and given greater attention, while others are relegated to the background. The propensity for instrumental issues in multimedia to become foreground at the expense of social concerns can be seen in terms of theory related to the centrality of multimedia or other objects in our awareness. As Alexandersson and Runesson (2006) observe, Some [things] are more central in our awareness; they come to the forefront of our attention, whereas others remain in the background or are unnoticed (p. 143)

This interpretation suggests that our awareness of distance education is likely to be concentrated on the foreground, together with its instrumental characteristics, rather than the social and ethical issues that tend to remain in the background. Collectively, these two perspectives help to explain why there has sometimes been too little attention paid to ethical issues in distance education.

6.2. Identification of Students' Affective State

One aspect of the traditional face-to-face mode of education is that the teacher or instructor is, potentially, aware of the emotional state of students. Emotions have often been suppressed or ignored in education (Boler 1999), although they inform our thinking about how we treat others, and they are likely to constitute an important component of moral assumptions. Recent research related to emotions and the affective domain (Damasio 2000), has maintained, on neurological evidence, that emotions are essential for rational thinking, and Picard and Klein (2002) have argued that humans should be "motivated to action by a complex system of emotions, drives, needs and environmental conditioning in addition to cognitive factors" (p. 142).

It follows, then, that if emotions contribute to moral assumptions and the way that we treat others, then any paradigm related to Distance Education should identify the appropriate pedagogy or tools that instructors' can use to recognise them. Earlier theories of communication related to Distance Education have

concentrated on the notion of information channels. These have included Psychological Distancing (Wellens 1986), which discussed ways in which the number of information channels was related to telecommunication bandwidth; Media or Information Richness (Dede 1991; Daft and Lengel 1986), where learning is believed to be related to the characteristics or richness of the communications channel; and the earlier work of Korzenny and Bauer (1981), whose theory of Electronic Proximity referred to the degree to which members of an organisation experience communication satisfaction, through factors such as bandwidth, complexity of information, feedback, and level of communication skills.

However, more recently, these theories have been paralleled by arguments related to the holistic nature of communications. Dreyfus (2000) has discussed the notion of "intercorporeality" and the "sense of being in the presence of other people" (p.61). Dreyfus (2001) has also emphasised the importance of the body and emotions to our ability to "make sense of things so as to see what is relevant, our ability to let things matter to us ... and finally [to control] our capacity for making the unconditional commitments that give meaning to our lives". (p. 90). For Canny and Paulos (2000), an understanding of behaviours based on both mind and body are preferable to Cartesian approaches involving the breaking down of interaction into communication channels.

It follows then that any paradigm of Distance Education should recognise the relevance of these observations. Intercorporeality in face-to-face interactions is greater than the sum of any constituent communication channels in Distance Education, and choosing pedagogy or tool that prioritises any one channel is unlikely to be a complete solution. The instructors' understanding of students' affective states in Distance Education should enable greater empathy and the development of personal qualities that should benefit individuals and businesses. Goleman (2005) has argued that empathy is related to moral questions and principles, and that empathy "underlies many facets of moral judgements and actions" (p. 105).

6.3. Utilizing a Detached Perspective in Distance Education

Ragsdale (1988) has argued that it is particularly important to determine what the unintended outcomes of the use of computers in education might be, and has observed that "the original intentions for computer use are probably less important than the side effects" (p. 10). Drawing on techniques of goal-free evaluation, Ragsdale also suggests that an evaluator can enter into a program with the purpose of determining what the program is actually doing, rather than what it is trying to do. For distance education practitioners, this suggests that there should be a focus not on the stated aims or learning objectives of a given program but on its wider effects. These might include interpersonal relationships, the promotion of citizenship, and a more harmonious society. The method by which this technique might be accomplished is discussed by Jackson (1990), who offers a solution in which the observer is detached and disengaged from any participation in the process. The cultivation of such a detached perspective would potentially enable the consideration of the good or harm might result from a particular implementation of distance education.

7. Conclusion: Ethical Challenges and Distance Education

The ethical dilemmas arising from the use of pedagogies and techniques in distance education are linked to globalisation and market-driven approaches to education. These include the harm or good to a society that can result from the unintended consequences of distance education for society. A solution to this problem has been proposed in this paper involving the use of an ethical paradigm. Responses such as the paradigm outlined above are likely to become increasingly necessary as perceptions shift to incorporate notions of the way that people relate to each other, as well as how and what people learn. The reconceptualization resulting from this process may highlight the ways in which distance education tools and techniques shape the society in which we live and promote reflection on ethical aspects of educational practices.

References

- Alexandersson, M., and Runesson, U. (2006). The Tyranny of the Temporal Dimension: Learning About Fundamental Values through the Internet. **Scandinavian Journal of Educational Research**, 60(4), 411-427.
- Al-Saggaf, Y., (2004). The Effect of Online Community in Saudi Arabia. **The Electronic Journal on Information Systems in Developing Countries**, 16(2), 1-16.
- Anderson, B., and Simpson, M. (2007). Ethical Issues in Online Education. **Open Learning: The Journal of Open and Distance Learning**, 22(2), 129-138.
- Apple, M.W. (1986). Is the New Technology Part of the Solution or Part of the Problem in Education? In M.W. Apple (Ed.) **Teachers and Texts: A Political Economy of Class and Gender Relations in Education** (pp. 150-174). New York: Routledge and Kegan Paul.
- Ascough, R.S. (2002). Designing for Online Distance Education: Putting Pedagogy before Technology. **Teaching Theory and Religion**, 5(1), 17-29.
- Axelrod, P., Anisef, P., and Lin, Z. (2001). Against all odds? The Enduring Value of Liberal Education in Universities, Professions, and the Labour Market. **The Canadian Journal of Higher Education**, 31(2), 47-78.
- Ayers, E.T. (1894). **Bowls, Bowling Greens and Playing** (second edition). London: Jurold and Sons.
- Boal, I.A. (1995). A Flow of Monsters: Luddism and Virtual Technologies. In J. Brook and I.A. Boal (Eds) **Resisting the Virtual Life: The Culture and Politics of Information** (pp.59-70). San Francisco: City Lights.
- Boler, M., (1999). **Feeling Power: Emotions and Education**. New York and London: Routledge.

Bromley, H., (1997). The Social Chicken and the Technological Egg: Educational Computing and the Technology/Society Divide. **Educational Theory**, 47(1), 51-65.

Burbules, N.C., (1996). Technology and Changing Educational Communities. **Educational Foundations**, 10(4), 21-32.

Burbules, N.C., and Callister, T.A. Jr. (2000). **Watch It! The Risks and Promises of Information Technologies for Education**. Westview: Boulder Colorado

Bush, C.G. (1983). Women and the Assessment of Technology: To Think, To Be, To Unthink, To Free. In J. Rothschild (Ed), **Machina Ex Dea: Feminist Perspectives on Technology** (pp. 151-170). New York: Pergamon.

Canny, J. and Paulos, E. (2000). Tele-Embodiment and Shattered Presence: Reconstructing the Body for Online Interaction. In K. Goldberg (Ed), **The Robot in the Garden: Telepistemology in the Age of the Internet** (pp. 276-294). Cambridge, Massachusetts: MIT Press.

Cuban, L. (2001). **Oversold and Overused: Computers in the Classroom**. Cambridge, Massachusetts: Harvard University Press.

Daft, R.L and Lengel, R.H. (1986). Organizational Information Requirements, Media Richness and Structural Design. **Management Science**, 32, 554-571

Damasio, A.R. (2000). **Descartes' Error: Emotion, Reason and the Human Brain**. New York: Harper Collins.

Day, P. and Schuler, D. (2004). Preface. In P. Day and D. Schuler (Eds), **Community Practice in the Network Society: Local Action/Global Interaction** (pp. xii-xv). London: Routledge.

Dede, C.J. (1991). Emerging Technologies: Impacts on Distance Learning. **Annals of the American Academy for Political and Social Science**. 514(1), 146-158.

DiBiase, D., (2000). Is Distance Education A Faustian Bargain? **Journal of Geography in Higher Education**, 24(1), 130-135.

Dreyfus, H.L. (2000). Telepistemology: Descartes Last Stand. In K. Goldberg (Ed), **The Robot in the Garden: Telepistemology in the Age of the Internet** (pp. 48-63). Cambridge, Massachusetts: MIT Press.

Dreyfus, H.L. (2001). **On the Internet**. London: Routledge.

Garrison, D.R. (1989). **Understanding Distance Education: A Framework for the Future**. London: Routledge.

Goleman, D., (2005). **Emotional Intelligence**. New York: Bantam.

Gunawardena, C.N. and McIsaac, M.S. (2004). Distance Education. In D.H. Jonassen (Ed.), **Handbook of Research on Educational Communications and Technology** (pp. 355-395). Mahwah, New Jersey: Lawrence Erlbaum.

Hamilton, C. (2001). The University and the Marketplace. In P. Kinnear (Ed.) **The Idea of a University: Enterprise or Academy?** (pp. 9-15). Canberra: The Australia Institute.

Henry, M., Lingard, B., Rizvi, F., and Taylor, S., (1999). Working with/against Globalization in Education. **Journal of Education Policy**, 14(1), 85-97.

Hinchcliff, J. (2006). The future of the university: some ethico-epistemological explorations. **On the Horizon**, 14(2), 77-83.

Jackson, P.W. (1990). **Life in Classrooms**. New York: Teachers College Press.
Kellner, D. (2000). Globalization and New Social Movements: Lessons for Critical Theory and Pedagogy. In N.C. Burbules and C.A Torres, (Eds) **Globalization and Education: Critical Perspectives** (pp. 299-321). London: Routledge.

Korzenny, F., and Bauer, C., (1981). Testing the Theory of Electronic Proximity. **Communication Research**, 8(4), 479-498.

Mayers, T., and Swafford, K., (1998). Reading the Networks of Power: Rethinking Critical Thinking' in Computerized Classrooms. In T. Todd and I. Ward (Eds). **Literacy Theory in the Age of the Internet** (pp. 146-157). New York: Columbia University Press.

Milojevik, I., (2005). **Educational Futures: Dominant and Contesting Visions**. Routledge: London and New York.

Picard, R.W. and Klein, J. (2002). Computers that Recognise and Respond to User Emotion: Theoretical and Practical Implications. **Interacting with Computers**, 14, 141-169.

Ragsdale, R.G. (1988). **Permissible Computing: Values Assumptions and Needs**. New York:Praeger.

Russell, G. (2007). Globalization, Distance Education and Hegemonic Futures. **The Turkish Online Journal of Distance Education**, 8(4). Retrieved from the World Wide Web at <http://tojde.anadolu.edu.tr/> on October 27, 2007.

Russell, T.L. (1999). **The No Significant difference Phenomenon: A Comparative Research Annotated Bibliography on Technology for Distance Education**. North Carolina State University: IDECC.

Shale, D., (1990). Towards a Reconceptualization of Distance Education. In M.G. Moore (Ed.) **Contemporary Issues in American Distance Education**. (pp.333-343). Oxford: Pergamon

Sharma, P. and Malayeff, J., (2003). Internet Education: Potential Problems and Solutions. **The International Journal of Management**, 17(1), 19-25.

Streibel, M.J., (1988). A Critical Analysis of Three Approaches to the Use of Computers in Education. In L.E. Beyer and M.W. Apple (Eds) **The Curriculum: Problems, Politics and Possibilities** (pp. 259-288). Albany: State University of New York Press.

Stromquist, N.P. (2002). **Education in a Globalized World: The Connectivity of Economic Power, Technology, and Knowledge**. Lanham: Rowman and Littlefield.

Verbeek, P-P. (2005). **What Things Do: Philosophical Reflections on Technology, Agency and Design**. Trans. R.P. Crease. University Park, Pennsylvania: Pennsylvania State University Press.

Wagner, T. (1993). Systematic change: Rethinking the purpose of school. **Educational Leadership**, 51(1), 24-28.

Wellens, R.A (1986). Use of a Psychological Distancing Model to Assess Differences in Telecommunication Media. In L.A Parker and O.H. Olgren (Eds) **Teleconferencing and Electronic Communication** (pp. 347-361). Madison, WI: University of Wisconsin Extension.

Weiss, J. (2006). Introduction: Virtual Learning and Learning Virtually. In J. Weiss, J. Nolan, J. Hunsinger and P. Trifonas (Eds), **The International Handbook of Virtual Learning Environments** (Vol. 1, pp. 1-33). Dordrecht: Springer.

Yang, R., (2003). Globalisation and Higher Education Development: A Critical Analysis. **International Review of Education**, 49(3-4), 269-291.

Life Skills for Student Leaders to Promote Academic Success

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Abstract

Today's community college student faces challenges both in and out of the classroom that jeopardizes their academic success and retention. Furthermore, many of these students enter community colleges under prepared and lacking the life skills to successfully navigate through a college system (McCabe, 2000, Maxwell, as cited in Platt, 1986). Several personality factors such as self-esteem and internal locus of control have been found to be associated with the achievement of high risk students (Ochroch and Dugan, 1986). The purpose of this paper is to identify a life skills curriculum to support student leaders. The life skills curriculum includes time management, goal setting, self-advocacy, conflict resolution and personal finance. The paper examines the relevant literature surrounding college readiness for community college students and further explores student characteristics and behavior. A project proposal will be discussed as well as an implementation plan, observable outcomes and evaluation methods.

Keywords: Student Leadership – Academic Success – Life Skills

Introduction

Today's community college student faces challenges both in and out of the classroom that jeopardizes their academic success and retention. Furthermore, many of these students enter community colleges under prepared and lacking the life skills to successfully navigate through a college system (McCabe, 2000, Maxwell, as cited in Platt, 1986).

As the advisor to the Associated Students at San Bernardino Valley College (SBVC), I am faced with this reality on a daily basis. In addition, the added commitment to leadership positions exacerbates the preexisting condition that many of the students find themselves in.

In an effort to address the ethical issue of what I consider, preparing students for success rather than for failure, I will develop a life skills curriculum at SBVC to support student leaders at the college. The life skills curriculum will include time management, goal setting, self-advocacy, conflict resolution and personal finance. The pages that follow will address the relevant literature surrounding college readiness for community college students and will further explore college student characteristics and behavior. Following the literature review, a project proposal will be discussed as well the implementation plan, observable outcomes and evaluation methods.

2. College Readiness

Underpreparedness for college-level work has been a historical problem within community colleges (Maxwell, as cited in Platt 1986). In response, many community colleges have created developmental education courses to help provide underprepared students with the requisite academic skills need to succeed in college. Although research evaluating the efficacy of such programs has yielded positive findings (Amey & Long, 1998; Hennessey, 1990; Hoyt 1999; Kraska et al, 1990, Napoli & Hiltner, 1993), questions of college readiness still exist (Hoyt, 1999). In 1990, Hennessey found that students who were more likely to follow a counselor's advice had certain individual characteristics that may have contributed to the student's success.

2.1. College Student Characteristics and Behaviors

Many studies have attributed student behaviors and characteristics to the success of underprepared learners (Amey & Long, 1998, Ley & Young, 1998, Ochroch & Dugan (1986). Furthermore, Ochroch and Dugan (1986) found that certain personality factors such as self-esteem and internal locus of control were associated with the achievement of *high-risk* students. In a study that compared successful and unsuccessful undpreprepared students, Amey and Long (1998) found that "differences in outcomes for the students in the two groups were related to actions taken by the students and/or the institution while the student was in attendance" (p. 5). According to Byrd and MacDonald (2005), self-regulating behavior may help indicate college readiness. Finally, a student's ability to navigate within a college's systems and protocols has contributed to a student's success (Napoli and Wortman, 1996).

2.2. College Readiness Skills and Abilities

In their qualitative study, Byrd and MacDonald (2005) found that (a) skills in time-management, (b) the ability to apply one's self and focus on a goal, and (c) skills for advocating for oneself as a learner were integral to college readiness. In fact, subjects of the study felt that these skills contributed significantly to their success.

Specifically, the skill of time-management was noted by participants as critical to their college readiness (Byrd and MacDonald, 2005). Time-management abilities played an important role in juggling coursework, family, work and extracurricular commitments. Those students with greater life experience felt a greater strength in this area due to their experience; while others felt time management to be an obstacle in their academic success.

Similarly, goal setting was found to be an important factor to college readiness (Byrd and MacDonald, 2005). One student stated, "When I think of what it takes to be ready for college, I think it's more of a mental mind set...of having a goal" (p. 29). Furthermore, a student's goal setting abilities were directly related to their life experience. Six participants expressed that they were much more

prepared as an older student with previous college experience than those who had no previous experience.

Finally, another life skill found to be important from the Byrd and MacDonald (2005) study was the "ability to advocate for oneself as a learner" (p. 29). Central to the theme of self-advocacy is the student's self-concept and self-regulating behavior (Ley & Young, 1998). Furthermore, students who have a greater internal locus of control and believe they have control over their own destiny, have a stronger self-concept (Ochroch and Dugan, 1986). As time-management and goal setting became easier for older students, so did the ability to self-advocate. Participants in the study shared stories about working with counselors and professors on their needs as college students and further indicated that it built on their self-esteem. They felt better prepared and capable as college students. The students in this study found self-advocacy to be an important skill in order to navigate successfully through the college system.

3. Project Plan

To better prepare student leaders for life's challenges beyond their participation in extracurricular activities, I have developed and will implement a life skills curriculum designed to prepare the student leader to meet society's changing demands between college and the real world. The project goals are to provide student leaders with the education and experience needed to realize their higher academic achievement; increase retention, graduation, and professional success. Furthermore, students will gain a higher level of maturity and responsibility as a foundation to their overall success.

3.1 .Curriculum

3.1.1. Time Management Workshop

This workshop is designed to help student leaders recognize the importance of time management skills as they relate to their personal values. In this session, students will learn how to manage daily activities, multiple priorities and demands on their time. In addition, long-range strategic planning will be discussed and methods will be taught. Students will engage in a hands-on time management activity and will leave the workshop with a tool to manage their commitments on a weekly basis. Further exploration will include barriers to time management, mental models and self-regulation.

3.1.2. Goal Setting Workshop

In this session, students will explore how their values influence the goals they set. Students will learn how to develop goals with clear targets, as well as identify support and barriers to their goal. This will include brainstorming, creating an action plan with timelines, as well as maintaining motivation. In

addition, students will learn how to monitor progress towards their goal and how to reward themselves in the end.

3.1.3. *Self-Advocacy Workshop*

In the self-advocacy workshop students will learn to express and identify their rights and responsibilities, use proper communication styles and learning ways to stand up for oneself. Students will develop skills to (a) express opinions appropriately, (b) asking for assistance, and (c) communicating for others. Moreover, through role playing, students will learn how to distinguish between accommodating, collaborative and authoritative styles of communication and choose appropriate styles when advocating on group or personal needs. Another focus of the workshop would be for students to reflect on their attitudes. Through this, they will increase their awareness of, and change, self-defeating attitudes by asking them how they react to situations and demonstrating how they can change their responses for more effective results.

3.1.4. *Conflict Resolution Workshop*

In this session, students will build their capacity to change adversarial approaches to conflict resolution into problem-solving collaborations, while producing better outcomes for all parties involved and maintaining long-term relationships. Through this workshop, students will gain a greater awareness of the complexities of negotiation and conflict resolution. Furthermore, students will be given a framework to understand, diagnose and facilitate the process of conflict resolution. Students will have the opportunity to practice through role playing and feedback and will be equipped with a process of continued improvement and learning.

3.1.5. *Personal Finance Workshop*

In this session, students will learn sound personal financial practices to foster wise financial decision-making. Students will participate in creating a monthly budget for themselves, as well as basic money management principles. Participants will have an overview of credit card basics, student loan and financial aid information.

4. Project Implementation

As I embark on implementing a life skills curriculum for student leaders at SBVC, it will be important to enlist two groups of people. They are the student leaders themselves and other departments on campus that may serve as resource for possible presenters. According to Kouzes and Posner (2002), to fulfill this vision "the members of the organization must understand, accept, and commit to the vision. When they do, the organization's ability to change and reach its potential soars" (p. 143). The first step in enlisting others is to engage in authentic dialogue about their hopes and dreams in order to develop a shared destiny.

Enlisting others encompasses three practices: (a) listen deeply to others, (b) discover an appeal to a common purpose, and (c) give life to a vision by communicating expressively, so that people can see themselves in it.

As educators at SBVC, we dream about making a difference in a student's life and supporting them in reaching their fullest potential. As students, they hope to develop the necessary skills and abilities to empower themselves to achieve these dreams. Dialogue can occur in departmental meetings and student organization meetings and retreats. They can also occur in more informal avenues, such as lunch, one-on-one meetings and campus activities. Kouzes and Posner (2002) suggest that:

It's about enrolling others so that they can see how their own interests and aspirations are aligned with the vision and can thereby become mobilized to commit their individual energies to its realization. A vision is *inclusive* of constituent's aspirations; it's an ideal and unique image of the future for the *common* good. (p. 143)

For example, in departmental meetings, I can present how this life skills curriculum is in alignment with the SBVC Mission Statement: "To provide a quality education to a diverse community of learners" and with departmental student learning outcomes. For many student services departments, self-advocacy for students is a student learning outcome. By collaborating with the Office of Student Life in presenting workshops in this curriculum, departments will be participating in activities that support their student learning outcomes as well.

To ensure student participating in the workshops, it will be critical to utilize Goleman's (2000) "affiliative" style of leadership. Since student leaders are already overcommitted, the relationship I create with them and the trust that we build will determine their involvement in this program. According to Goleman, the affiliative style focuses on the development of people, whose value is paramount to the organization. An affiliative leader aims to keep their followers happy and to create a harmonious environment. This style has a positive effect on communication between the members of the organization. Therefore, affiliative leaders inspire flexibility, ideas and risk taking. Moreover, they create a sense of belonging among their members and provide positive feedback.

For student leaders at SBVC, an affiliative style (Goleman, 2000) of leadership is so important because many of them feel overwhelmed with academics and participation in any extracurricular activity is already a stretch for them. To commit to another activity may initially appear cumbersome for them; therefore, creating value for students is imperative. Nurturing students' potential and them trusting their leader in that process is equally important.

Once departmental support has been secured, I will work with these departments in developing the workshops further and planning logistics. In this context, using Blanchard's Situational Leadership II (1985) model would be wise. Potential presenters may include college administrators, faculty and staff; therefore, a variety of styles may need to come into play. For example, if I asked a counselor to present the conflict management workshop, a *low supportive – low directive style* may be an appropriate approach since many of our counselors have

previous conflict management training and are highly educated. Blanchard proposes that in this approach,

The leader offers less task input and social support, facilitating employees' confidence and motivation in reference to the task. The delegative leader lessens his or her involvement in planning, control of details, and goal clarification. After the group agrees on what they are to do, this style lets subordinates take responsibility for getting the job done the way they see fit. (p. 94 as cited in Northouse, 2007)

Therefore, the delegative leader gives control to the employee and maintains confidence in their abilities to meet the goals and objectives.

However, in working with my administrative staff who are not as familiar with marketing and public relations, a *coaching or high directive – high supportive* style (Blanchard, 2000) of approach may be needed. In this approach,

The leader focuses communication on both achieving goals and meeting subordinates' socioemotional needs. The coaching style requires that the leader involve himself or herself with subordinates by giving encouragement and soliciting subordinate input. (p. 93 as cited in Northouse, 2007)

In the end, the leader still makes the final decision on *what* and *how* goals are accomplished.

4.1. Outcomes and Evaluation

At least one outcome was observed during the development of this project. I presented an initial time management workshop to students at the beginning of February 2007 utilizing the curriculum described earlier. There were 25 students in attendance and feedback was overwhelmingly positive. Another observable outcome would be that the curriculum is utilized in both the Associated Students Fall Retreat in August 2007 and the Student Leader Fall Retreat in October 2007.

With regards to the student learning outcomes for the Office of Student Life, this curriculum addresses the following: (a) students involved in leadership positions will demonstrate knowledge of and learn self-advocacy skills, (b) students will improve their time management skills, and (c) acquire core leadership skills, enabling them to lead productive and meaningful lives within the SBVC and global community.

Students who participate in the curriculum will be asked to fill out a self-assessment pre- and post-workshop. Students will be tracked by both the Director of Student Life and the Student Activities/Campus Center Specialist. Pre-workshop assessment questions will be measured on a 4 point Likert scale (No, Not Much, Some, A Lot) and will include the following questions:

1. How much do you know about the workshop subject?
2. Do you think the information is important to your college success?

3. Are you excited about the possibility of learning more on the subject?
4. Do you anticipate doing things differently because of this training?

Conversely, the post-assessment will include the following questions utilizing the same scale:

1. Have you learned anything new from the workshop?
2. Did you think the information you heard was important?
3. Are you excited about what you have learned?
4. Will you do things differently because of this training?

5. Conclusion

From the research presented the development of life skills is positively correlated to students' college readiness and academic success. Specific skills include, time management, goal focus and self-advocacy. These are especially important to first generation, high risk students who attend community colleges.

The preceding project aims to provide a curriculum and implementation plan that will provide students with the opportunities to develop these skills. Acknowledgement of these skills could help community college students recognize their strengths and weaknesses and become familiar with the college system.

It is my hope that by investing in each individual, we would be empowering them to achieve their fullest potential, recognize dreams and become contributing members of society.

6. References

- Amey, J.A., and Long, P.A. (1998). Developmental coursework and early placement: Success strategies for underprepared community college students. *Community College Journal*, 22(3), 3-10.
- Blanchard, K., Zigarmi, P., & Zigarmi, D. (1985). *Leadership and the one minute manager: Increasing effectiveness through situational leadership*. New York: William Morrow.
- Byrd, K.L. & MacDonald, G. (2005). Defining College Readiness from the Inside Out: First-Generation College Student Perspectives. *Community College Review*, Fall, 33(1), 22-37.
- Goleman, D. (2000). Leadership that gets results. *Harvard Business Review*, March-April, p. 37-49.
- Hennessey, J.H. (1990). At-risk community college students and a reading improvement course: A longitudinal study. *Journal of Reading*, 34(2), 114-120.
- Hoyt, J.E. (1999). Remedial education and student attrition. *Community College Review*, 27(2), 51-73.
- Kouzes, J.M. & Posner, B.Z. (2002). *Leadership Challenge*, San Francisco: Jossey-Bass.

- Kraska, M.F., Nadelman, M.H., Manner, A.H., & McCormick, R. (1990). A comparative analysis of developmental and nondevelopmental community college students. *Community/Junior College Quarterly of Research and Practice, 14*, 13-20.
- Ley, K. and Young, D.B. (1998). Self-regulation behaviors in underprepared (developmental) and regular admission college students. *Contemporary Educational Psychology, 23*, 42-62.
- McCabe, R.H. (2000). *No one to waste: A report to public decision-makers and community college leaders*. Washington, DC: Community College Press.
- Napoli, A.R., & Hiltner, G.J. (1993). An evaluation of developmental reading instruction. *Journal of Developmental Education, 17*, 14-20.
- Napoli, A.R. & Wortman, P.M. (1996). A meta-analysis of the impact of academic and social integration on persistence of community college students.
- Northouse, P. (2004). *Leadership Theory and Practice*. Thousand Oaks: Sage Publications, Inc.
- Ochroch, S.K., & Dugan, M. (1986). Personality factors for successful high-risk students. *Community/Junior College Quarterly of Research and Practice, 10*, 95-100.
- Platt, G.M. (1986). Should colleges teach below-level courses? *Community College Review, 14*(2), 19-24.

Insights on Inclusion and Collaboration: Reflections on a Virtual Parenting Experience

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Abstract

Transformative learning occurs when students engage in activities that simulate life experiences, promote empathy and critical reflection, and challenge formative assumptions. The *Family Collaboration Portfolio Project* was designed as a 9-week interactive simulation exercise in which pre-service professionals critically examine their assumptions of parenting a child with a disability through becoming the parent of a virtual child with a disability. The *FCPP* is based on interactive pedagogical strategies associated with transformative learning, such as case studies that involve the exploration of themes of power and disempowerment, engagement with feelings and emotion, reflective journaling and learning in relationship. Data from three *FCPP* activities completed by students in five pre-professional education classes (three graduate and two undergraduate) were analyzed qualitatively. Findings include increased understanding of parents issues, and increased support for inclusion and collaborative parent-professional decision-making.

Keywords: Transformative learning – Collaboration – Parents – Disability - Education.

1. Introduction

While parents of children with disabilities have a strong desire to see their children included as full members of a school community, they contend that education professionals continue to display negative attitudes toward inclusion and collaborative-based models (Bernheimer & Weisner, 2007; Hutton & Caron, 2005). Parents have reported that professionals misunderstand their family experiences, exaggerating the stresses associated with parenting a child with a disability and mistaking the struggle and courage required to manage life within multiple overlapping systems for denial, depression, or maladjustment (Hartshorne, 2002; Kearney & Griffin, 2001; Scorgie & Sobsey, 2000). According to Green (2007), "parents of children with disabilities must raise their children within the context of powerful societal discourse that devalues adults with disabilities and, therefore, holds low expectations for the ultimate 'success' of parenting children with disabilities" (p. 151).

Deck, Scarborough, Sferrazza, & Estill (1999) asserted that many professionals feel inadequately prepared to serve families of children with special needs. When Pruitt, Wandry, & Hollums (1998) asked parents to reflect on ways in which educators could be more sensitive to their needs, parents replied that professionals should listen to parents, value their knowledge of their children, treat them with greater dignity and respect, and try to understand life from their

perspective. In other words, parents wanted professionals to “walk a mile in their shoes” (p. 165).

The challenge for those who train pre-service professionals is to utilize a methodology that will shape perceptions of parents of children with disabilities in ways that will enhance parent-professional collaboration system. The focus of the paper is to explore a pedagogical training strategy designed to enhance support for parent-teacher collaboration in preservice education professionals.

The *Family Collaboration Portfolio Project* [FCPP] is a 9-week interactive course component based on transformative learning pedagogy. Mezirow (1997) maintained that transformational learning occurs when students are engaged in critical reflection designed to examine the sources and content of various assumptions that underlie beliefs and practices. Transformational learning, he believed, can be initiated through the presentation of a “disorienting dilemma” or crisis which causes learners to reevaluate the efficaciousness of their assumptions using both personal reflection and reflective discourse with others. Transformation of perspective occurs when assumptions are retooled to incorporate new information.

Franquiz (1999) claimed transformation is facilitated when students are presented with a curriculum “organized around powerful ideas and highly interactive teaching strategies” (p. 31). Other methodologies that support transformation include the presentation of a disorienting dilemma, role playing and simulations, small group problem-solving opportunities, authentic case studies, and reflective journaling (Cranton, 1996; Grabove, 1997; Mezirow, 1997; Pohland & Bova, 2000). Using the principles of transformational learning, the objective was to design a series of class exercises to help students examine, evaluate and modify their views of parents of children with disabilities, with the goal of promoting greater acceptance of inclusion of students with disabilities and support for collaborative parent-professional partnerships within the school environment.

2. Procedures

The *Family Collaboration Portfolio Project* [FCPP] contains 31 activities that fall into four categories: simulation exercises, role-playing scenarios, readings, and utilization of on-line resources. The main purpose of the simulation experience is to enable pre-service professionals to “walk a mile in [a parent’s] shoes” by becoming the parent of a virtual child with a disability. The simulations, which are based on authentic parent narratives, present students with a disorienting dilemma (e.g., diagnosis of disability in a virtual child), and require them to reflect, journal thoughts and feelings, engage in group problem-solving, and plan a course of action. Sixteen unique case study streams, each covering an eight-week trajectory from the child’s birth through entry into high school and representing such child diagnoses as autism, Down syndrome, deafness, behavior disorder, learning disorder, seizure disorder, severe developmental delay and mental retardation, allow students in the class an individualized case study path to follow.

During the first class meeting, students were told to imagine that they were expectant parents of a child to be born within a week's time. They were asked to write a letter to the unborn child outlining their hopes and dreams for him/her. Small group and whole class discussions confirmed shared parental attributes for an expected child and typically projected family life trajectory. Subsequent scenarios included such topics as diagnosis of disability, justifying and accessing services, dealing with professionals, experiences of disempowerment, public perceptions of disability, and child friendship issues. For the final activity, students reflected on what they learned about parenting a child with a disability in a letter to the child.

This paper incorporates the responses of 97 students from five different classes to three FCPP virtual child scenarios: diagnosis of disability in the virtual child, starting school, and the final letter to the virtual child. Data from five classes that met during the 2005-2006 academic year were analyzed qualitatively (Lincoln & Guba, 1985). Data collected represents three categories of students : a graduate level school counseling class [GRC] consisting of 12 students (three males and nine females); two graduate level special education classes [GRS] consisting of a total of 28 students (five males and 23 females); and two undergraduate teacher education classes [UGE] consisting of a total of 57 students (16 males and 41 females).

3. Results and Discussion

Data from three scenario activities, diagnosis of disability, entering school, and final letter to virtual child, were analyzed qualitatively. Construction of themes was based on support across the three groups of students.

(1) Diagnosis of Disability : In this scenario students were presented with a diagnosis of disability in their virtual child. For some, this occurred during the "birth" scenario (e.g., Down syndrome or spina bifida). For others, the diagnosis was made during the "infancy" scenario (e.g., deafness or epilepsy) or during the "early childhood" scenario (e.g., autism or behavior disorder). As students wrote reflections of their thoughts and feelings following diagnosis four major themes emerged: messages of encouragement to the child, negative affect following diagnosis, expressions of "parental" needs, and suggestions of strategies to be used in the days following diagnosis.

The most common messages sent by participants to their virtual children following diagnosis were statements of unconditional love (e.g., "I wish I could tell my baby I love him no matter what"), personal commitments to be there for the child (e.g., "anything I can do for you, it will be done"), statements of assurance and encouragement (e.g., "I would want to tell him, "Just hang in there. Everything will be okay"), and hope for the future, such as health, happiness, and a fulfilling life (e.g., "I hope she is able to achieve great goals"). Additional messages included statements that the child had done nothing to deserve the diagnosis of disability and that the child was born into a caring family.

The large majority of study participants reported at least one negative affect following the diagnosis, such as fear and anxiety, sadness and grief (e.g., “my heart is broken”), or anger (e.g., I’m mad at everybody—God, my husband, myself”). Some students mentioned fears of inadequacy or helplessness (e.g., “I’m afraid I won’t be able to handle this”). Statements of confusion regarding the diagnosis (e.g., “Why him? Why me?”) were also journaled by both GRS and UGE students. Following diagnosis many students also mentioned specific needs, such as the support of family and friends, information about the disability, and reassurance about the child and his/her future. GRS (46%) and UGE (38%) also journaled that their greatest need was to spend time with their child (e.g., “hold her in my arms until I can’t take it anymore”).

While a large number of students included specific strategies in their journaling, most of these were disability specific, such as learning sign language, exploring a disability specific child-related option, or locating a specified professional (e.g., “speech pathologist”) or type of service. Students also journaled positive statements, such as being happy or excited to welcome the child into their family and appreciative references of other persons (e.g., spouses, extended family members and friends) who were available to assist them or their child in the future.

(2) Entering the Public School System: In this scenario, students encountered a variety of experiences and difficulties as they sought an appropriate school placement for their child. Themes that emerged included participants’ perceptions of ideal school placements for their virtual children, statements of their rights as ‘parents,’ problem-solving strategies they would employ, and fears and concerns for their children.

Participants described the ideal school placement as one in which their virtual children would be challenged educationally (e.g., “a program that can stimulate him intellectually”), be welcome and accepted (“included in the class and look upon as any other student”), experience social inclusion and friendships, and have access to needed resources (e.g., “an aide if he needs one”). The most commonly cited parental “rights” listed were the right to inclusion within the neighborhood school for their child and open access to all information and to the classroom at any time. Some also stated that parents have the right to demand resources for their child, such as classroom aides and technology.

Strategies most commonly mentioned included maintaining open lines of communication with professionals, gathering additional information about the disability, and exploring a range of educational options. Other strategies included working with the child on specific skills and accessing legal advice. Common fears were that the virtual child might be teased or ostracized and that the child would be discriminated against and have limited educational experiences due to disability.

(3) Final Letter to the Child: For the final FCPP assignment, students were instructed to write a farewell letter to their child outlining what they had learned through the virtual parenting experience. Four themes emerged from the final letters: lessons learned about parents of children with disabilities, lessons

learned about the educational system, lessons learned about children with disabilities, and final messages to the virtual child.

Participants wrote that they learned parents of children with disabilities had to “fight a plethora of systems” to access services for their children, they had to be persistent and “not give up,” and that the role of parents was “difficult.” They also learned that a parent’s unconditional love serves as the catalyst for the demands they may make (e.g., “I no longer see them as ‘meeting monsters;’ they just love their kids”), and that parents want their children included and valued by others (e.g., “parents want their children to be accepted by society as human beings, not seen as some kind of oddity”). Participants stated that parents of children with disabilities are basically no different from other parents and that all parents want the same things for their children (e.g., “to be able to live life as fulfilling as possible—to have happiness and success”).

Themes relating to the educational system included views that the system is difficult both for those who are different (e.g., “the educational system can be overwhelming—professionals might even try to push for something that is not in the best interest of the child”), and for general classroom teachers (e.g., “teachers have a fine line to walk—they must see to the needs of all students and find ways to adapt to allow disabled students to grow and develop at their own rate”). Participant writings reflected both negative (e.g., “teachers focus too much on how these children are different”) and positive (e.g., “most teachers want to do what they can to create an environment for all students”) attitudes toward teachers and inclusion.

Through parenting their virtual child, participants also attested to gaining new insights about children with disabilities, such as the courage they possess, but most iterated that their child taught them that children with disabilities have the same hopes, desires and needs as other children. Participants also asserted that their virtual child taught them about issues of prejudice and tolerance (e.g., “I learned that stereotyping children with disabilities can be one of the most detrimental factors to a child’s education and overall wellbeing”) and engendered in them greater acceptance of and respect for others (e.g., “through you I have learned to accept all people with greater grace and tact”).

Many of the farewell letters closed with specific messages to the virtual child, such as statements of love (e.g., “[you have] really touched my heart”), pride (e.g., “you have accomplished more than I ever could imagine; you are my star”), and continued support for the child (e.g., “I will always be your best advocate”).

Through their journal entries graduate and undergraduate education students attested to increased understanding of and empathy toward parents of children with disabilities (e.g., “I know I will work differently with parents by ensuring that their opinions or remarks are taken seriously and that they are valued”). Parenting their own “virtual” child made students more sensitive to social structures parents face, especially disempowerment, marginalization and alienation. Students indicated that the virtual parent experience provided them a powerful glimpse into another’s world (e.g., “this has been an eye-opening

experience. I learned that teachers need to put themselves in 'our' shoes") and proved foundational in shaping their attitudes toward working with parents of children with disabilities (e.g., "I have new knowledge that will change my way of working with parents").

4. Conclusions

School-based collaboration is built on the principle of shared responsibility for the planning and execution of educational programs (Martin, 2005; Pugach & Johnson, 1988). Collaborative partnerships require mutual trust, empathy and understanding of the other (Turnbull & Turnbull, 2001). Virtual learning experiences based on transformational learning pedagogy can enhance understanding of others and transform perspective when used in practitioner training programs. Case studies that engender ownership can be effectively employed in a variety of education classes to foster support for inclusive environments and attitudes that enhance collaborative team-building. Though this study is limited by the number of participants and the inability of the researcher to test student behavior in real world situations, students confirmed that the opportunity to "walk in a parent's shoes" had made them more sensitive to and aware of the issues parents face as they navigate the educational system.

References

- Bernheimer, L. P., & Weisner, T. S. (2007). "Let me tell you what I do all day . . .": The family story at the center of intervention research and practice. *Infants & Young Children, 20*(3), 192-201.
- Cranton, P. (1996). Types of group learning. *New Directions for Adult and Continuing Education, 71*, 25-32.
- Deck, M., Scarborough, J.L., Sferrazza, M. S., & Estill, D.M. (1999). Serving students with disabilities: Perspectives of three school counselors. *Intervention in School and Clinic, 34*, 150-153.
- Franquiz, M. E. (1999). Learning in the transformational space: Struggling with powerful ideas. *Journal of Classroom Interaction, 34*, 30-44.
- Grabove, V. (1997). The many facets of transformative learning theory and practice. *New Directions for Adult and Continuing Education, 74*, 89-96.
- Green, S. E. (2007). "We're tired, not sad!": Benefits and burdens of mothering a child with a disability. *Social Science and Medicine, 64*, 150-163.
- Hartshorne, T. S. (2002). Mistaking courage for denial: Family resilience after the birth of a child with severe disabilities. *The Journal of Individual Psychology, 58*, 263-278.

Hutton, A. M., & Caron, S. L. (2005). Experiences of families with children with autism in rural New England. *Focus on Autism and Other Developmental Disorders, 20*(3), 180-189.

Kearney, P. M., & Griffin, T. (2001). Between joy and sorrow: Being a parent of a child with developmental disability. *Journal of Advanced Nursing, 34*, 582- 592.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Martin, N. R. M. (2005). *A Guide to Collaboration for IEP Teams*. Baltimore, MD: Brookes.

Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education, 74*, 5-12.

Pohland, P., & Bova, B. (2000). Professional development as transformational learning. *International Journal of Leadership in Education, 3*, 137-150.

Pruit, P., Wandry, D., & Hollums, D. (1998). Listen to us! Parents speak out about their interactions with special educators. *Preventing School Failure, 42*, 161- 166.

Pugach, M. C., & Johnson, L. J. (1988). Rethinking the relationship between consultation and collaborative problem solving. *Focus on Exceptional Children, 21*, 1-8.

Scorgie, K., & Sobsey, D. (2000). Transformational outcomes associated with parenting children who have disabilities. *Mental Retardation, 38*, 195-206.

Turnbull, A. P., & Turnbull, H. R. (2001). *Families, professionals, and exceptionality: Collaborating for empowerment*. Upper Saddle River, NJ: Prentice-Hall.

Affective knowledge / Effective learning: Applying Deleuze's Philosophy to Educational Theory

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Abstract

Gilles Deleuze called for education of the senses by means of exploring the faculties of perception not limited to the pre-given data of sense impressions. Deleuze's "pedagogy of the concept" presupposes a triadic relation between percepts, affects and concepts. Novel concepts are constructed in experience. The process of knowing **Erreur ! Source du renvoi introuvable.** constitutes an experimental and practical art **Erreur ! Source du renvoi introuvable.**, and education is reconceptualized in terms of evaluating experience, inventing concepts and creating novel meanings.

The paper revisits the learning paradox first posited by Socrates in his famous dialogue with Meno and suggests a model for the cognitive structure that would have (dis)solved the learning paradox by means of incorporating Deleuze's relational dynamics. Philosophical thinking based on the triadic "logic of affects" necessarily leads to the creation of concepts; still those new concepts are themselves informed by the physicality of affects bridging therefore the dualistic gap of a Cartesian subject. Affective knowledge serves as a necessary condition for effective learning defined as the creation of concepts and assigning meaning to experience.

Deleuze's method of transcendental empiricism leads to establishing an unorthodox "foundation" for knowledge if and when the affective conditions in the real experience for the actualisation of the virtual meanings would have been fulfilled.

Keywords: Affect – Desire – The Learning Paradox – The Unconscious – Virtual Reality

1. Introduction: learning from experience

Gilles Deleuze (1925-1995), French poststructuralist philosopher, considered the narrow and limited approach to education as problematic and **Erreur ! Source du renvoi introuvable.** called for education of the senses by exploring the faculties of perception above and beyond the given data of sense perceptions. His was the "pedagogy of the concept" that posited a triadic relation between percepts, affects and concepts so that novel concepts become constructed in experience. For Deleuze, knowledge is not reduced to a static body of facts but constitutes a dynamic process of inquiry as an experimental and practical art embedded in experience **Erreur ! Source du renvoi introuvable.** Experience is not confined to a personal Cogito of a Cartesian subject but represents an experiment with the enviroing world, from which we can, and should, learn. Experience is that *milieu*

which provides capacity to affect and be affected; it is a-subjective and pre-personal.

The difference embedded in real experience makes thought encounter a shock or crisis, which is not reduced to a Cartesian doubt but is embedded in the *objective* structure of an event *per se*, thereby by necessity transcending the faculties of perception beyond supposedly given sense-data. Experience is rendered meaningful not by grounding empirical particulars in abstract universals but by experimentation, that is, by treating any concept "as object of an encounter, as a here-and-now, ... from which emerge inexhaustibly ever new, differently distributed 'heres' and 'nows'. ...I make, remake and unmake my concepts along a moving horizon, from an always decentered center, from an always displaced periphery which repeats and differentiates them" (Deleuze 1994: xx-xxi). Making and remaking of concepts constitutes a creative process, which is not reducible to a static recognition but demands an experiential and experimental encounter that would have forced us to think and learn, that is, to construct meaning for a particular (presently un-thought-of and lacking sense) experience.

Grounded in Deleuze's practical philosophy, this essay reconceptualizes education as a process of learning from and evaluating experience, inventing concepts in practice, and creating novel meanings.

2. The Socratic paradox

The problematic of learning from experience, however – if experience exceeds the private world of sense-data – inevitably leads to the so called "learning paradox" first posited by Socrates in his famous dialogue with Meno. After briefly examining Kierkegaard's classical solution in terms of the necessity of the decisive moment, this essay suggests that, contrary to Kierkegaard, no miraculous knowledge takes place and justifies this conclusion by analysing Deleuze's philosophical method of transcendental empiricism and the process of nomadic inquiry into as yet unknown. Philosophical thinking based on the triadic "logic of affects" necessarily leads to the creation of novel concepts; still those new concepts are themselves informed by the very physicality of affects bridging therefore the dualistic gap of a Cartesian subject. Affective knowledge serves as a necessary condition for effective learning defined as the creation of concepts and assigning meaning to experience. Deleuze's ontology of the virtual lays down an unorthodox "foundation" for knowledge if and when the affective conditions in the real experience for the actualisation of the virtual would have been fulfilled. The essay concludes by suggesting a model for the cognitive structure that would have (dis)solved the learning paradox by means of incorporating Deleuze's relational dynamics of experience.

In a famous dialogue, Socrates claims that we cannot acquire new knowledge by learning. Let us recall Plato's *Meno* and the problem of being as first known, later formulated by Aquinas, as *ens primum cognitum*. Meno is puzzled by what Socrates means when he provocatively says that there cannot be any new

knowledge and that what is called learning is pretty much a process of recollection. Plato states the paradox in the following way^{xxxix}:

Men. And how will you inquire, Socrates, into that which you know not? What will you put forth as the subject of inquiry? And if you find what you want, how will you ever know that this is what you did not know?

Soc. I know, Meno, what you mean; but just see what a tiresome dispute you are introducing. You argue that a man can not inquire either about that which he knows, or about that which he does not know; for he knows, and therefore has no need to inquire about that – nor about that which he does not know; for he does not know that about which he is to inquire.

Are we facing the absurdity because either one knows *a priori* what is it that she is looking for, or one does not know what she is looking for and therefore cannot have prior expectations of finding anything? According to Plato, the theory of recollection demands that we always already possess all the knowledge unconsciously and simply recognize the given truths. However, if any new knowledge is incompatible with prior learning – the latter is fact being a precondition for the understanding of what is new – then there is no foundation on which to build such a new knowledge. Socrates, in fact, argues that to learn something means to *discover* a previously unknown truth; it is clear, however, that we won't be able to recognize it anyway. After the lengthy dialogue with a slave boy, Socrates concludes that it is not possible to acquire any new knowledge that wouldn't have been already possessed by a learner. Therefore we do not learn but must have all possible truths within ourselves. Such is the Socratic paradox leading to the explanation in terms of Platonic theory of recollection. We either learn what we always already knew, that is, the concept of learning is meaningless; or we are in the dark anyway because it is impossible to recognize this new knowledge even as we are trying to learn something new.

3. The problematic of prior/new knowledge

Several educational studies have inquired into possible solutions to the learning paradox, mainly as regards science education and the possibility of students' conceptual change (Bereiter 1985, Hendry 1992). Prawat (1999) ingeniously brought into the conversation the legacy of American pragmatism and Dewey's logic as the theory of inquiry^{xi}. The classical philosophical attempt to solve the learning paradox belongs to Kierkegaard who agreed with the seriousness of the problem of new knowledge, however proposed to resolve it in a different manner^{xii}. Contrary to Plato's positing that we have to have all knowledge within

^{xxxix} See *The Essential Plato*. 1999, introduction by Alain De Botton, tr. by B. Jowett, 442. Book-of-the-Month Club, Inc.

^{xi} For sympathetic critique of Prawat's approach see Noddings 1999 and Semetsky 2004a.

^{xii} See Tubbs 2005 who analyses in detail Kierkegaard's philosophy of the teacher. Tubbs locates the presence of the "third partner within a philosophical pedagogy" (2005: 404)

ourselves, Kierkegaard suggests that there is no prior knowledge. The impossibility of recognizing any new truth still holds, unless – and here lies Kierkegaard’s ingenious solution – an extremely strange occurrence would have taken place. At the very moment of acquiring true knowledge, says Kierkegaard, a learner becomes so different as to be capable of distinguishing true knowledge from false even if prior to this moment she were remaining in a state of total ignorance. What happens is enlightenment that, by some miracle, makes a learner knowledgeable rather than leaving her ignorant. New knowledge therefore is miraculous because it is impossible to explain a learner’s sudden transformation, or the presence of such a decisive moment in her life, otherwise. For Kierkegaard, it is the decisive moment that brings forth eternal, true, and certain knowledge: the learner is enlightened by God’s act.

What would become a solution to the Socratic paradox in the framework of Gilles Deleuze’s philosophy? Deleuze addressed education only indirectly, but a careful reading of his many works helps in presenting an alternative figuration to the problematic of new knowledge. Affirming a fundamental encounter with the new against prior recognition, Deleuze posits the task of philosophy as the creation of concepts. For Deleuze and Guattari, the creation of concepts is impossible without “the laying out of a plane” (Deleuze and Guattari 1994: 36). Thinking and learning presuppose constructing the plane of immanence so as to pragmatically “find one’s bearings in thought” (Deleuze and Guattari 1994: 37) by means of stretching, folding, unfolding, enfolding, that is, by multiple movements of this plane’s diagrammatic features that may traverse this plane so that concepts would appear in the guise of the plane’s intensive features. What is significant, is desire: a concept inhabits the empirical happening; it is, as Deleuze and Guattari say, a living concept, and it is desire, which is irreducible to either magical thinking or conscious will that will have propelled an event into becoming.

The creative desire is not reduced to some incomprehensible link connecting subject and object. Such romantic conceptualisation would be incomplete; it would make the subject forever split and in search of the object forever out of reach, the latter becoming an infamous obscure object of desire. Desire is a process of laying out the plane of immanence that is to be “crisscrossed by particles and fluxes which break free from subject and object” (Deleuze 1987: 89) alike. Desire cannot be considered internal to the subject, because an experiential event itself is as yet subject-less (as we said earlier, experience is a-subjective and pre-personal). Nor does it belong to the object: it is “immanent to a plane which it does not pre-exist” (Deleuze 1987: 89). To elucidate, Deleuze

and addresses the important notion of indirect communication. As will have been seen further below, Deleuze’s diagonal line (as per Fig. 2 diagram) is indeed an example of an indirect, what he and Guattari called *transversal*, communication. The difference lies in Deleuze’s philosophy positing movement across levels (or *plateaus*); therefore we can consider the actualization of the virtual (ontologically) or becoming-aware of the unconscious traits in experience (psychologically, see Semetsky 2004b) as representing examples of such transversal communication. The necessity of the third partner is thus both logical (as compatible with Charles S. Peirce’s triadic logic as semiotics; see Semetsky 2005a) and ontological (akin to Charles S. Peirce’s modes of being). It is Deleuzian becoming as affect that performs the role of the third partner.

refers to music, “where the principle of composition is not given in a directly perceptible, audible, relation with what it provides. It is therefore a plane of transcendence, a kind of design, in a mind of man or in the mind of god, even when it is accorded a maximum of immanence by plunging it into the depth of Nature, or of the Unconscious” (Deleuze 1987: 91).

4. (Educational) constructivism and (philosophical) immanence

Desire is a positive, active, and creative force rather than just a reactive one, passively responding to some negativity or lack. The subject does not possess desire *a priori*; just the opposite, it is desire that “produces reality” (Deleuze and Guattari 1987: 30) in the guise of new objects of knowledge for a subject of experience for which novel concepts are to be invented, making a subject *per se* also an event in a series as becoming-other. An immanent desire constructs a plane: immanence, for Deleuze, is equivalent to constructivism. Such desire would perhaps be what Nietzsche called the will to power; according to Deleuze, however, “there are other names for it. For example, ‘grace’” (Deleuze 1987: 91). Wherein the plane of immanence is being constructed “the spiritual and the material [as] two distinct yet indiscernible sides of the same fold” (Goddard 2001: 62) do meet. The plane of immanence therefore always presupposes an extra dimension, as though inhabited by “grace”, and being supplementary to the plane *per se*, it constitutes a manifold, “a complex place” (Deleuze 1990: xiv; see Figures 1 and 2 further below). The plane of immanence is enfolded analogous to the Baroque art that expresses the harmonious multiplicity of the folds (Deleuze 1993). According to the Baroque model, “knowledge is known only where it is folded” (Deleuze 1993: 49): in fact, Being is Fold. Similar to the drapes in fabric, things themselves, as Deleuze says, are wrapped up in nature; as for ideas – they are often so enveloped or enfolded “in the soul that we can’t always unfold or develop them” (Deleuze 1993: 49) based on subjective rationality as one’s conscious will solely unless experience itself would have presented conditions for their unfolding.

For Deleuze, “all desires come from ...the Outside [and we] can always call it plane of Nature, in order to underline its immanence” (Deleuze 1987: 97-98). Pointing out that it was Spinoza who conceived the plane in this manner, Deleuze is adamant that it is an immanent process of desire that fills itself up, thus constituting a process called *joy*. Only being filled with immanence means becoming fulfilled! Historically, philosophy has identified self-fulfilment not with personal physical values like, for example, one’s biological or physiological needs, not even with social and communitarian values, but with values considered spiritual and hence ideal. Deleuze’s philosophy, however, does not set apart the ideal from the real. *Platonism is turned upside down*. In Deleuze’s radically empirical philosophy everything is real, including that what is not yet actual, thereby as yet virtual. What is traditionally called a mystical experience is, for Deleuze, an *existential practice* of sorts, taking place at the level between discursive and non-discursive formations: it becomes an experiential and experimental *art* of perceiving the otherwise imperceptible. In one of his books on the analysis of cinematic images, Deleuze (1989) posits mysticism in terms of a sudden actualisation of potentialities, that is, awakening of sense-perception, such as seeing and hearing, by raising them to a new power of enhanced

perception or a future-oriented perception in *becoming* called percept. Such “a vision and a voice ...would have remained virtual” (Goddard 2001: 54) unless some specific conditions in experience, necessary for the actualisation of the virtual would have been established.

5. The way of knowing as a creative art

In terms of Deleuze’s *ontology of the virtual* (cf. Boundas 1996; May and Semetsky in press) what we usually call soul and spirit are *pure events* constituting virtual reality. The realm of the virtual exceeds the possible: possible can be realized, and the real *thing* is to exist in the image and likeness, as the saying goes, of the possible *thing*. But the virtual is always already real – even without being the actual! It actualises itself during a process of what Deleuze dubbed *differentiation*, so that the actual does not resemble the virtual. The two are not related mimetically; they are *different*, and it cannot be otherwise because the virtual is posited just as a tendency, therefore *no-thing*. Virtual tendencies, or *no-things*, become actualised, that is, embodied in the actual *things*, in the guise of new objects, experiences, and states of affairs. The nuance is significant: it is “[f]rom virtuals [that] we descend to actual states of affairs, and from states of affairs we ascend to virtuals, without being able to isolate one from the other” (Deleuze and Guattari 1994: 160).).

For Deleuze, the virtual realm, inhabited by the problematic ideas, must be exteriorised, that is explored by setting up problems that would have addressed their spatio-temporal distribution and trace the processes constituting the dynamics of the plane of immanence. The processes’ “directions ... are fractal in nature” (Deleuze and Guattari 1994: 40): Deleuze uses the image of crossing and zigzagging lines as “a set of various interacting lines” (Deleuze 1995: 33), to describe intuitions populating the plane. But why intuitions?

A fundamental encounter with the new, in the paradoxical absence of any recognition of the latter, demands the creation of new concepts under the conditions that we will “speak directly and intuitively in pure percepts” (Deleuze 1995: 165). Percept is a perception in *becoming*; therefore it means perceiving something that is not given. New concepts will have been created when one’s perception undergoes transformation or *increase in power* into *becoming-percept* as a necessary condition for the creation of concepts. The very passage between the two is *affect*; Deleuze, bringing a creative element of art into the rational domain of philosophy, says that we “need all three [affect, percept, and concept] to get things moving” (Deleuze 1995: 165). Deleuze’s philosophy of the virtual frees thinking from common sense: for him, it is life that activates thought, and it is thought that affirms life. If, as Deleuze was saying, immanence is a life (Deleuze 2001), then “miracles” may indeed happen.

But then, aren’t we back to Kierkegaard’s miraculous moments? Not at all! In the world described by Deleuze and Guattari as *becoming-world*, however, these moments may not be called miracles after all: as *pure events*, they belong to the realm of virtual reality. A virtual event has the potential of becoming-actual, that is, getting its actual existence, and Deleuzian *differentiation* as the process for actualisation is compatible with Bergson’s intuition, or the pragmatic way of

knowing (see Semetsky 2004a) embedded in Deleuze's practical method of transcendental empiricism (Deleuze 1994). Speaking in percepts as a form of intuition achieves the *virtual*, somewhat tacit and implicit, but nonetheless *real* knowledge. Perception would not become a percept without the enfolded relation between the old and the new represented by the *fold* between the inside and the outside. In fact, for Deleuze, fold in the ontological sense is precisely "the inside of the outside" (Deleuze 1988: 96). What is striving to become the actual is that what is *in virtu*, and is only waiting for conditions in the real experience to come forward. Without affects' entering a *zone of indiscernibility* with percepts, a percept *per se* would have never undergone a deterritorialization into a line of flight in order to reterritorialize, that is, enter a new territory, the one of a concept.

A line of flight is *transversal* to both inside and outside, and the presence of the transversal link is what characterises Deleuze's method of transcendental empiricism that he qualified as both *wild* and *powerful*. It is empirical by virtue of the object of investigation regarded as real albeit sub-representative experience, yet transcendental because the very foundations for the empirical principles are left outside the common faculties of perception. The Deleuzian object of experience is considered to be given only in its tendency to exist – or, rather, to subsist – in a virtual, as yet non-representative form. The deterritorialization marks "the possibility and necessity of flattening all of the multiplicities on a single plane of consistency or exteriorly" (Deleuze and Guattari 1987: 9): as a projection on the plane or surface. While not all virtualities may become actualised in the present, they are nevertheless real. Hardt (1993:17) points onto subtle connection of Deleuze's thought to Scholastic ontology; in Scholastic terminology *virtual* means the ideal or transcendental, but not in any way abstract or just possible: it is maximally real, *ens realissimum*.

The relationship between the virtual and the actual does not make one less real than the other. The Deleuzian *Outside* as an ontological category is an overcoded virtual space that "possesses a full reality by itself ...it is on the basis of its reality that existence is produced" (Deleuze 1994: 211). However, "in order for the virtual to become the actual it must *create* its own terms of actualisation. The *difference* between the virtual and the actual is what requires that the process of actualisation be a creation ..Without the blueprint of order, the creative process of organization is always an art (Hardt 1993:18). That's why a "fundamental distinction between subrepresentative, unconscious and aconceptual ideas/intensities and the conscious conceptual representation of common sense" (Bogue 1989: 59) becomes moot during the very process of the actualisation of the virtual or, in other words, when the unconscious becomes available to consciousness in the guise of novel concepts, new knowledge. Such is a "zone of proximity or copresence" (Deleuze and Guattari 1987: 273) that constitutes an imperceptible, that is, a molecular (because ordinarily perception would operate solely at the molar level), creative, *becoming*.

Rather than being a blueprint, a transcendental field is an immanent and enfolded "abstract drawing" (Deleuze 1987: 93). Virtual tendencies have a potential of becoming actual when unfolded "through differentiations of an initially undifferentiated field either under the action of exterior surroundings or under the influence of internal forces that are directive, directional" (Deleuze 1993: 10). Affective forces are arrows or directional lines that traverse one's old

universe of knowledge and enable an unknown universe to appear seemingly from nowhere – “out of the shadow” (Deleuze and Guattari 1994: 66) – as if it were a hidden variable. The new knowledge is genuinely new: Deleuze’s method of transcendental empiricism implies “not a reproduction of the same but a repetition of the different” (Deleuze 1988: 98). Learning, for Deleuze, always takes place “in and through the unconscious, thereby establishing the bond of a profound complicity between nature and mind” (Deleuze 1994: 165) leading to the conjugation, which determines, as Deleuze says, the threshold of consciousness: unconscious-*becoming*-conscious traversing the immanent-transcendent divide.

Because “Nature is contingent, excessive, and mystical essentially” (Deleuze 1994: 57), it is a percept as the perception in becoming that constitutes an intuitive access to that what is otherwise inaccessible. At the level of percepts, it is on the newly constructed surface^{xlii} where experience gets organized. For Deleuze, it is the surface as “the locus of sense” (Deleuze 1990: 104) that becomes a plane for novel concepts. Concepts are forever fuzzy and never completely determined: they are born from intuitions and impulses and, as Deleuze says, there exist forces constraining experience and imposing impulses that compel one to think. Different/ciation, for Deleuze, presupposes an intense field of individuation, and it is because of “the action of the field of individuation that such and such differential relations and such and such distinctive points ...are actualized – in other words are organized within intuition along lines differentiated in relation to other lines” (Deleuze 1994: 247). The meeting of the old and new, of repetition and difference, is possible by means of transversal link crossing levels and thresholds.

6. Nomadic education: an inquiry into novelty

An inquiry into as yet unknown is *nomadic*. The *nomad* metaphor carries a topological nuance, “a fate of place” (Casey 1997); indeed the whole philosophy of place is exemplified in Deleuze and Guattari’s (1994) explicitly naming their approach *Geophilosophy*. It implies the significance of a direction but simultaneously affirms the multiplicity of paths that nomadic tribes wander along in their movement in the “smooth space” (Deleuze and Guattari 1987: 371). The epistemic process understood as nomadic inquiry is experiential and experimental, and “that’s where you have to get to work...As though [there] are so many twists in the path of something moving through space like a whirlwind that can materialize at any point” (Deleuze 1995: 161) creating novelty at the moment of actual emergence. Nomad’s way is an immanent trajectory; as a symbol for becoming, nomads always “transmute and reappear in the lines of

^{xlii} Maximilian de Gaynesford, in his essay “Bodily organs and organization” (in Bryden 2001: 87-98) relates Deleuze’s philosophy to the fourth- to fifth-century theology and notices a similar kind of approach to the incarnation made recently by some philosophers of religion. He cites Don Cupitt who says that “we may think of the surface of the human body as the primal surface [where] desire and culture [or experience] meet, as the body’s feeling-expression is converted by culture into the common world of signs” (Don Cupitt, *The Long-Legged Fly* [London: SCM Press, 1987], page 11, quoted in De Gaynesford 2001: 98, brackets mine, IS).

flight of some social field” (Deleuze 1995: 153). But for Deleuze, social and psychic dimensions interpenetrate, and from the epistemological perspective, nomadic ideas would be, in Deleuze’s words, intensive multiplicities distributed in the smooth space: it is “an unconscious psychic mechanism that engenders the perceived in consciousness” (Deleuze 1993: 95).

The adjective *smooth* is contrasted with *striated*, both terms defining (after composer Pierre Boulez) different musical forms: striated – as ordered by rigid schemata and point-to-point connections ensuring a linear and fixed structure, and smooth – as irregular, open and heterogeneous, dynamical structure of fluid forces, “a field ...wedded to nonmetric, acentered, rhizomatic multiplicities” (Deleuze and Guattari 1987: 381) and filled with the polyvocality of directions based on the *affective* logic of the included middle. It is this particular logic, as the basis for Deleuze and Guattari’s a-signifying semiotics (see Semetsky 2005b) that engenders the as yet another solution for the learning paradox. While paradox *per se* cannot be overcome, the very existence of what common sense considers a paradox is a feature of semiotics encompassing the triad of affects, percepts, and concepts. Deleuze’s method of transcendental empiricism aims “to bring into being that which does not yet exist” (Deleuze 1994: 147). For Deleuze, it is intuition that enables the reading of signs, which lay down the dynamical structure of experience, and it is the apprenticeship in signs (Bogue 2004) that engenders knowledge:

Something in the world forces us to think. This something is an object not of recognition but a fundamental ‘encounter’...It may be grasped in a range of affective tones: wonder, love, hatred, suffering. In whichever tone, its primary characteristic is that it can only be sensed. In this sense it is opposed to recognition (Deleuze 1994: 139).

Thinking of this sort constitutes the supreme act and art of philosophy: rather than simply *thinking* the plane of immanence, one must *show* that it is there by means “of flattening all of the multiplicities on a single plane of consistency or exteriorly” (Deleuze and Guattari 1987: 9) when the smooth place is somewhat striated. This, by the way, satisfies Deleuze and Guattari’s positing a condition of the *complementary relationship* between the two: while all becomings take place in the smooth space, the progress can only be “made up and in striated space” (Deleuze and Guattari 1987: 481).

7. Structuring affective knowledge: a triadic diagram for effective learning

To literally *show* Deleuze's plane of consistency, I suggest the following diagram (Fig. 1)^{xliii}:

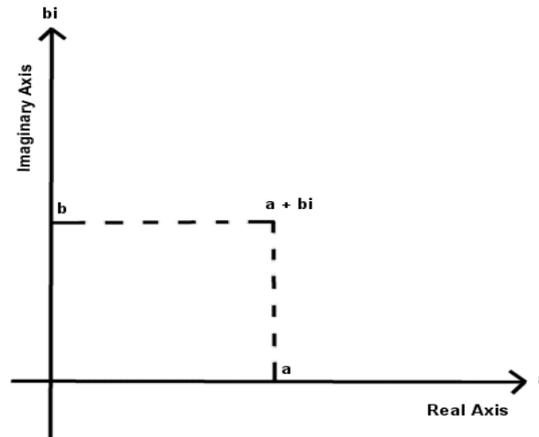


Fig. 1. The complex plane

The plane on Fig. 1 is *not* a Cartesian grid as its two coordinate axes are located on a *complex plane* and marked with imaginary, on the vertical axis, and real on the horizontal axis, numbers respectively. Considering that imaginary numbers, according to Leibniz, are the intermediary between being and nonbeing, it is on the imaginary axis where becoming (or affect) is taking place: literally, *shown*. Percepts are shown on the real axis, in the physical world of real numbers. The two directional forces *converge*, using Deleuze's term, onto the resultant vector on a complex plane. This resultant vector may be considered to represent new knowledge in the form of a created concept that, sure enough, is inseparable from affects and percepts: they constitute triadic, *a-signifying*, relationship, a genuine sign. According to the diagram on the complex plane, the dynamic process of becoming and concepts-creation expresses itself – in agreement with Deleuze's figurations – in the form of an intensive multiplicity of *singular points* **$a+bi$** on a complex plane (Fig. 2):

^{xliii} I initially suggested this model in Semetsky 2004b.

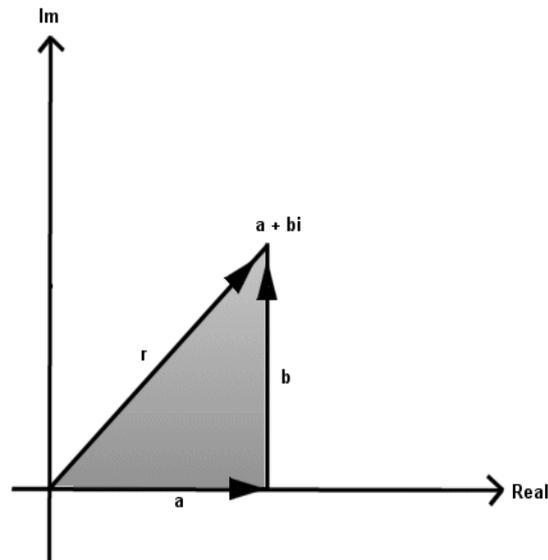


Fig. 2. The resultant vector

The laws of vectors addition and projective geometry employed here in order to conceptualise the model as per Fig. 1 and 2, agree with Deleuze stating that signs subsisting in their virtual state are bound, when projected, to undergo transformations that “convey the projection, on external space, of internal spaces defined by ‘hidden parameters’ and variables of singularities of potential” (Deleuze 1993: 16).

It is a diagonal transversal line that enables coming into being of the new objects of knowledge as the newly created concepts by virtue of “the genesis of intuition in intelligence” (Deleuze 1991: 111). It is “the resonance of two series” (Deleuze 1990: 104), along the vertical and horizontal directions, that enter into “the surface organization” (ibid.) to create concepts. The depth of the *psyche* is capable of making sense only when it, “having been spread out became width. The becoming unlimited is maintained entirely within this inverted width” (Deleuze 1995: 9), making meaning “all the more profound since [an event] occurs on the surface” (1995:10) constructing “any given multiplicity...like one area on a plane” (Deleuze 1995: 146). It is the triadic relation between affects, percepts and concepts that engenders the “second power [of thought] which grasps that which can only be sensed” (Deleuze 1994: 165) and makes it intelligible. According to this model and, importantly, without any recourse to either *conscious* recollection or miraculous moment, a slave boy in the *Meno’s* dialogue with Socrates should become capable of lifting “each faculty to the level of its transcendent exercise” (Deleuze 1994: 165) when he starts to apprehend signs in the process of learning from experience and grounding his learning on the complex, virtual yet real, foundation for knowledge.

References

- Bereiter, C. (1985) Towards a Solution of the Learning Paradox. *Review of Educational Research*, 55, 2: 201-226.
- Bogue, R. 1989. *Deleuze and Guattari*. London and New York: Routledge.
- Bogue, R. 2004. Search, Swim and see: Deleuze's apprenticeship in signs and pedagogy of images. *Educational Philosophy and Theory*, special issue *Deleuze and Education*, edited by I. Semetsky, 36(3): 327-342.
- Boundas, C. 1996. Deleuze-Bergson: an Ontology of the Virtual. In *Deleuze: A Critical Reader*, edited by P. Patton, 86-106. Cambridge, MA: Blackwell Publishers Ltd.
- Casey, E. 1997. *The Fate of Place: A Philosophical History*. Berkeley: University of California Press.
- De Gaynesford, M. 2001. Bodily organs and organization. In *Deleuze and Religion*, edited by M. Bryden, 87-98. London and New York: Routledge.
- Deleuze, G. 1983. *Nietzsche & Philosophy*, tr. H. Tomlinson. New York: Columbia University Press.
- Deleuze, G. 1987. *Dialogues (with Claire Parnet)*, tr. H. Tomlinson and G. Burchell. New York: Columbia University Press.
- Deleuze, G. 1988. *Foucault*, tr. S. Hand, Minneapolis: University of Minnesota Press.
- Deleuze, G. 1989. *Cinema 2: The Time-Image*, tr. H. Tomlinson and R. Galeta. Minneapolis: University of Minnesota Press.
- Deleuze, G. 1990. *The Logic of Sense*, tr. M. Lester. New York: Columbia University Press.
- Deleuze, G. 1993. *The Fold: Leibniz and the Baroque*, tr. T. Conley. Minneapolis: University of Minnesota Press.
- Deleuze, G. 1994. *Difference and Repetition*, tr. P. Patton. New York: Columbia University Press.
- Deleuze, G. 1995. *Negotiations 1972-1990*, tr. M. Joughin. New York: Columbia University Press.
- Deleuze, G. 1997. *Essays Critical and Clinical*, tr. D. W. Smith and M. Greco. Minneapolis: University of Minnesota Press.
- Deleuze, G. 2001. *Pure Immanence: Essays on A Life*, tr. A. Boyman. New York: Zone Books.

- Deleuze, G. and F. Guattari. 1987. *A Thousand Plateaus: Capitalism and schizophrenia*, tr. B. Massumi. Minneapolis: University of Minnesota Press.
- Deleuze, G. and F. Guattari. 1994. *What is Philosophy?* tr. H. Tomlinson and G. Burchell. New York: Columbia University Press.
- Goddard, M. 2001. The scattering of time-crystals: Deleuze, mysticism and cinema. In M Bryden (Ed.) *Deleuze and Religion*, 53-64. London and New York: Routledge.
- Hardt, M. 1993. *Gilles Deleuze: An Apprenticeship in Philosophy*. Minneapolis: University of Minnesota Press.
- Hendry, G. 1992. *Conceptual change theory: A recapitulation or resolution of the learning paradox?* Paper presented at the AARE/NZARE 1992 Joint Conference, Deakin University, Geelong, VIC. Australia. Available at <http://www.aare.edu.au/92pap/hendg92139.txt>
- May, T. and I. Semetsky (in press). "Deleuze, Ethical Education, and the Unconscious", in I. Semetsky (Ed.) *Nomadic Education: Variations on a Theme by Deleuze and Guattari*, Rotterdam: Sense Publishers.
- Noddings, N. (1999). Comments on "Dewey, Peirce and the learning paradox", *American Educational Research Journal*, 36 (1): 83-85.
- Prawat, R. (1999). Dewey, Peirce and the learning paradox. *American Educational Research Journal* 36(1): 47-76.
- Semetsky, I. 2004a. The role of intuition in thinking and learning: Deleuze and the pragmatic legacy. *Educational Philosophy and Theory*, 36 (4): 433-454.
- Semetsky, I. 2004b. "The complexity of Individuation", *The International Journal of Applied Psychoanalytic Studies*, 1 (4): 324-346. UK: Whurr Publishers Ltd.
- Semetsky, I. (Ed.) 2004c. Deleuze and Education (special issue). *Educational Philosophy and Theory*, 36 (3).
- Semetsky, I. 2005a. "Learning by abduction: a geometrical interpretation", *SEMIOTICA*, 157 (1-4): 199-212. Berlin, New York: Mouton de Gruyter.
- Semetsky, I. 2005b. Semiotics. In Adrian Parr (Ed.) *The Deleuze Dictionary*, Edinburgh University Press, 242-244.
- Tubbs, N. 2005. Philosophy of the Teacher. *Journal of Philosophy of Education* special issue 39 (2): 184-420.

Language, Identity and Belonging in France: An Exploration of Breton Language Immersion Education and Breton Identity through a Critical Hermeneutic Lens.

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Abstract

What is the meaning of identity in today's globalized world? As regional ethnic identity movements have risen within national borders, countries like France that have been traditionally viewed as one unified culture are being forced to consider on new terms the concept of nationhood. This paper explores the connection between language and identity as it relates to our pluralistic experiences of being in the world. The research specifically focuses on the language revival movement in Brittany, France, and how it is influencing the Bretons' sense of self and belonging.

The research for this paper was conducted from an interpretive approach based upon critical hermeneutic theory. Interpretations of identity, and the role that language education plays within this domain, were explored by way of conversations with Bretons. Their narratives are discussed within the framework of the theories of Martin Heidegger, Paul Ricoeur, and Richard Kearney who focus on the ontological condition of being in the world and the search for understanding frames of meaning through textual paths of interpretation.

Keywords: language – identity – hermeneutics – Bretons - education

1. Introduction

How are language and identity interconnected? What meaning does language bring to understanding ourselves? In turn, how does this understanding relate to and influence our understanding of and response to others and the world? These are the questions at the heart of my inquiry. We think, reflect, and understand in our linguistic domain, and each language reveals a particular outlook on life, which includes how we perceive the world and conceive of the self. I am interested in understanding the connection between language and identity as it relates to our pluralistic experiences of being in the world, and how in that pluralism we can possibly still find a common ground for discourse and understanding.

In order to explore these issues, I have chosen Brittany, France as my research site because it is a place where questions of language and identity are a socio-

cultural and political struggle today. The Bretons, a minority group in France living in the region called Brittany since the fifth century, have a language that is seriously endangered. In the past 30 years there has been a concentrated effort in Brittany to revive pride in their heritage and to save their language. Central to this movement has been the development and advocacy of Breton language immersion schools (Diwan) and bilingual programs in the public schools (Div Yezh) and private Catholic schools (Dihun). The Breton movement has been fraught with controversy, both in the region and in France as a nation. Given the fact that language and identity are issues that many Bretons are actively engaged in addressing, this research site offers a rich context for my inquiry.

2. Statement of the Issue

Language, identity, and belonging are critical issues facing nations around the world today. We are, as the anthropologist Clifford Geertz (2000, p. 219) writes, living in a world where “a much more pluralistic pattern of relationships among the world’s peoples seems to be emerging, but its form remains vague and irregular, scrappy, ominously indeterminate.” Because language and identity are core concepts that speak to our existence and our relationship to others in the world, they need to be included in any discussion on the challenges we face to achieve inclusive and quality educational programs that reflect our diverse societies. Education is a powerful tool that instills in young citizens a particular worldview and an understanding of their role in that world. In multicultural societies, inclusiveness is critical. Without recognition of and truly valuing our diversity, citizens of our societies are made to feel marginalized, which leads to social problems that impact the stability and vitality of a nation. Furthermore, as diversity is quashed through homogenization, our societies lose part of their cultural richness and history, and therefore a part of themselves. My interest is in understanding the conflicts which arise within our diverse societies, and how language and identity can inform us about the possibilities of new ways of being that could shed light on our world situation. As David Throsby states (2000, p. 128):

In a rapidly changing world, cultural heritage is playing an increasingly important role in providing people with a sense of who they are, where they have come from and what their lives mean...languages, customs, communal practices, traditional skills and so on are all becoming more widely recognized as essential means of articulating identity and meaning for local communities, regions, nations and humankind as a whole.

3. Background to the Issue

To understand the situation of Bretons as a minority group in France, one must look into the Breton and French history that has shaped their story, for as Paul Ricoeur (1984, p. 138) writes, “Cultures create themselves by telling stories of their own past.” Brittany is a northwestern peninsula region of France. The Bretons are a Celtic people, originally from Great Britain, who migrated across the English Channel to Brittany, fleeing Saxon invasions around the fifth century A.D. (Laroche, 1999, p. 29). The Bretons remained independent until 1532 when Brittany was annexed by the French monarchy. Initially the Bretons, like other

conquered territories at that time, were granted a great deal of latitude to conduct their own affairs in their own language. France changed radically after the French Revolution of 1789, and this had significant implications for the Bretons. The Revolutionaries overthrew the monarchy and established a Republic with a unified system of governance across the country. Unity rather than plurality became the goal. One result was the decision to impose a common language on the people. French was chosen because it was already the established administrative language, and all other minority languages were forbidden. The French language became a powerful symbol of national unity (Ager, 1999, p. 19). Following the Revolution, compulsory education was established in order to increase French literacy. This compulsory education was used as a covert tool to assimilate minorities and eradicate their languages (Leigh Oakes, 2002). For the Bretons, this forced assimilation, which included laws that forbid the Breton language, resulted in language loss and a disconnection from their own cultural traditions, history, and memory.

The Modern Breton Movement

Beginning in 1968, France experienced a period of political and social upheaval that included linguistic and regional revitalization movements (Timm, 2003). As a result, Breton language immersion schools, called *Diwan* schools, were established in 1977. In addition to the *Diwan* schools, the French public state schools and private Catholic schools in Brittany also established bilingual classes beginning in the early 1980's in response to parental pressure in the region (Moal, 2000). Over the past 30 years, the Breton language movement has grown considerably and there have been some successes: bilingual road signs throughout Brittany, Breton radio broadcasts, the flourishing of Breton music festivals across Brittany, and Breton being studied at all levels of the education system. These successes have not been without tremendous effort and conflict both within the Breton community and the wider French society. For many Bretons, after centuries of French assimilation, there is resistance to the notion of a separate Breton identity and a disinterest in the struggle for language rights. For France as a nation, there has been much opposition to empowering the region with autonomy or providing the necessary resources to support and promote Bretons' efforts to save their language.

4. Theoretical Foundation

My research is grounded in the critical hermeneutic tradition, which looks at meaning and understanding as interpretation. In this theory language is central, for it is communication that is understood and interpreted, and language is the way we communicate. The important distinction about language in this framework is that it is not just a tool used for communication but is a part of our very being. Gadamer (1960/2004, p. 443) writes, "Language is not just one of man's possessions in the world; rather, on it depends the fact that man has a *world* at all." Given that my research explores language and identity, critical hermeneutics offers a theoretical frame to consider this topic in terms of deepening our understanding of who we are and how we can be in the world. Within critical hermeneutics, I have focused on three main themes to connect the

theory back to my specific research topic. These are language as being, narrative identity, and imagination.

4.1 Language as Being

Martin Heidegger's theory is concerned with understanding in terms of our ontological condition of being in the world. For Heidegger, there is a relationship between man and Being which is connected to his concept of identity as the *belonging-together* in Being. The question of identity is the question of who we are. Heidegger's (1969/2002, p. 31) answer is that Man is "the being who thinks, is open to Being...Man is essentially this relationship of responding to Being." He explains that Being is always present and is always making a claim on us. As we live out our lives, we are responding to this claim upon us, from which derives our identity. Our identity is also determined by and in our relationship with others, Heidegger (1969/2002, p. 26) explains, because "everywhere, wherever and however we are related to beings of every kind, we find identity making its claim on us." Language is central to Heidegger's theory of Being, because we think in language and language is our world. He states (1969/2002, p. 38), "Language is the most delicate and thus the most susceptible vibration holding everything within the suspended structure of the appropriation." By appropriation, Heidegger means our identity of belonging. Through this event of appropriation, we can leap beyond our particular frame and reach into the essence of identity (Heidegger, 1969/2002, p. 39).

4.2 Narrative Identity: Recognition of the Self and the Other

Paul Ricoeur's theory of interpretation focuses on narrative discourse and identity. He writes that discourse "refers to a world which it claims to describe, express, or represent" (Ricoeur, 1981, p. 133). This process is verbal, however it is not the words themselves that are conveyed, but their meaning, and this meaning is an interpretation. Ricoeur (1976, p. 16) explains, "My experience cannot directly become your experience...nevertheless, something passes from me to you...The experience as experienced, as lived, remains private, but its sense, its meaning, becomes public." Narrative identity describes the process by which we understand our lives through the stories we tell about our lives. Narrative is part of the linguistic and temporal dimension of our identity. As Ricoeur (1990/1992, p. 147) explains, "The person shares the condition of dynamic identity peculiar to the story recounted. The narrative constructs the identity of the character." Therefore the development of our identity occurs in the narrative realm, and this develops over time. A story has meaning for us because we can emplot the collection of experiences over time into a meaningful connection.

Narrative identity refers to the linguistic nature of our identity, but our stories are not created in isolation. Because our stories develop from living out our lives in relation with others, each of our stories intersects with the stories of others. Ricoeur (1990/1992, p. 161) describes this as the "entanglement of the history of each person in the histories of numerous others." Therefore narrative identity also includes the dimension of recognition of others within our stories, and ourselves within the stories of others. This implies an ethical component to

narrative identity, for narrative brings the world of the self and the world of the other together. These shared stories reveal the plurality of our experiences and our identity as belonging in and to community. Ricoeur (1990/1992, p. 3) writes, "*Oneself as Another* suggests from the outset that the selfhood of oneself implies otherness to such an intimate degree that one cannot be thought of without the other."

4.3 Imagination

Richard Kearney's theory of imagination further develops Ricoeur's concept of narrative identity by reinterpreting "the role of imagination as a relationship between the self and the other" (Kearney 1988, p. 363). Imagination allows us to imagine the *other*, which includes other possible interpretations or other ways of being. Imagination liberates us, as Kearney (1988, p. 366) writes, "in a way which animates and enlarges our response to the other rather than cloistering us off." In imagination there is a play of possibilities, which opens us to the poetic dimension of our world. Thus in our openness to the other through our imagination, we free ourselves from the immediacy of our reality and can include the other in our experience of this world.

Imagination, like narrative, is an act, and action has an ethical component because we act within a social context. In a world where there is conflict or injustice, imagination is necessary for change to occur because we need as a first step to "*imagine* that the world as it is could be *otherwise*" (Kearney 1988, p. 371). Kearney (1988, p. 390) suggests that we can tap into our narratives and use our imagination to retell our stories in a new way that also includes imagining the other in relation to our story. Through the retelling of our stories, we can reinterpret our traditions and experiences, which can lead to new understandings. This theory of imagination also underscores Ricoeur's ethical component of narrative identity because it proposes imagining a reinterpretation of the self, "which remembers its commitments to the other (both in its personal and collective history) and recalls that these commitments have not yet been fulfilled" (Kearney, 1988, p. 395). Through this lens, self-identity can be more broadly understood as communal identity. Likewise, understanding is not achieved within the individual as self-revelation but rather between people in discourse, tapping into their imaginative play to remember together and project together the connection of their stories and their responsibility to each other.

5. Research Process

My research process uses the critical hermeneutic research protocol developed by Herda (1999). This research involves conversations with participants, which are tape-recorded, transcribed, validated by participants, and then analyzed within an interpretive frame. In the context of critical hermeneutic inquiry, the conversations with participants become texts that allow for interpretation to take place. The purpose is "to create conditions whereby people can engage in discourse so that truth can be recognized and new realities can be brought into being" (Herda, 1999, p. 82). In order to explore Breton language and identity, I traveled to Brittany in October 2007 to meet with families who have children

enrolled in Diwan schools. In this paper, I present my analysis of one conversation I had with a Breton family, the Jehanno's.

6. Conversation and Analysis

6.1 Language as Being

Much of the conversation I had with this family centered around issues having to do with language as being, how language is something which touches the very core of who we are. In the grandparents' case, they grew up speaking Breton. The grandfather noted that there were some families who didn't speak Breton, "but for us, my family, we always spoke Breton. Walking down the street if I passed another guy, I would say hello in Breton." It was very interesting to learn that, despite their deep-rooted connection to the language, the grandparents only speak French together and they did not transmit the language to their son. When I asked them why this happened the grandfather said, "Well, we didn't have any opportunity to speak Breton when he was born. From the time we were married we only spoke French." The grandmother added, "Well, that's because we had left home. In our professional life we had to speak French. We always understood Breton but we didn't use it much."

Breton language identity for the grandparents is associated with their family history and the world of their childhood, but French was the language of their professional life and they assimilated into this French world because that was what was expected of them. When I asked them whether the decision to switch from Breton to French was a conscious choice, they both said absolutely not. They said it seemed natural to them because they already knew French and knew that they had no choice. The grandfather said, "Because you understand well when you're in that situation, the decision has already been made for you. It's true. They [the French] didn't know Breton, so we had no choice."

This resignation was made clear also in their decision to not teach their children Breton. I asked the grandfather whether it ever occurred to him to transmit the language to his children and he said, "No, no. Because people weren't speaking it then. It was something in the past. Well, because when we were younger, that's just how it was!" When I asked the father what he thought about this he said, "Unconsciously I think that's what caused a rupture between my parents, and all the parents of their generation, with their children." This tension around the language gap between the generations is a common experience in Breton families today, especially for Bretons of the parents' generation who are now involved in the language revitalization movement. In fact, their desire to save the language is often driven by their feelings of loss having not learned the language from their own parents. The father said,

I didn't have a chance to learn Breton...The bond with my family's language was cut. However, the fact that my children are in the immersion schools, I feel I have given them this chance to know the language, and everything that goes along with it...it's that connection that I couldn't have with my own parents.

Even though the father does not speak Breton, he identifies strongly with being Breton because of his family history and because of his commitment to saving the language and raising his children to be bilingual. During the conversation he said,

I consider a region or a country to not have an identity if it doesn't have a language. So in France, everyone is French...except when they introduce themselves they say, I am Breton, I am Basque, I am Corsican...We are not all the same in France. Being the same means nothing in France, because we don't all share the same language.

Both the positive connections of the language to one's identity, and the sense of deep loss associated with disconnection from one's language, became a part of this text. The grandparents have Breton as their language of origin, where their experience of belonging is rooted to the world which the Breton language discloses. These roots run deep and the grandparents carry the meaning of this world within them to this day. Their story also includes their crossing over into the French language world, and in some ways abandoning their Breton way of being. Their story reflects separation of identity, and assimilation of a new identity, and yet it is clear that their connection to being Breton speakers remains within them despite their linguistic distance from the language as adults.

The father's story is very different from the grandparents. His language has always been French, but he grew up with an awareness of another world through his exposure to his parents and grandparents speaking Breton around him. Whereas his parents lived within both worlds, the father seems to have felt stuck within one world (French) while being compelled by the other (Breton). The father described this as a rupture in the relationship between him and his parents. It is as if, by bringing the Breton language back into his home through his children, he has found a way to reach into the other world that he needed to discover in order to feel grounded in his being. The father described this saying, "And through this we are undergoing a return...we are trying to recover what was lost."

6.2 Narrative Identity: Recognition of the Self and the Other

It is through narratives that perspectives on identity emerge and understanding of oneself develops. This identity connects the self with the other through different forms of recognition. Stories of both recognition of the self and the other were presented in this conversation in different ways. For example, even though the father doesn't speak Breton, he told stories that emphasized his commitment to the culture and his identification with the language movement, which forms his sense of belonging to that community. In contrast to the father, the grandparents' narrative revealed their identity as Breton speakers, and their experience of belonging to the language. The grandfather told me,

Just the other day, I ran into a guy in Saint-Ave, and we started to speak. I must have said something, used a Breton word, I don't know what, and he caught me. He asked, are you Breton? I said, of course, I'm Breton! And then we spent a half-hour talking in Breton, discussing everything..and I didn't even know him!

These stories of recognizing oneself with others who share the quality of sameness reveal the importance of being able to see who we are in terms of

where, how, and to whom we belong. Ricoeur (1990/1992, p. 121) writes, "The identity of a person or a community is made up of these identifications with values, norms, ideals, models, and heroes, in which the person or community recognizes itself."

Within this conversation there were also stories about recognition of the self as different. For example, the grandmother said, "In our era, there was no notion of leaving home, because the outside world was bad. We thought it was dangerous...so we all stayed in the region." Likewise, the father discussed his sense of otherness amongst fellow Bretons, both within his family because he could not speak Breton with them, but also with Bretons who do not support the Breton movement. The father explained, "The Breton culture in general was not seen well. People rejected the Breton culture completely. We were ridiculed. For them we were seen as stupid peasants for wanting to bring back the culture!" This conflict of identity within Breton culture also emerged when the parents talked about the difficulty of their decision whether to send their son to a Diwan high school next year. The mother explained, "You have to realize that it's very unique, this way of educating children in a language which is not the official language of the country, even if it is the language of this region. It's a choice that not everyone will understand." The father added, "Yes, even in Brittany with 3 million people, when we tell some people that we send our children to a Diwan school, there are people who think that's horrific. They think we are raising our children to be militants." This identity as other distances oneself from others in its recognition as such. This is identification as comparison rather than as sameness. Ricoeur (1990/1992, p. 125) writes, "It is indeed by comparing a thing with itself in different times that we form the ideas of identity and diversity." This comparative aspect of self and demarcation of difference is one of our processes of recognizing who we are in relation to who others are, but it does risk leaving us in a position of separation or isolation if we cannot reach across those differences.

After discussing many details of each family members narrative related to identity, recognition, and belonging, I asked them each to tell me in summary how they would describe their identity. The grandfather answered that he is Breton. I asked what it means then for him to identify as Breton but to be a part of France, and he said, "To be in France, ah yes, we are obligated to be a part of France. But I am always Breton, I will always stay Breton. Of course, I am French too, but if you ask me what I am, I tell you that I am Breton. That's it." The father answered, "For me, I am Breton, and after that, I have a French identity card, but culturally I am Breton...To say I am Breton means that I live in Brittany and I defend the culture...for me it's not about geography. It's my heart."

6.3 Imagination

Imagination opens us to the other, and allows us to imagine other possibilities of being, which can lead to transformation of the self and transformative action. Imagination can be challenging for it requires looking beyond what *is* to what *could be*. This challenge was evident in the conversation with the family. For example, in discussing the future of the Breton language, the father said, "Today there are 250,000 Breton speakers, at least that's what the statistics tell us, but I don't believe that we're going to greatly increase those numbers. I don't think it's realistic." The struggle to imagine a new story is also a struggle deep within the heart of French national identity. I asked the family why they think France is so reluctant to recognize the Breton language, or any of their minority languages. The father answered,

Because if they were to recognize that in Brittany there are two languages, because that is what we are demanding, for Breton to have the same status as French, that would mean they would have to acknowledge that France is not really one unified country.

The mother added,

It goes back to the French Revolution. The revolutionaries chose French to bring about this communal ideal of France being for everyone...So France means to speak French. It is out of the question to see it any other way because that is how it was constructed.

When I pushed the parents to consider the possibility for a change in this view, the father said,

Yes! I can imagine it in the sense that not very far from here that has happened - in Wales. Welsh now appears in the media, on television, and everywhere. In Scotland it's the same. If you travel to Spain too...It would suffice to change one article of the Constitution to fix the problem, so it would say that the language of this country is not only French but could be another.

Imagination gives us the freedom to see other worlds of possibility and to engage in the world and with others in new ways. Whenever we are stuck in social conflict, there is likely a crisis of imagination occurring. Imagination is what is required to get us out of those conflicts. Imagination asks us to consider the other "who addresses me at each moment and asks me *who I am* and *where I stand*" (Kearney, 1988, p. 395). Ultimately, the text of this conversation with the family revealed the difficulty that any one person, or any community, has in imagining a different future. Likewise, imagining the other is a challenging task of the self, especially when imagining the self is complicated by conflicting ideas of belonging and identity. But what are our options? If we do not use our imagination to retell our stories, to rethink of the self as in relation to the other, and from that build a new narrative moving forward in community with the other, we are left in a liminal stage: betwixt and between the conflicts of the past with the struggles of the present and the impossibilities of the future. This is summarized by the father who said,

But the problem with languages is that it is much easier to destroy them than to construct them. What has been destroyed here or undervalued, it would take, well, there will never be enough years to bring it back to where it was before. Today we can only save what still remains.

7. Implications

As the conversation with the family revealed, the question of language, identity and belonging in Brittany is complex and has different interpretations formed out of the life experience of individuals. This is why the stories of individuals must be explored in order to reach understanding. Change cannot occur without understanding. Understanding begins with discourse, with sharing our stories in order to find meaning in and continue to shape our personal and communal identity. One of the implications of this study is the value in having these family conversations. These conversations could expand beyond the family circle to other community circles, linking people together through discourse, which could lead to change in action, as responsibility of the self in community with the other became more and more a reality.

Another implication of this study is that Bretons who have a connection to the language (whether it is through their own fluency or their children's fluency) have a strong Breton identity, and in fact consider themselves more Breton than French. Therefore, the link is made between language and identity, and the implication is that efforts to save a language can also strengthen cultural identity. This also means that the French government's insistence on the image of a unified country is not only fictional, but will continue to impede the possibilities for resolution to the conflict between the nation and their minority groups, and for re-imagination of French identity that truly is reflective of its citizens. At a period in our history when pluralism and differentiation is on the rise, how can a nation respond? How can diverse cultural and linguistic groups be included? As is evident in Brittany, even with some success of an immersion education program, language revitalization remains a challenge if there is not enough community and political support. Most importantly, diversity cannot be addressed unless genuine discourse about issues of diversity can occur across that diverse community. It is in everyone's interest to recognize the multiplicity of narratives within a society.

8. Summary

Language and identity are intimately inter-related: from our condition of being in this world as linguistic beings; through the way in which our world comes into being in our language; to the narrative nature of our lives; and to the unfolding identification of self through the expression of self in relation to others, with others, and in otherness. Understanding the significance of their connection is crucial if one wants to understand the multiplicity of *meanings of being* in the world today. This understanding would create room for possibilities of resolution to conflicts that have erupted around our globe. Resolution of conflict and reaching understanding are indeed possible for any person or community of people, for, as Herda (1999, p. 1) writes, "we need to acknowledge and understand that humans have the capacity to live in community and to address and solve problems together in organizations and social settings." It is the next generation of Bretons, the children who are retracing their roots, returning to their history and the language, living out a bilingual life as citizens of France, with pride in their Breton identity, who will bridge the gap between the language

and identity conflict of their parents and grandparents, and bring forth a new understanding of a modern Breton identity that is their own. But dialogue needs to begin now, and imagination needs to be recovered, so these children can learn to retell the stories in a new way which will inform their future actions.

References

- Ager, D. (1999). *Identity, insecurity and image: France and language*. Clevedon: Multilingual Matters Ltd.
- Gadamer, H-G. (2004). *Truth and method* (2nd revised ed.). (J. Weinsheimer & D. G. Marshall, Trans.). New York and London: The Continuum International Publishing Group. (Original work published 1960).
- Geertz, C. (2000). *Available light: Anthropological reflections on philosophical topics*. Princeton, NJ: Princeton University Press.
- Heidegger, M. (2002). *Identity and difference*. (J. Stambaugh, Trans.). Chicago: University of Chicago Press. (Original work published 1969).
- Herda, E. (1999). *Research conversations and narrative: A critical hermeneutic orientation in participatory inquiry*. Westport, CT: Praeger Publishers.
- Kearney, R. (1988). *The Wake of imagination*. London: Routledge Press.
- Laroche, J. M. (1999). *Linguistic pluralism in France*. Report. Electronic document 426621. Retrieved November 20, 2007 from <http://www.eric.ed.gov/>.
- Moal, S. (2000). Broadcast media in Breton: Dawn at last? *Current Issues in Language and Society*, 7(2), 117-134.
- Oakes, L. (2002). Multilingualism in Europe: An effective French identity strategy? *Journal of Multilingual and Multicultural Development* 23(5), 371-387.
- Ricoeur, P. (1976). *Interpretation theory: Discourse and the surplus of meaning* (6th ed.). Texas: Texas Christian University Press.
- Ricoeur, P. (1981). *Hermeneutics and the human sciences*. (J. B. Thompson, Trans.). Paris: Cambridge University Press, Editions de la Maison des Sciences de l'Homme.
- Ricoeur, P. (1984). *The creativity of language in dialogues with contemporary continental thinkers*. Manchester: Manchester University Press.
- Ricoeur, P. (1992). *Oneself as another*. (K. Blamey, Trans.). Chicago and London: The University of Chicago Press. (Original work published 1990).
- Throsby, D. (2000). Paying for the past: The economics of cultural heritage. In *World culture report*. Paris: UNESCO.
- Timm, L. A. (2003). Breton at a crossroads: Looking back, moving forward. *Journal of Interdisciplinary Celtic Studies* 2, 25-61.

Transition of Rural High School Youth into Post-secondary Education: Challenges and Issues

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Abstract

In the Canadian province of Newfoundland and Labrador about two-thirds of the school-aged population is located in rural schools. Many of these students must complete required high school courses on-line because courses are not available locally. To better understand how the post-secondary education decisions of these students are influenced, 1,169 graduating students at 72 rural schools across the province were surveyed. The survey addressed several transition issues and challenges along with demographic variables. The most prominent student concerns related to financial and academic issues, and career planning. The results of logistic regression analyses indicated that rural students' decisions to continue education at the post-secondary level are strongly influenced by academic factors, and that first-generation students and students who do not consider student loans to be a funding option for them are at a particular disadvantage. The results also suggested that the choice between university and non-university studies is significantly impacted by academic factors, gender, and after school activities. Completion of on-line courses in high school was not a significant factor in the regressions.

Keywords: transition - post-secondary education - rural students

1. Introduction

The success of the Canadian economy is increasingly predicated on a high-skills/high-wage economic strategy – a strategy which presumes the availability of a large pool of post-secondary educated workers. Figures cited by the government of Canada suggest that the numbers of jobs requiring post-secondary education are increasing on an annual basis and that upwards of two-thirds of new job openings in the next ten years will be in occupations requiring some form of advanced education (Canada, 2007). With the 'baby boom' generation moving toward retirement, it appears that a larger proportion of Canada's young adults will need to complete post-secondary education and training if future workforce requirements are to be met.

The research literature provides few details about how Canadian secondary school students consider and choose their post-graduation destination, be it the workforce or further study. However, considerable study has been given to students' college choices in the United States (Lapan, Tucker, & Kim, 2003). This body of research has been directed toward gaining a better understanding of how

students make decisions about post-secondary education opportunities. Important influencing factors include student academic ability; encouragement, expectations and educational attainment of parents; parental income and socio-economic status; teachers and guidance counsellors; race and ethnicity; and gender (Hossler, Schmit, & Vesper, 1999; McDonough, 1997; Sandefur, Meier, & Campbell 2006; Stage & Hossler, 1989).

Student choices about post-secondary education are strongly correlated with parental educational attainment (Andres & Krahn, 1999; Barr-Telford, Cartwright, Prasil, & Shimmons, 2003; Choy, 1999, 2001; Hango & de Broucker, 2007; Lowe & Krahn, 2000) and the family income levels (Bell & Anisef, 2005; Butlin, 1999; Corak, Lipps, & Zhao, 2003). Lower parental educational attainment levels and household incomes tend reduce the probability of post-secondary participation. In her study of the relationship between participation in post-secondary education and family background, Drolet (2005) concluded that, "when taking account of both parental education and parental income, university participation rates are more strongly associated with parents' level of education than with their income" (p. 4).

As Deschenes (2007) points out, there is a "strong correlation between the educational attainment of parents and children, which may contribute to the transmission of socio-economic status and inequality across generations (p. 271)." Research has shown that the higher the socio-economic status of parents, the *higher* their children's educational plans extend. Students from more affluent backgrounds are more likely than lower-status youth to pursue post-secondary studies, and when they do go on to participate in post-secondary study higher-status youths are more likely to attend university rather than other types of post-secondary education such as community colleges (Boyle, & Lipman, 2002; Butlin, 1999; Christofides, Cirello, & Hoy, 2001; Corak et al., 2003; Hossler et al., 1999; Looker & Lowe, 2001; McDonough, 1997; Statistics Canada, 2001).

1.1. Rural Youth

Numerous studies of youth transition from high school have found that urban Canadian youth are more likely to attend university than rural youth (Andres & Looker, 2001; Finnie, Lascelles, & Sweetman, 2005; Frenette, 2004, 2006, 2007; Hango & de Broucker, 2007; Shaienks & Gluszynski, 2007). A variety of explanations for this difference in participation have been advanced including the effect that proximity to a post-secondary institution has on one's decision to enrol in post-secondary studies. Associated with this is the fact that rural students often must necessarily incur the additional living expenses that are associated with living away from home (Barr-Telford et al.; 2004; Finnie, 2002).

A number of studies have found that rural students have different educational and occupational aspirations than those of urban students (Bajema, Miller, & Williams, 2002; Conrad, 1997; Haller & Virkler, 1993). There is also evidence to suggest that rural youths who do choose to continue their education at the post-secondary level are more likely to enrol in a non-university program (Newfoundland and Labrador, 1998; Shaienk & Gluszynski, 2007). These differences have been attributed to the socio-economic conditions in rural communities (Conrad, 1997; Dupuy, Mayer, & Morissette, 2000; Haller & Virker,

1993), the relatively smaller numbers of higher status role models in rural areas compared to that of urban communities (Apostal & Bilden, 1991; Cahill, 1992), and differences in the career aspirations of rural and urban individuals (Bajema, et al, 2002; Conrad, 1997; Marshall, 2002; McCracken & Barcinas, 1991).

While relatively little is known about the types of information sources that rural students specifically consult in making post-secondary choices, research has shown that Canadian youth tend to rely on parents, friends, teachers and guidance counsellors for advice with post-secondary education plans (Bell & Bezanson, 2006; Looker & Lowe, 2001; Sharpe & Spain, 1991; Sharpe & White, 1993).

1.2. Theoretical Models

1.2.1. Social and Cultural Capital

Differences in the post-secondary participation behaviours between youths of differing socio-economic backgrounds have been accounted for using the theories of cultural and social capital. Cultural capital, conveyed from parents to children, is the sum total of all of the intangible goods, such as the milieu and leisure time that fosters intellectual and cultural reflection, that sustain and predict the academic success and ambition of those in the middle- and upper-income strata. Bourdieu (1977, 1986) argues that the cultural capital inherited by those in the middle- and upper-class produces a confidence and disposition that is a very strong indicator of academic and social success.

Social capital is a form of capital that facilitates the transaction and the transmission of different resources among individuals through their relationships for mutual benefit (Coleman, 1988; McDonough, 1997). Those individuals who have access to information about post-secondary education through their social networks have greater access to cultural capital and are more likely to be at an advantage in accessing and understanding information and attitudes relevant to making decisions about their post-secondary options.

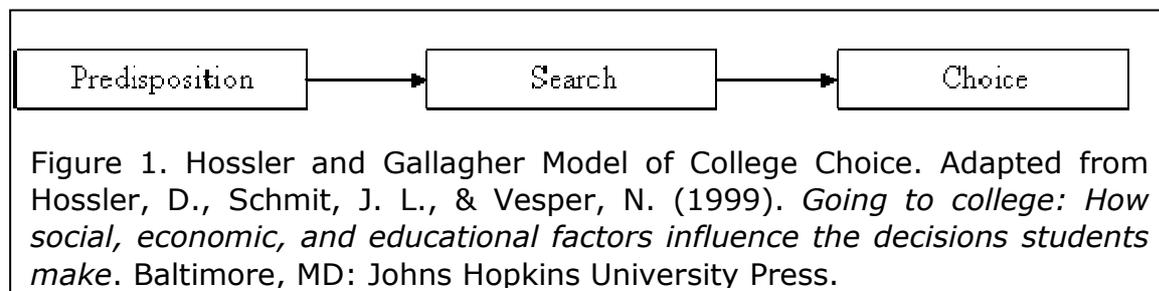
In the case of rural student post-secondary education participation rates, theories of cultural and social capital are a useful tool in examining why there are lower rates of participation amongst rural populations even where their income is comparable to or greater than their urban counterparts.

1.2.2. Student Choice Model

McDonough (1997) outlines the three basic approaches that have been taken in the study of college choice decision-making. These include:

1. social psychological studies, which examine the impact of academic program, campus social climate, cost, location, and influence of others on students' choices; students' assessment of their fit with their chosen college; and the cognitive stage of college choice;
2. economic studies, which view college choice as an investment decision and assumes that students maximize perceived cost-benefits in their college choices; have perfect information; and are engaged in a process of rational choice; and
3. sociological status attainment studies, which analyze the impact of the individual's social status on the development of aspirations for educational attainment and measure inequalities in college access. (p. 3)

Several conceptual models have outlined the stages of students' post-secondary decision-making (Cabrera & La Nasa, 2000; Chapman, 1981; Hossler & Gallagher, 1987). The current study takes into account the conceptual model developed by Hossler and Gallagher (1987). This model, illustrated in Figure 1 below, identifies three key phases of post-secondary choice decisions: predisposition, search and choice. This model is particularly useful in considering the sequencing of factors that impact the decision-making process for students and parents and the role of guidance officials and other external influences.



In first phase, the predisposition phase, high school students begin to see post-secondary education as an important step in achieving their personal and occupational goals. During the search stage, students refine their options, develop preferences and consider sources of funding and admission qualifications. In the final phase, the eventual choice made by students is influenced by both economic and sociological factors.

While a small number of research studies have examined student transitions from secondary school to post-secondary education in Newfoundland and Labrador (Boak & Boak, 1989; Sharpe & Spain, 1991; Sharpe & White, 1993), they have not examined the post-secondary participation decisions of rural students specifically. The focus of this research study was to examine various characteristics and behaviours that influence rural high school students' post-

secondary education decisions. Hossler and Gallagher's (1987) choice model and the results of earlier Canadian studies of youth transition were used to select factors that were incorporated into the survey questionnaire regarding students' post-secondary plans.

2. Methodology

2.1. Survey Participants

The province of Newfoundland and Labrador has a proportionally larger rural population than Canada as a whole. Approximately 40% of the province's population resides outside centres with a population of 1,000. Most (65%) of the province's 285 schools are designated as rural (Newfoundland & Labrador, 2006). We surveyed graduating students at 72 of these rural schools with a combined population of 2,113 students in their final year of studies. Teachers at these schools administered questionnaires during classroom time at the end of the 2007 school year. Of the 2,113 eligible participants, 1,169 students completed surveys for an overall response rate of approximately 60%.

2.2. Outcome Variables

Two outcomes related to rural students' post-secondary education decisions were selected for regression analysis. First, we examined whether or not students planned to pursue post-secondary level studies after completing high school. Next, amongst the students who indicated an intention to continue with further studies after high school, we examined if students chose a university program or a non-university program.

2.3. Predictor Variables

Drawing on findings of previous Canadian studies of youth transition to post-secondary education (Anisef, Frempong, & Sweet, 2005; Davies, 2005; Finnie et al., 2005; Frenette, 2004, 2006, 2007; Hango & de Broucker, 2007; Looker & Dwyer, 1998), a questionnaire was designed to collect information from rural students about various demographic and academic performance variables that have been shown to influence students' post-secondary transitions. The questionnaire included questions about students' after school activities, students' sources of information about further studies, and potential sources of funding for post-secondary education. Table 1 provides descriptions of the operational definitions used for each of the predictor variables in the regression models.

Table 1: Description of Independent Variables in the Regression Models

Variable	Description
<i>On-line course enrolment</i>	0 = no, 1 = yes
<i>Demographic characteristics</i>	
Gender	0 = male, 1 = female
Number of siblings	Number of brothers/sisters
Family Structure	0 = one parent, 1 = two parent, 2 = other, dummy coded with one parent as reference category
Generation	0 = first generation, 1 = second generation
<i>After School Activities</i>	
Works part-time, Volunteers, Homework, Extracurricular	Survey question: "How have you spent your time after school and on weekends this school year?" 0 = no, 1 = yes
<i>Academic Performance</i>	
Grade 12 math	0 = none, 1 = practical/basic, 2 = academic, 3 = advanced, dummy coded with none as reference category
Overall achievement	Self-reported overall average mark in school
<i>Sources of Information</i>	
Friends, Parents, Siblings, Post-secondary students, teachers, Guidance counsellors, Campus tour, Promotional brochures, Other advertising, Recruitment official	Survey question: "Listed below are people and sources of information that students often rely on when deciding what to do after high school." Rating on a scale of 1 to 5, with 1 being 'not important at all' and 5 being 'very important',
<i>Sources of Funding</i>	
Unsure, Summer job, Work during academic year, Scholarship/bursary, Student Loan, Private loan, Personal savings, Tuition voucher	Survey question: "Besides your family, which of the following can you rely on to help pay for post-secondary education?" 0 = no, 1 = yes

As shown in Table 1, in addition to a variable indicating student enrolment in on-line courses in high school, four "demographic characteristic" variables were included in the model for this analysis: gender, number of siblings, family structure and whether students were "first-generation" students or "second generation" students. The family structure variable was operationalized in accordance with the number of parents or guardians that children lived with – one parent, two parents or other for students who reported alternative living arrangements. The "first-generation" student group was comprised of students whose parents did not complete post-secondary studies while the "second generation" group consisted of students who have one or more parents who completed a post-secondary program at college or university.

Academic performance was measured by two variables. The type of mathematics course completed in Grade 12 (none, basic, academic or advanced) was used as a proxy for the academic rigor of the high school curriculum completed by students. Students' self-reported overall academic average at school was used to assess their level of overall academic achievement.

Students' participation in after school activities was assessed by responses to the following question: "How have you spent your time after school and on weekends this school year?" The four forced-choice responses to this question included: working part-time, volunteering, homework, and extracurricular activities (e.g., sports, clubs).

The sources of information that students accessed in making their career decisions were appraised by student responses to the following survey item: "Listed below are people and sources of information that students often rely on when deciding what to do after high school." Each of the following 10 potential information sources were rated by respondents on a Likert-type scale (5 = very important to 1 = not important at all): friends; parents; brothers or sisters; college or university students; high school teachers; guidance counsellor; college or university campus tour; promotional materials/ brochures; television or print advertising; and recruitment officer from a post-secondary institution.

The final set of predictor variables were derived from a survey question that asked students the following: "Besides your family, which of the following can you rely on to help pay for post-secondary education?" Responses included: unsure; summer job; work during the academic year; scholarship/bursary; student loan; private bank loan; personal savings and tuition voucher.

2.4. Student Concerns

The survey questionnaire also presented several statements associated with possible difficulties that students may face in making the transition from secondary school to post-secondary education (e.g., finances, living away from home, academic preparation, making new friends) and requested that students rate their level of concern regarding each item on a Likert scale with 1 being "not concerned" and 5 being "very concerned". These items were not included in the regressions.

3. Results

3.1. Descriptive Statistics

Of the 1,169 surveys completed, useable data were available for 1,161. Descriptive statistics for the outcome variables and selected demographic characteristic and academic performance and predictor variables are provided in Table 2. Only 12.1% of the students indicated that they were not planning to participate in some form of post-secondary education. Of the students who indicated their post-secondary preference, most (58.2%) did not plan to attend university. Over one quarter (26.8%) of the students in the study completed on-line distance courses in high school. More of the students were second generation students (57.1%), and 50.8% had completed an advanced-level math course in Grade 12.

Table 2: Descriptive Statistics for Selected Demographic Characteristic and Academic Performance Variables

Variable		Model 1			Model 2*		
		% Going to PSE (87.9%)	% Not Going to PSE (12.1%)	% Total	% University (41.8%)	% Non-University (58.2%)	% Total
On-line Courses	Yes	27.6	20.9	26.8	32.4	24.6	27.9
	No	72.4	79.1	73.2	67.6	75.4	72.1
Gender	Male	45.9	58.6	47.5	30.5	56.3	45.5
	Female	54.1	41.4	52.5	69.5	43.8	54.5
Generation	First	40.1	63.6	42.9	32.2	45.8	40.0
	Legacy	59.9	36.4	57.1	67.8	54.2	60.0
Family Structure	1 parent	16.5	25.5	17.3	12.4	19.2	16.4
	2 parent	81.4	73.6	80.7	86.1	78.2	81.5
	other	2.1	0.9	2.0	1.5	2.6	2.1
Grade 12	None	3.6	11.5	4.6	0.2	5.7	3.4
	Basic	18.3	46.8	21.7	1.0	29.4	17.5
	Academic	23.4	18.7	22.9	18.6	26.8	23.4
	Advanced	54.6	23.0	50.8	80.1	38.1	55.7

*

A number of students did not provide an indication of their choice (i.e., university/non-university).

With regard to their after school activities, 83.6% of rural students indicated that they spent some of their time after school completing homework assignments (see Table 3). The second most common type of after school activity selected was extracurricular activity such as sports or clubs (64.9%).

The 3 sources of information that students relied on most when making their plans for after high school were 1) parents, 2) friends and 3) teachers (see Table 4).

Table 3: Descriptive Statistics for Students' After School Activities

Variable		Model 1			Model 2		
		% Going to PSE	% Not Going to PSE	% Total	% University	% Non-University	% Total
<i>After School Activities</i>							
Part-time work	Yes	32.1	22.2	30.9	35.8	29.3	31.9
	No	67.9	77.8	69.1	64.2	70.7	68.1
Volunteering	Yes	40.2	25.4	38.4	55.0	29.8	40.3
	No	59.8	74.6	61.6	45.0	70.2	59.7
Homework	Yes	85.5	69.3	83.6	98.5	77.0	86.0
	No	14.5	30.7	16.4	1.5	23.0	14.0
Extracurricular	Yes	67.6	45.3	64.9	79.5	59.5	67.8
	No	32.4	54.7	35.1	20.5	40.5	32.2

Table 4: Mean Values for Students' Sources of Information

Variable	Model 1			Model 2		
	% Going to PSE	% Not Going to PSE	% Total	% University	% Non-University	% Total
Friends	3.13	3.35	3.16	3.01	3.22	3.13
Parents	3.77	3.65	3.76	3.80	3.75	3.77
Siblings	2.75	3.17	2.80	2.72	2.75	2.74
College or university students	2.82	2.40	2.77	2.98	2.72	2.83
Teachers	3.07	2.90	3.05	3.29	3.08	2.93
Guidance counsellors	2.77	2.60	2.75	2.89	2.70	2.78
Campus tour	2.44	2.01	2.39	2.51	2.40	2.45
Promotional materials	2.58	1.95	2.51	2.67	2.53	2.59
Advertising	1.94	2.16	1.96	1.86	1.99	1.94
Recruitment officer	2.48	2.14	2.44	2.77	2.28	2.49

As reported in Table 5, the students’ anticipated primary sources of funding, aside from their family, were income from a summer job (67.9%), a student loan (61.3%) or employment income earned during the school year (51.3%). Only 7.1% of students indicated that they did not know of any source of funding that they could rely on other than their family.

Table 5: Descriptive Statistics for Sources of Funding for Post-Secondary Education

Variable		Model 1			Model 2		
		% Going to PSE	% Not Going to PSE	% Total	% University	% Non- University	% Total
Unsure of funding	Yes	4.9	23.4	7.1	2.7	5.5	4.3
	No	95.1	76.6	92.9	97.3	94.5	95.7
Summer job	Yes	71.1	45.4	67.9	80.4	66.6	72.4
	No	28.9	54.6	32.1	19.6	33.4	27.6
Work during year	Yes	52.1	46.1	51.3	45.9	56.4	52.0
	No	47.9	53.9	48.7	54.1	43.6	48.0
Scholarship/bursary	Yes	36.6	12.1	33.6	56.6	23.4	37.3
	No	63.4	87.9	66.4	43.4	76.6	62.7
Student loan	Yes	64.6	37.6	61.3	66.8	64.9	65.7
	No	35.4	62.4	38.7	33.2	35.1	34.3
Private bank loan	Yes	8.6	11.3	8.9	6.8	10.5	9.0
	No	91.4	88.7	91.1	93.2	89.5	91.0
Personal savings	Yes	33.1	21.3	31.6	38.8	29.5	33.4
	No	66.9	78.7	68.4	61.2	70.5	66.6
Tuition voucher	Yes	18.3	3.5	16.5	32.4	9.0	18.8
	No	81.7	96.5	83.5	67.6	91.0	81.2

3.2. Student Concerns

Table 6 outlines students’ top five and bottom five concerns about making the transition from high school to post-secondary education. Students were most concerned about financial issues (“Having money to support yourself” and “Getting money for tuition and books”), academic issues (“The level of difficulty of program” and “Your high school preparation”) and their “career plans”.

Table 6: Student concerns about transition from high school

Top 5 Concerns	<i>M</i>	<i>SD</i>	Bottom 5 Concerns	<i>M</i>	<i>SD</i>
Having money to support yourself	3.70	1.33	Child care responsibilities	1.53	1.04
The level of difficulty of program	3.49	1.18	Using computer technology	2.06	1.12
Getting money for tuition and books	3.32	1.38	Your reading skills	2.08	1.23
Your high school preparation	3.12	1.15	Size of the college/university	2.26	1.18
Your career plans	3.15	1.31	Making new friends	2.35	1.23

3.3. Logistic Regression Analyses

In recent years, logistic regression analysis has increasingly been employed in post-secondary education and higher education research (Anisef et al., 2005; Arbona & Nora, 2007; Madgett & Bélanger, 2007; Peng, Lee, & Ingersoll, 2002; Wright, Scott, Woloschuk, & Brenneis, 2002; Perna, 2000). As with previous studies, logistic regression was selected as it can be used to predict which one of two categories an individual will belong to given a number of independent predictor variables. Logistic regression was used to examine the significance of the variables in two hypothesized models (described below) which reflect the research questions.

3.3.1 Model One: Choosing Post-Secondary Education

The first logistic regression was performed to assess the impact of selected factors on the likelihood that students would report that they planned to continue on to post-secondary education after finishing their final year of high school (coded 1) versus not continuing on to post-secondary education (coded 0). The 28 predictor variables entered into the logistic regression equation included 3 demographic characteristic variables, 4 student after school activity variables, 2 academic performance variables, 10 post-secondary information source variables and 8 post-secondary funding source variables.

The full model with all predictors included was statistically significant, $\chi^2(29) = 319.50$, $p < .001$, indicating that the model was able to distinguish between students who reported and did not report an intention to pursue post-secondary studies. The model as a whole explained between 27.1% (Cox and Snell R square) and 59.7% (Nagelkerke R squared) of the variance in student choices, and correctly classified 93.4% of cases. Table 7 reports the regression results for the 12 predictor variables that made a unique statistically significant contribution to the model.

Completion of on-line distance courses in high school was not a significant factor in the first regression. With all other factors held constant, second generation students were more likely to indicate that they planned to continue on to post-secondary education than first-generation students. In fact, the odds that second generation students planned to continue to the post-secondary level was 2.5 times greater than the odds for a first-generation student.

Compared to students who completed no Grade 12 math, the odds that students who completed an academic math course planned to pursue post-secondary education was 4.627 times greater. However, the strongest predictor that students would choose post-secondary studies was the completion of advanced-level Grade 12 mathematics, recording an odds ratio of 9.06. This indicated that students who planned to continue on to post-secondary education after high school were over 9 times more likely to have completed a Grade 12 advanced math course as compared to students who did not complete any math in Grade 12, controlling for other factors in the model. Further, the odds ratio of 1.121 for student's self-reported overall academic performance indicated that for every 1%

increase in student overall average grades, students were 1.121 times more likely to intend to participate in post-secondary education.

Table 7: Logistic Regression Predicting Rural High School Students' Likelihood of Choosing Post-Secondary Studies

Predictor	β	SE β	Wald's χ^2	df	p	Odds Ratio	95% C.I. for Odds Ratio	
							Lower	Upper
<i>Demographic characteristics</i>								
Generation	.92**	.34	7.38	1	.007	2.50	1.29	4.86
<i>Academic Performance</i>								
Academic math vs. none	1.53**	.57	7.20	1	.007	4.63	1.51	14.17
Advanced math vs. none	2.20**	.58	14.36	1	.000	9.06	2.90	28.35
Overall achievement	.11***	.02	29.81	1	.000	1.12	1.08	1.17
<i>Sources of Information</i>								
Parents	.63***	.16	14.76	1	.000	1.88	1.36	2.59
Siblings	.90***	.16	29.71	1	.000	.41	.30	.56
College or university students	.83***	.19	20.16	1	.000	2.30	1.60	3.30
Teachers	-.37*	.17	4.71	1	.030	.69	.49	.96
Promotional materials	1.00***	.22	20.92	1	.000	2.71	1.77	4.16
Other Advertising	-.49**	.18	7.24	1	.007	.61	.43	.88
<i>Sources of PSE Funding</i>								
Unsure of funding	-1.11*	.47	5.56	1	.018	.33	.13	.83
Student loan	1.16**	.36	10.12	1	.001	3.18	1.56	6.49

Note: $R^2 = .523$ (Hosmer & Lemeshow), .271 (Cox & Snell), .597 (Nagelkerke). Model $\chi^2 (29) = 319.60$, $p < .001$. * $p < .05$, ** $p < .01$, *** $p < .001$.

Results of the logistic regression indicated that, among rural students, the likelihood of post-secondary educational plans was influenced by a number of information sources in the post-secondary choice process. Students who relied on their parents, post-secondary students and promotional materials from post-secondary institutions as sources of information in deciding what to do after high school were more likely to have plans to partake in post-secondary education. In contrast, students were less likely to have post-secondary plans if their key sources of information were their siblings, their high school teachers or newspaper, magazine, or television advertising.

Students' post-secondary plans were uniquely influenced by the sources of education financing on which they felt they could rely. Students who were uncertain that they could rely on any other source aside from their parents were 33% less likely to have plans to continue on to post-secondary education. However, those students who felt they could rely on student loans as a source of funds were 3.182 times more likely to have post-secondary plans.

3.3.2 Model Two: Choosing University

Table 8 below includes the predictor variables that made a statistically significant contribution to the second logistic regression model. This second regression analysis was carried out to assess the impact of selected factors on whether students planned to attend university (coded 1) or a non-university post-

secondary program (coded 0) after high school. As before, 28 predictor variables were entered into the regression equation. As with the first model, completion of on-line courses in high school was not a significant factor in the second regression. The statistically significant model was able to differentiate between students who intended to pursue university and non-university education, $\chi^2(29) = 645.78$, $p < .001$. The model explained between 52.7% (Cox and Snell R square) and 70.9% (Nagelkerke R squared) of the variance in student choices, and correctly classified 94.7% of cases.

Table 8: Logistic Regression Predicting Rural High School Students' Likelihood of Choosing University-Level Studies

Predictor	β	SE β	Wald's χ^2	df	p	Odds Ratio	95% C.I. for Odds Ratio	
							Lower	Upper
<i>Demographic characteristics</i>								
Gender	.99***	.24	16.54	1	.000	.38	.23	.60
<i>After School Activities</i>								
Works part-time	.89**	.26	12.07	1	.001	2.44	1.48	4.03
Volunteers	.64**	.24	6.82	1	.009	1.89	1.17	3.04
Homework	2.13**	.70	9.25	1	.002	8.44	2.13	33.35
Extracurricular	.55*	.26	4.43	1	.035	1.73	1.09	2.88
<i>Academic Performance</i>								
Advanced math vs. none	2.75*	1.18	5.49	1	.019	15.70	1.57	157.07
Overall achievement	.20***	.02	86.78	1	.000	1.22	1.17	1.27
<i>Sources of Information</i>								
Friends	-.33**	.12	7.53	1	.006	.72	.56	.91
Teachers	.48***	.123	13.62	1	.000	1.61	1.25	2.07
Promotional materials	-.26*	.13	4.35	1	.037	.77	.60	.98
Recruitment official	.48***	.11	18.54	1	.000	1.61	1.30	2.00
<i>Sources of PSE Funding</i>								
Private bank loan	1.65***	.45	13.49	1	.000	.19	.08	.46
Tuition voucher	.76*	.31	6.07	1	.014	2.14	1.17	3.92

Note: $R^2 = .551$ (Hosmer & Lemeshow), $.527$ (Cox & Snell), $.709$ (Nagelkerke). Model $\chi^2(29) = 645.78$, $p < .001$. * $p < .05$, ** $p < .01$, *** $p < .001$.

Amongst the students who planned to continue on to post-secondary education after completing high school, males were about 38% less likely than female students to indicate that they planned to attend university. The strongest predictor that students would choose university-level studies was the completion of an advanced-level mathematics course in Grade 12. In comparison to students who completed no math in Grade 12, the odds that students who completed advanced-level math planned to enrol in a university program were 15.7 times greater. Students' self-reported overall academic performance also played a significant role in plans to attend university. The odds ratio of 1.221 for this variable suggests that for every 1% increase in their overall grades the students were 1.221 times more likely to intend choose university.

Participation in all four of the after school activities increased the probability that students planned to attend university. Of the four, completion of homework had the greatest impact on students' chosen post-secondary destination. Students who indicated that they completed homework after school and on weekends were 8.437 times more likely to plan to attend university. For rural students planning to attend university, working part-time for a wage, volunteering and participating in extracurricular activities increased their probability of choosing university by 2.438 times, 1.887 times and 1.729 times respectively.

The results indicated that Grade 12 students who demonstrated that they relied more heavily on their friends and institutions' promotional materials were more likely to plan to attend a non-university post-secondary program. Those rural students who were more likely to rely on their high school teachers or recruitment officials from post-secondary institutions were more likely to have plans to continue on to university after high school. In terms of the funding that students felt they could rely on, aside from their family, rural students who had earned a tuition fee voucher were 2.139 times more likely to intend to pursue university. Students who believed that they could use a private bank loan to cover their educational costs were 19.2% less likely to select a university program.

4. Discussion

This study analyzed data from a survey of graduating secondary school students at 72 rural schools to better understand how the decision of students to continue their education at the post-secondary level is impacted by a number of factors. The vast majority of the students in the study indicated that they planned to participate in post-secondary education and, consistent with other studies of rural students' transition plans (Looker & Dwyer, 1998; Newfoundland and Labrador, 1998; Shaienk & Gluszynski, 2007) most of the rural students surveyed in this study opted for a non-university form of post-secondary schooling.

Our analyses involved two separate comparisons. Students who indicated that they had chosen to take part in a post-secondary program were compared with those who had not chosen post-secondary education. Also, students who indicated that they had elected to attend university were compared to those who had selected a non-university post-secondary institution. The findings suggest that rural students' post-secondary education decisions are influenced, albeit somewhat differently, by their demographic characteristics, secondary school academic performance, participation in after school activities, sources of information about further studies and sources of funding for post-secondary education.

In this study, family structure and their number of siblings had no significant impact on the outcome of students' post-secondary decisions. As observed in other research findings (Barr-Telford et al., 2003; Butlin, 1999; Cabrera & La Nasa, 2000; Choy, 2001; Frenette, 2007; Pascarella et al., 2004; Statistics Canada, 2001), the rural students whose parents had not completed post-secondary education, so called first-generation students, were less likely than

their peers to have made a choice to participate in post-secondary education after high school. This finding may have been income-related since income and educational attainment tend to be positively correlated. It also may be the case that "second generation" rural students have access to a reservoir of information about post-secondary education that their peers are unable to access.

While gender had no significance influence on whether or not students planned to pursue studies at the post-secondary level, it did play an important role in whether students with post-secondary plans chose a university or non-university program. The observed female preference for university education is consistent with the trends observed at both the provincial (Newfoundland and Labrador, 2005) and national levels (Canadian Council on Learning, 2007).

There were no significant differences in the model regarding the after school activities of students who did not plan to go on to post-secondary education and those who did. However, when those who were planning to attend were considered alone, we observed significant differences between their participation in part-time employment, volunteering, homework, and extracurricular activities. If we conceptualize these four after school activities as proxies for rural students' industry (working part-time), school engagement (homework), civic engagement (volunteering) and social and cultural capital (extracurricular activities), our findings suggest that compared to rural students who chose non-university post-secondary education, the university-bound rural students exhibit significantly higher levels of industry, school and civic engagement and social and cultural capital. This interpretation would appear to be consistent the results of similar research on the post-secondary participation of Canadian youth (Davies, 2005; Finnie et al., 2005; Shaienks & Gluszynski, 2007)

Also consistent with previous research (Butlin, 1999; Barr-Telford et al., 2003; Finnie et al., 2005; Shaienks & Gluszynski, 2007), our findings suggest that compared to other students, rural students who demonstrate higher levels academic achievement, as evidenced by overall grades, are more likely to plan to pursue post-secondary education. Likewise, university-bound rural students are more likely to have academically out-performed students whose post-secondary plans are for community college or other non-university programs. This was not surprising considering that entrance requirements for post-secondary institutions are tied to high school marks and that universities tend to require higher average grades for admission. Similarly, students who completed a more rigorous high school curriculum, as demonstrated by the level of math completed, were both more likely to plan post-secondary education and more likely at the university level.

There have been few investigations of the specific sources of career and post-secondary education information that rural students tap into as they engage in decisions about their opportunities. Previous examinations of the key career influencers of youth have tended to indicate that young people rely on a combination of sources including on parents, peers, teachers and counsellors (Bell & Bezanson, 2006; Hossler et al., 1999; Looker & Lowe, 2001; Sharpe & Spain, 1991; Sharpe & White, 1993). Our results indicate that rural students who choose to pursue opportunities at the post-secondary level rely a great deal more than their peers on parents, post-secondary students and promotional materials from post-secondary institutions. Compared to students who chose a

non-university option, students who chose university relied significantly more on information provided by teachers and recruitment officials. It is possible that these results might be, in part, explainable by influences that remain unspecified in our model. However, our findings are quite consistent with our understanding that the decision to participate in post-secondary education is a complicated process whereby students' decisions are informed and influenced by a diverse set of information sources.

Our results show that rural students are less likely to plan to go to post-secondary education if they are uncertain about how they can cover the associated costs. This observation is not surprising considering that financial barriers are one of the most commonly cited impediments to post-secondary participation cited by Canadian youth (Barr-Telford et al., 2003; Looker & Lowe, 2001; Shaienks & Gluszynski, 2007). We also observed that students with post-secondary plans are far more likely to indicate that student loans will be a source of their financial support. This is consistent with past research which shows that rural students tend to rely heavily on student loans and accumulate debt as they pursue postsecondary education (Kirby, 2003; Kirby & Conlon, 2006). With respect to the second model's comparison of students who were planning university with those planning for other types of post-secondary education, the single most interesting observation is the lack of difference in these two groups' planned sources of funding. This would suggest that, for rural students who decide to pursue post-secondary education, the specific type of post-secondary education selected is not significantly influenced by their expected sources of funding.

5. In Summary

Increasing post-secondary participation among rural students continues to be an important policy concern for governments across Canada (Alberta, 2006; Newfoundland & Labrador, 2005; Ontario, 2005; Saskatchewan, 2007). Though not unequivocal, the following three generalizations about the influences on rural students' post-secondary decision-making processes are warranted as they have important implications for policy formulation: 1) rural students' decisions to continue education at the post-secondary level are strongly influenced by academic factors; however, first-generation students and students who do not consider student loans to be a funding option for them are at a particular disadvantage; 2) rural students' post-secondary choice are influenced by a variety of sources of guidance and support that may not necessarily be well-informed sources; and 3) rural students' selection of university and non-university studies are strongly connected to academic factors, gender, and after school activities, but less dependent on students' sources of funding.

References

- Alberta. (2006). *A learning Alberta*. Edmonton, AB: Alberta Advanced Education.
- Andres, L., & Krahn, H. (1999). Youth pathways in articulated post-secondary systems: Enrolment and completion patterns of urban young women and men. *Canadian Journal of Higher Education*, 29(1), 47-82.
- Anisef, P., Frempong, G., & Sweet, R. (2005). The effects of region and gender on educational planning and Canadian families. In R. Sweet & P. Anisef (Eds.), *Preparing for post-secondary education: New roles for governments and families* (pp. 201-221). Montreal: McGill-Queen's University Press.
- Andres, L., & Looker, D. (2001). Rurality and capital: Educational expectations and attainments of rural, urban/rural, and metropolitan youth. *Canadian Journal of Higher Education*, 31(2), 1-46.
- Apostal, R., & Bilden, J. (1991). Educational and occupational aspirations of rural high school students. *Journal of Career Development*, 18(2), 153-160.
- Barr-Telford, L., Cartwright, F., Prasil, S., & Shimmons, K. (2003). Access, persistence and financing: First results from the Post-secondary Education Participation Survey (PEPS). Ottawa, ON: Statistics Canada.
- Bajema, D. H., Miller, W. W., & Williams, D. L. (2002). Aspirations of rural youth. *Journal of Agricultural Education*, 43(3), 61-71
- Bell, D., & Bezanson, L. (2006). Career-development services for Canadian youth: Access, adequacy and accountability. Ottawa, ON: Canadian Policy Research Networks.
- Bell, S., & Anisef, P. (2005). Accessibility and student debt: The shift from public to private support in Canada. In R. Sweet & P. Anisef (Eds.), *Preparing for post-secondary education: New roles for governments and families* (pp. 55-86). Montreal: McGill-Queen's University Press.
- Boak, R., & Boak, C. (1989). *Career interest and knowledge: Influencing factors*. St. John's, NL: Memorial University of Newfoundland.
- Bourdieu, P. (1977). Cultural reproduction and social reproduction. In J. Karabel and A. H. Hasley, *Power and ideology in education*. New York: Oxford University Press.
- Bourdieu, P. (1984) *Distinction: A social critique of the judgement of taste*. London: Routledge.
- Bourdieu, P. (1986). The forms of capital. In J. C. Richardson (Ed.), *Handbook of theory and research for the sociology of education*. New York: Greenwood Press.
- Boyle, M. H., & Lipman, E. L. (2002). Do places matter? Socioeconomic disadvantages and behavioural problems of children in Canada. *Journal of Consulting and Clinical Psychology*, 70, 378-389.
- Butlin, G. (1999). Determinants of post-secondary education. *Education Quarterly Review*, 5(3), 9-35.
- Cabrera, A. F., & La Nasa, S. M. (2000). Understanding the college choice of disadvantaged students. *New Directions for Institutional Research*, 107, 5-22.
- Cahill, M. (1992). A qualitative analysis of factors related to career development of rural women in Newfoundland and Labrador. In M. Van Norman (Ed.), *National Consultation on Vocational Counselling Papers: 1992* (pp. 19-30). Toronto, ON: University of Toronto Press.

- Canada. (2007). *Looking ahead: A 10-year outlook for the Canadian labour market (2006-2015)*. Ottawa, ON: Human Resources and Social Development Canada.
- Canadian Council on Learning. (2007). *Post-secondary education in Canada: Strategies for success*. Ottawa, ON: Author.
- Chapman, D. W. (1981). A model of student college choice. *Journal of Higher Education*, 52(5), 490-505.
- Choy, S. (1999). College access and affordability. *Education Statistics Quarterly*, 1(2), 74-90.
- Choy, S. (2001). *Students whose parents did not go to college: Post-secondary access, persistence, and attainment*. Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- Christofides, L., Cirello, J., & Hoy, M. (2001) Family income and post-secondary education in Canada. *Canadian Journal of Higher Education*, 31(1), 177-208.
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 95-120.
- Conrad, R. L. (1997). Career development of rural men and women: Different priorities. In H. Farmer (Ed.), *Diversity and women's career development: From adolescence to adulthood* (pp. 212-225). Thousand Oaks, CA: Sage.
- Corak, M., Lipps, G., & Zhao, J. (2003). *Family income and participation in post-secondary education*. Ottawa, ON: Statistics Canada.
- Davies, S. (2005). A revolution of expectations?: Three key trends in the SAEP Data. In R. Sweet & P. Anisef (Eds.), *Preparing for post-secondary education: New roles for governments and families* (pp. 149-165). Montreal: McGill-Queen's University Press.
- Deschenes, O. (2007). Estimating the effects of family background on the return to schooling. *Journal of Business and Economic Statistics*, 25(3), 265-277.
- Drolet, M. (2005). *Participation in post-secondary education in Canada: Has the role of parental income and education changed over the 1990s?* Ottawa, ON: Statistics Canada.
- Dupuy, R., Mayer, F., & Morissette, R. (2000). *Rural youth: Stayers, leavers, and return migrants*. Ottawa, ON: Statistics Canada.
- Finnie, R. (2002). Student loans, student financial aid and post-secondary education in Canada. *Journal of Higher Education Policy and Management*, 24(2), 155-170.
- Finnie, R., Lascelles, E., & Sweetman, A. (2005). *Who goes? The direct and indirect effects of family background on access to post-secondary education*. Ottawa, ON: Statistics Canada.
- Frenette, M. (2004). Access to college and university: Does distance to school matter? *Canadian Public Policy*, 30(4), 427-443.
- Frenette, M. (2006). Too far to go on? Distance to school and university participation. *Education Economics*, 14(1), 31-58.
- Frenette, M. (2007). *Why are youth from lower-income families less likely to attend university? Evidence from academic abilities, parental influences and financial constraints*. Ottawa, ON: Statistics Canada.
- Haller, E. J., & Virkler, S. J. (1993). Another look at rural-nonrural differences in students' educational aspirations. *Journal of Research in Rural Education*, 9(3), 170-178.
- Hango, D., & de Broucker, P. (2007). *Education-to-labour market pathways of Canadian youth: Findings from the youth in transition survey*. Ottawa, ON: Statistics Canada.

- Hossler, D., & Gallagher, K. S. (1987). Studying student college choice: A three phase model and implications for policy-makers. *College and University*, 2(3), 207-221.
- Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. Baltimore: Johns Hopkins Press.
- Hossler, D., & Stage, F. K. (1992). Family and high school experience influences on the post secondary educational plans of ninth-grade
- Kirby, D. (2003). *Paying the difference: Rural and urban students at Memorial University of Newfoundland*. Unpublished doctoral dissertation, University of Toronto, Ontario, Canada.
- Kirby, D., & Conlon, M. (2005). Comparing the economic experiences of rural and urban university students. *Alberta Journal of Educational Research*, 51(1), 4-17.
- Lapan, R. T., Tucker, B., & Kim, S. K. (2003). Preparing rural adolescents for post-high school transitions. *Journal of Counseling and Development*, 81(3), 329-342.
- Looker, E. D., & Dwyer, P. (1998). Education and negotiated reality: Complexities facing rural youth in the 1990's. *Journal of Youth Studies*, 1(1), 5-22.
- Looker, E. D., & Lowe, G. S. (2001). *Post-secondary access and student financial aid in Canada: Current knowledge and research gaps*. Ottawa, ON: Canadian Policy Research Networks.
- Marshall, A. (2002). Life-career counselling issues for youth in coastal and rural communities. The impact of economic, social and environmental restructuring. *International Journal for the Advancement of Counselling*, 24(1), 69-87.
- McCracken, J. D., & Barcinas, J. D. (1991). Differences between rural and urban schools, student characteristics, and student aspirations in Ohio. *Journal of Research in Rural Education*, 7(2), 29-40.
- McDonough, P. M. (1997). *Choosing colleges: How social class and schools structure opportunity*. New York: SUNY Press.
- Newfoundland and Labrador. (2005). *Foundation for success: White paper on public post-secondary education*. St. John's, NL: Department of Education.
- Newfoundland and Labrador. (1998). *Postsecondary indicators '98*. St. John's, NF: Department of Education.
- Ontario. (2005). *Ontario: A leader in learning*. Toronto, ON: Ministry of Training, Colleges and Universities.
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, 75(3), 249-284.
- Sandefur, G. D., Meier, A. M., & Campbell, M. E. (2006). Family resources, social capital and college attendance. *Social Science Research*, 35(2), 525-553.
- Saskatchewan. (2007). *Post-secondary education accessibility and affordability: Final report*. Regina, SK: Post-secondary Education Accessibility and Affordability Review.
- Shaienks, D., & Gluszynski, T. (2007). *Participation in post-secondary education: Graduates, continuers and drop outs, results from YITS Cycle 4*. Ottawa, ON; Statistics Canada.
- Sharpe, D. B., & Spain, W. H. (1991). *Youth transition into the labour market: The class of '89 initial survey of level III (grade 12) high school students*.

St. John's: Centre for Educational Research and Development, Memorial University of Newfoundland.

Sharpe, D. B., & White, G. (1993). *Educational pathways and experiences of Newfoundland youth*. St. John's: Centre for Educational Research and Development, Memorial University of Newfoundland.

Stage, F. K., & Hossler, D. (1989). Difference in family influences on college attendance plans for male and female ninth graders. *Research in Higher Education, 30*(3), 301-315.

Communication Differences in the Classroom: Implications for Student Teachers from Diverse Populations

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Abstract

This paper will discuss the results of a qualitative study for which one of the research questions was: "How do communication patterns of ethnically diverse student teachers contribute to their comfort level in the classroom?" Four non-traditional female student teachers, for whom English was their second language, responded to a series of interview questions examining how their native and adoptive cultures influenced their beliefs about teaching.

Analysis of the interviews suggested that the subjects believed they were perceived negatively as teachers based upon their native verbal and non-verbal communicative patterns. Implications for increasing the competence and confidence of ethnically diverse student teachers include making the students aware that they need to refine their communication skills, and creating strategies that will promote understanding of all stakeholders' needs. The ways in which participation in a Foreign Accent Reduction (FAR) program would benefit ethnically diverse student teachers will be discussed.

Keywords: teachers – communication – diversity – FAR

1. Introduction

Hall (as cited in Battle, 2002), said, "Culture is communication. Communication is culture." As such, it is imperative that speakers and listeners are aware and respectful of each others' cultures to avoid tensions resulting from faulty assumptions or inaccurate judgments.

Future teachers of diverse ethnic backgrounds and for whom English is their second language may find both verbal and non-verbal communication challenging, if not problematic, with their students, students' parents, colleagues, and other stakeholder groups in the American K-12 system. Factors contributing to the challenges presented by language differences can include: identification with and internalization of the ways in which individuals in the dominant society communicate, personal beliefs about teacher and student behavior as they relate to communication, and support from other professionals, including colleagues and instructors. Time spent in the dominant culture and

society may also have a profound impact on the degree to which verbal and non-verbal language differences may negatively impact teacher acceptance and performance in the classroom.

2. Methodology

Inherent in the teaching profession is the ability to effectively communicate with one's students. In order to explore the degree to which communication patterns of ethnically diverse student teachers contributed to their comfort levels in the classroom, a participant sample was generated through purposeful and snowball sampling.

Four non-traditional female student teachers, for who English was their second language and who were current student teachers or had student taught within the last school year at a predominantly Caucasian, comprehensive, mid-western university volunteered to participate in the study (Shaw & Upham, 2006). The ethnic backgrounds of the subjects included: Hmong, (Asian) Indian heritage, South American, and European/southern European descent. Two of the women already held degrees from universities in their countries of origin.

Each subject responded to a series of interview questions during one-on-one audio taped sessions. The questions were designed to elicit responses about how their native communication patterns affected their teaching practices in predominantly Caucasian classrooms. The transcripts of the one to two hour interviews were read, approved and/or corrected by the individual interviewees and subsequently coded for analysis.

The data analysis was organized into three broad but interrelated themes: communication patterns, assimilation into the dominant classroom culture, and teacher identity. The remainder of this paper is predominantly focused on the effects of communication patterns on two subjects and their assimilation and teacher identities.

3. Findings

The student teachers in this study, who spoke with foreign accents, perceived that their students, cooperating teachers, and school administrators regarded their communication differences as "incorrect", based upon the culture of the school. Below are some of the perceptions made by two subjects in the study.

Sophia's accent reflects her southern European country of origin. In her interview, Sophia shared this incident:

"When I started my student teaching in (my first placement), we had a unit meeting and when my cooperating teacher introduced me to the other teachers and I said, 'I am from (birth country). I have an accent. It usually takes two weeks to get used to my accent; after that you should be okay' and so forth. My cooperating teacher stood up and said: 'Well, then don't be surprised when my students go to (the next grade) and talk weird.'"

Sophia shared further that in her culture, it is perfectly acceptable to interrupt the person who is speaking. In her student teaching placement, she was defined by one colleague as “pushy” and “rude” for exhibiting such behavior.

When asked about the part the teachers in her school, her cooperating teacher, and university supervisors played in supporting her student teaching, Lucia a student teacher from South America, indicated that these individuals “increased her self-esteem as a teacher.” However, she also offered that the administrator in her school did not treat her like “an equal”, and added:

“When you have a second language acquisition in my side in this way it’s English for me it’s always we gonna’ learn everyday. So we need for us the administration is to help us...anything to help us increase our self-esteem about the language.” “But we don’t need to hear people say “Excuse me, you have to slow down the speech.” “We need positive feedback not bad feedback.” At another point within her interview, Lucia indicated that a student in her classes told her “Give me my space back” because he thought she was standing too close to him while talking. Clearly, Lucia perceived that others noticed her communication differences and had reacted to them.”

On the surface, the perceptions shared by the subjects might seem unfortunate. However, they provide an opportunity for student teachers, their students, school staff, and university supervisors to learn and gain an appreciation for accents, dialects, communication between individuals from non-mainstream cultures, and how non-native speaking student teachers can acquire instruction to refine their English speaking skills.

4. Implications & Recommendations

4.1 Cooperating Teachers

Since much of the communication in schools is achieved through the verbal channel, foreign accents are readily noticed by children and adults, and sometimes serve as the first indication that a person is “different” from the mainstream culture. Cooperating teachers, student teachers, and university supervisors are in a position to foster a sense of understanding and appreciation for the richness that non-native speaking student teachers bring to their classrooms.

Cooperating teachers (also referred to as mentor teachers) who are open and willing to facilitate a student teacher’s entry into the profession play a major role in the understanding, acclimation and acceptance of that new teacher. Our research has implied that sensitivity to the needs of ethnically diverse student teachers, at least in our geographic area, may need to be heightened. The role of the cooperating teacher in the development of the student teacher’s “teacher identity” cannot be understated. Student teachers often emulate the behaviors of their cooperating teachers, thereby perpetuating not only methods of content

development, delivery and assessment, but dispositions toward students and other stakeholder groups.

There may be assumptions on the part of the cooperating teachers that *all* student teachers know and understand “the hidden curriculum” (Noddings, 1984), including acceptable norms of verbal and non-verbal communication. Often this is not the case, as is borne out in our research. Thus, we recommend that cooperating teachers prepare themselves to work with a student teacher of a different ethnicity by educating themselves about the culture of that person. Further, the cooperating teacher should view her/himself as a mentor not only in the practice of teaching, but in the acceptable social norms of the classroom and school cultures.

Another recommendation would be for classroom teachers to teach their students about differences in “accented” English and differences in communication styles among cultures. Exposure to this information prior to and during student teaching experience of ethnically diverse student teachers will prepare pre-Kindergarten through grade 12 students to be more accepting of and sensitive to communication style differences.

Finally, we recommend cooperating teachers position themselves as advocates of ethnically diverse student teachers, embracing diversity and the many benefits afforded to both the classroom students and the student teacher through dialogue and understanding of others’ cultures.

4.2. Professors of Higher Education

A recommendation was offered by more than one of the women participating in the study, who felt that it would have been beneficial to her to have received direct instruction relative to school cultural norms. For example, Lucia would have benefited from understanding what constitutes acceptable “personal space”. Sophia could have come to understand that interrupting the person speaking is considered rude in many school cultures. Other scenarios could be role-played, questioned, and critiqued to address common issues which they may encounter in the school setting and in which acceptable ways of behaving may be interpreted differently from culture to culture.

Professors who teach and work with future teachers of ethnically diverse backgrounds have roles similar to and yet distinct from, cooperating teachers. Like cooperating teachers, professors must accept and value diversity in their classrooms. They must also acknowledge that not all professors communicate in the same ways and not all native speakers of English communicate in the same ways or in the same ways as native English speakers. Professors must be introspective about their own communication styles prior to making assumptions about the communication styles of the ethnically diverse students. In addition, personal biases must be acknowledged and behaviors learned (or unlearned) that will accommodate learners of ethnically diverse backgrounds so as to avoid implicit or covert discrimination.

Like cooperating teachers, professors must also advocate for these student teachers, promote understanding of them, their cultures, the ways in which they

communicate, and the benefits they bring to higher education and the greater society. Part of this advocacy could include private discussions with the student teacher about their communication style and cultural aspects of their interactions that may differ from the mainstream school culture in which they will be teaching to prepare them, from a psychological perspective, for the classroom teaching experience.

University professors should also feel a strong obligation to refer ethnically diverse student teachers who may have specific language needs to a Foreign Accent Reduction (FAR) program before beginning their student teaching experiences. This type of program, explained below, would enable the participants to better learn the English language skills that they would be using in their assigned classrooms. The program would also provide role models for verbal communication and encourage participants to observe and model behaviors associated with acceptable non-verbal communication practices in the dominant school culture. Competence with English language skills would likely be enhanced due to increased exposure to and practice with oral language. Participant's sensitivity to the differences in language speaking could be heightened.

4.3. Foreign Accent Reduction Program for Student Teachers

Along with educating school personnel about the culture of their student teacher, student teachers themselves can obtain instruction on how to use English more effectively and gain confidence in speaking the language. Several university Speech-Language and Hearing Clinics in the United States offer Foreign Accent Reduction programs designed help individuals with foreign accents refine their English speaking skills for employment purposes and to build their confidence in speaking (Schmidt, 1997). Although listeners can tell that the speech patterns in a particular accent differs from his/her own, most people have never been taught what a foreign accent is. The term accent is specific to non-native speakers of a particular language, and is characterized by phonetic traits of an individual's first language being carried over into his/her second language (Wolfram) as cited in Montgomery, 1999). Sometimes used interchangeably with accent, a dialect can be defined as a set of differences that make a person's speech different from another's. Every language has a set of dialects, and each dialect is defined by the regions of a country which people live (i.e., North, South, East, etc.). Each dialect has particular phonetic, morphological, grammatical, and pragmatic features, and even the most subtle differences in these elements can be detected by listeners. Other obvious differences between speakers from various cultures include non-verbal communication styles.

Had Sophia and Lucia enrolled in FAR services, a speech-language pathologist would have had the them practice the English production of speech sounds that differed in their accents, produce sentences with English grammatical structures, and identify and use professional vocabulary while providing them with positive feedback for their use of English. In addition, these women would have learned some important non-verbal aspects of communication in English, such as facial expression, gestures, and personal space by reviewing video taped samples of their student teaching and making suggested modifications. Anecdotal reports have shown that the process of participating in FAR programs increases the

participants' self-confidence in communicating within the mainstream culture. For many non-native university students, their FAR program, the student clinicians, and faculty supervisor become an important support network.

5. Conclusion

Student teachers representative of ethnically diverse cultures can and should be allowed to become successful classroom teachers within a culture different from their own. This study revealed that the communication patterns of the subjects both differed from and were problematic in relationships with those with whom they interacted in the predominantly Caucasian culture. These differences extended to verbal and non-verbal forms of communication.

Subjects reported instances of feeling marginalized due to communication pattern differences. Recommendations for ethnically diverse student teachers for whom English was not their primary language were outlined. Further, recommendations for those teaching and working with this population were provided.

Castellana stated, "We must loosen our white-knuckled grip on uniformity as the basis for meritocracy" (2004). All teachers who interact with non-native speaking student teachers can provide advocacy and guidance for making communication more effective and enjoyable in and outside of the classroom. In many ways, the elements that underlie the suggestions and recommendations provided here are similar those that teachers employ when interacting with their elementary and secondary students. That is, in order to inform, educate and inspire, teachers frequently seek and appreciate background information about their students, and find ways accommodate their and needs and reward their achievements. Most importantly, classroom teachers and school administrators truly believe in their students' ability to succeed. The same principles should be applied to student teachers by cooperating teachers, school administrators, and university instructors, so that they too can one day inform, educate, and inspire their own students.

References

- Battle, D. (2002). *Communication Disorders in Multicultural Populations*. Boston: Butterworth Heinemann.
- Castelana, E. (2004, May). *How the hidden curriculum in public schools prevents rather than promote building capacities for peace*. Retrieved November 26, 2007, from http://gseweb.harvard.edu/~t656web/peace/ArticlesSpring2004/Castellana_Elizabeth_hidden_curriculum.htm
- Montgomery, J. K. (1999). *Accents and Dialects: Creating a National Professional Statement*. *Topics in Language Disorders*, 19(4), 78-86.
- Noddings, N. (1984). *Caring, a feminine approach to ethics & moral education*. Berkeley: University of California Press.
- Schmidt, A. (199). *Working With Adult Foreign Accent: Strategies for Intervention*. *Contemporary Issues in Communication Science and Disorders*, 24, 53-67.
- Shaw, P. & Upham, D. (2006). *Understanding academic teaching identity construction in ethnically diverse student teachers*. *Unpublished research study*.

Cost Effectiveness of Special Education Teacher Preparation in the U. S.

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Abstract

To address teacher shortages and improve teacher quality, federal policy in the U. S. encourages states to ease entry to teaching through alternatives to traditional campus-based preparation. Developing training alternatives adds to the total cost of teacher preparation and so raises the issue of the cost effectiveness. In this paper, we report findings from a study of 31 alternative route, special education programs. We estimate instructional and administrative costs and report descriptive information about the programs, program content, and graduates. We identified four distinct approaches to alternative preparation that varied substantially on cost, size, and participant quality. Less costly programs proved to be substantially shorter and tended to attract more participants from careers outside of education. On the other hand, graduates of these programs were less likely to remain in special education teaching than graduates of longer, more substantial, and more costly programs.

Keywords: Cost effectiveness – teacher preparation – alternative routes – special education

1. Introduction

U. S. schools are plagued with shortages of qualified teachers, and federal policy (most notably *No Child Left Behind*, 2004) encourages states to address the problem by easing entry into the field. Easing entry is also thought to address the problem of teacher quality. By streamlining training and expediting entry to the classroom, policy makers hope to attract more able and more expert professionals to teaching—people who might be put off by the requirements of initial preparation and licensure, requirements that many *NCLB* proponents characterize as burdensome (Cohen-Vogel & Hunt, 2007). One consequence of this policy approach has been the proliferation of alternatives to traditional, campus-based teacher preparation. Alternative route (AR) programs address

critical shortages of math, science, and special education teachers, but they also have sprung up in many disciplines in which there are no teacher shortages.

Findings from some recent research (Cohen-Vogel & Smith, 2007) have called into question many of the assumptions underlying *NCLB* logic regarding the importance of alternative routes as a means for addressing shortages and improving teacher quality. In fact, even staunch advocates have expressed dismay at the failure of alternative routes to live up to their promise. Walsh and Jacobs (2007), for example, lamented the lack of selectivity, the failure to streamline, and the pervasive influence of schools of education, the largest providers of alternative route training. They described the latter as a “fox in the henhouse” (p. 14).

Be that as it may, in the U. S., alternative routes are proliferating. All 50 states and the District of Columbia now offer at least one alternative program (Feistritzer, 2007), and, in 2006, the 485 alternative programs operating in the U. S. prepared an estimated 59,000 new teachers (Feistritzer). This total represents an increase of over 800% from a decade before. Walsh and Jacobs (2007) reported that traditional teacher education programs offered nearly 70% of all alternative routes, and school district programs a share of the rest. Thus, states have underwritten the growth in AR programming and, as a result, have a substantial stake in their success. States also should be keenly interested in the return on their investment.

Only a handful of studies have addressed the cost effectiveness of alternative route teacher preparation (Darling-Hammond, 2000; Fowler, 2003; Rice & Brent, 2002). In these studies, researchers posed idiosyncratic questions and used very different methods. Per graduate costs (all expressed in 2006 dollars) have ranged from \$9,635 for full-time students in Pathways to Teaching programs at public institutions (Rice & Brent) to \$31,362 for graduates of 5th year, Holmes-type programs (Darling-Hammond). Teach for America, a popular *NCLB*-inspired, fast-track alternative route, costs \$11,710 per completer.

Our work extends previous work on the cost effectiveness of alternative route preparation by studying programs in special education, a representative area of chronic critical teacher shortage. However, unlike previous researchers, we considered other benefits beyond survival, among them teacher quality and contribution to supply. Of course, the latter has meaning only within the context of critical teacher shortage, whereas the former—and now student outcomes—clearly represents the gold standard for U. S. policy makers and, increasingly, educators.

1.1. Research Questions

In this study, we addressed these questions:

1. How many clock hours of training do AR programs require? How long do these programs take to complete?
2. What is the distribution of content across domains (e.g., general and special education foundations, general and special education methods, and field experiences)?
3. How large are AR program cohorts? What are the demographics of the participants? What did they do before they entered training? How much money did they make?
4. Who teaches AR programs courses? What are they paid?
5. What is the per completer cost of AR preparation? What are the total instructional costs? Total administrative costs?
6. What are AR program graduates' plans for the near future? How many will remain in special education teaching? How many will leave the field?

2. Cost Study Methods

We answered these questions with information from interviews with colleagues whom we call program directors (for lack of a consistent title) and from cost tables they completed after their interviews. We also gathered program planners or other such documents that enumerated program courses and the sequence in which they were taken. In this section, we describe our sample of programs and program directors, our interview protocol and how it was developed, and the cost tables and how they were developed. We also describe our procedures and how we analyzed the data.

2.1 Sample of Programs

We began soliciting participants for the cost study by emailing all 101 programs directors who had participated in a previous survey study of special education alternative routes (Rosenberg, Boyer, Sindelar, & Misra, 2007). To find the original sample, we conducted a state-by-state survey of state departments of education and searched a database maintained by the National Clearinghouse for the Professions in Special Education (NCPSE). The response to our initial solicitation for this study was disappointing. We subsequently recruited at professional conferences and returned to the NCPSE database for new programs that had begun since our last search, 2 years before. In this manner, we identified 33 directors willing both to talk to us about their AR programs and to complete the cost tables.

2.2 Interview

Interviews with program directors were conducted over the phone by the authors, who maintained contemporaneous records on their desktop computers. Interviews took roughly 30 minutes to complete and tapped both general program information and information about students, cohorts, and results. An initial draft of the protocol was field tested and revised three times before a final version of the protocol was agreed upon.

2.3 Cost Tables

We collaborated with economists from the University of Florida's Bureau of Economic and Business Research (BEBR) to develop cost tables. Ultimately, the three tables were organized as worksheets in an Excel workbook, and instructions for completing the tables were embedded in the worksheets as comments. Thus, simply moving the cursor over a column heading would reveal instructions for completing that column. We emailed the tables (and a separate, more complete set of instructions) to the directors and asked them to complete the three tables on their own, referring to the instructions as needed. After they returned the completed tables, we contacted them again by telephone to discuss any difficulties they had and to clarify any anomalies we observed.

On the first worksheet, directors were instructed first to list all courses in the program curriculum. For each course, they were to characterize delivery (face-to-face, on-line, distance, or field-based), estimate enrollments, report number of credit hours, and designate the rank of regular faculty members who typically taught the course. On the second worksheet, we asked program directors to estimate the administrative costs associated with the program. On the third, they indicated the initial size of a cohort and the number of students who persisted from semester to semester. This table provided an estimate of within program attrition. We piloted the cost table with the same three program directors who helped us pilot the interview protocol.

2.4 Analysis

Information from the interview and cost tables was largely descriptive and required no analysis beyond calculation of means, standard deviations, and ranges. However, with the program planners, we did organize content into five categories: special education foundations, general education foundations, special education methods, general education methods, and field experience. In computing instructional costs, we minimized irrelevant institution-to-institution salary variation by using Department of Labor, Bureau of Labor Statistics salary averages instead of actual salaries. Thus, the cost of any one course was calculated by multiplying FTE by the average salary of a faculty member of the same rank at institutions within the state.

Graduate Follow Up Survey Methods

We asked the 31 program directors who had completed interviews and cost tables to assist us by providing names and contact information of their most recent cohort of graduates. Directors of 15 route programs agreed to help. We

surveyed graduates of seven Internship programs, four Distance programs, two Step-up programs, and two Local programs.

3. Graduate Survey

To gather information on the background and experiences of students completing AR programs, we used questions from the Participant Information Protocol (PIP; Sindelar, Daunic, & Rennels, 2004) about basic demographics, academic background (highest degree earned, college major, standardized test scores), teaching experience, work experience outside of teaching, and professional interests. We also adapted two components of the Schools and Staffing Survey, Public School Teacher Questionnaire (PSTQ, 2003/2004) and the Teacher Follow-up Survey (TFS, 2003/2004) about the amount of preparation in pedagogy and practice teaching and teachers' intentions to continue teaching special education at the same school.

3.1 Survey Administration

We adapted the survey for telephone administration with the help of survey specialists at the BEBR Telephone Survey Lab. Subsequently, trained telephone interviewers at the BEBR Lab conducted the survey. Programming allowed for questions to be displayed on computer screens. Interviewers recorded answers contemporaneously, a process made possible by the questionnaire's use of multiple-choice and numeric formats. Entries were stored automatically in memory and preprogrammed follow-up questions, when appropriate, were displayed. BEBR collected survey data from July until November 2007. The interviews took from 15-20 minutes to complete, and BEBR maintained a careful log of all contacts. For each survey item, BEBR generated frequency distributions and two lists, one for other responses and one for text-box comments.

3.2 Identification of Program Types

Thirty-one project directors completed the interviews and cost tables. Many ($n = 14$) of their programs took a common form. Such *internship programs* were designed specifically for uncertified teachers working full-time as teachers of record. Commonly, an employing district would contract with a local teacher education provider to offer a program for all out-of-field teachers in the district. The content of preparation was often tailored for district sponsors, and courses were commonly offered at convenient off-campus venues. Also, requirements differed little if at all from those in the providers' on-campus programs. As a result, as described in column 1 of Table 1, internship programs were relatively long in duration, averaging over 22 months.

Table 1
Descriptive Data and Cost by Program Type

		Length in Months	% Completers	Exiting Cohort	Cost per Completer	Clock Hours	Cost per Clock Hour
Internship (N = 14)	M	22.5	85	30.8	\$14,522	624.3	\$681
	SD	6.1	10.8	22.9		411.7	
	Range	12-36	66-100	9-78		137-1,645	
Distance (n = 10)	M	24.0	80	41.6	\$10,537	485.7	\$728
	SE	6.9	25.7	30.3		229.4	
	Range	12-36	50-95	16-98		144-947	
Step-up (n = 4)	M	26.0	97	22	\$14,318	897.3	\$235
	SD	7.0	1.4	14.7		362.4	
	Range	18-30	96-98	9-38		528-1392	
Local (n = 3)	M	14.7	85	95.7	\$5,567	146.2	\$3,436
	SD	3.1	10	55.8		72.1	
	Range	12-18	75-95	48-157		80-223	

Distance programs were like internship programs in offering the equivalent of degree programs to practicing, uncertified teachers, most content was delivered on-line or via other distance technology. On average, they required 2 years to complete. Participants typically were scattered beyond the boundaries of a single district, often across a state. We identified 10 distance programs.

We also identified small numbers of two other program types. Four programs were designed specifically for special education paraprofessionals with associate degrees and required 2 years of study leading to bachelor's degrees and initial licensure in special education. Participants in such *step-up programs*, as we called them, worked during their programs as paraprofessionals, not teachers. *Local programs* differed from all other program types by being independent of a college or university curriculum and using district employees as instructors. Training was substantially shorter and was completed in less than 15 months. During the first year of the programs, participants were employed in the jobs they held before entering the program.

We used these program types to organize much of our data.

4. Results

4.1 Cost Study

With data from interviews with program directors and the cost tables, we estimated cost in two ways: cost per completer and cost per clock hour of instruction. These means by program type are reported in columns four and six of Table 1.

Cost per completer. For an individual program, the instructional and administrative costs associated with preparing a single cohort were summed to estimate total cost. Cost per completer represented the total cost/cohort divided by the average size of a graduating cohort (a datum we obtained from the

interviews. In column 3 of Table 1, we report the averages by program type.) We then averaged cost per completer within program types. Average cost per completer ranged from \$5,567 for Local programs to \$14,522 for Internship programs and \$14,318 for Step-Up programs. It should be noted that in spite of the similarity of their program structures, distance programs, which averaged \$10,537 per completer, were substantially cheaper than Internship programs. This difference may result from efficiencies associated with on-line or distance course delivery.

Cost per clock hour of instruction. For these estimates, we used information from the interviews, planners, and cost tables to determine total clock hours of instruction. We report average clock hours of instruction by program type in column 5 of Table 1. Cost per clock hour of instruction was computed for each program then averaged within program type. Average cost per clock hour ranged from \$235 for Step-up programs to \$3,436 for Local programs. Internship and Distance programs averaged \$681 and \$728.

Of course, these cost estimates must be considered preliminary. As Darling Hammond (2000) demonstrated clearly in her cost study, initial costs like these are strongly influenced by graduates' attrition. Thus, in her study, the high initial cost associated with 5th year programs was attenuated by high retention, and the low initial cost of Teach for America was inflated by high attrition. We anticipate that our cost findings will come into focus 3 to 5 years into the future, when program attrition may be entered into the cost equation.

Participants who start programs but fail to complete them incur recruitment, advisement, and orientation costs that diminish overall program efficiency. As can be seen in column 2 of Table 1, such *within program attrition* varies somewhat by program type, from a low of 3% for Step-up programs to a high of 20% for Distance programs. For both Internship and Local programs, 15% of the participants who began the programs failed to complete them.

Program Content

We obtained documents describing curriculum requirements from all 31 programs. Using these documents, we sorted courses into five categories or asked the directors to do so themselves. The five categories included general education foundations (e.g., educational psychology), general education methods (e.g., teaching reading), special education foundations (e.g., characteristics of students with mental retardation), special education methods (e.g., methods for teaching students with mental retardation), and field experiences. Our findings about program content are presented in Table 2.

Table 2
Program Coverage in Clock Hour Means, Ranges, and Percents

		GEF	SEF	GEM	SEM	FE	Total
Internship (n = 14)	Mean	49.5	62.0	76.6	239.0	197.1	624.3
	Range	0-180	0-270	0-240	112-490	0-720	137-1645
	Percent	7.9	9.9	12.3	38.3	31.6	
Distance (n = 10)	Mean	16.5	69.9	39.2	270.8	89.3	485.7
	Range	0-45	0-135	0-144	84-515	0-432	144-947
	Percent	3.4	14.4	8.1	55.8	18.4	
Step-up (n = 4)	Mean	112.4	71.5	198.0	295.5	219.7	897.0
	Range	0-240	30-112	144-270	144-432	74-480	528-1392
	Percent	12.5	8.0	22.1	32.9	24.5	
Local (n = 3)	Mean	17.5	31.8	55.7	27.8	13.3	146.2
	Range	9-23.5	10.5-45	20-84	0-45	0-40	80-223
	Percent	12.0	21.8	38.1	19.0	9.1	

As can be seen in the last column of Table 2, total hours of instruction vary greatly, both between and within program types. However, on the question of how much training is completed before and after beginning to teach, our findings were less ambiguous: Internship and Distance programs offered what amounted to on-the-job training, whereas Step-up (100%) and Local (61%) programs involved more pre-service training. On average, participants in Internship programs received 8.9 hours of preparation before entering the classroom, while participants in Distance programs got 6.3 hours. On average, Local programs were shortest (M = 146.2 hours) and Step-up programs longest (M = 897 hours). However, the difference between them is smaller than the range of instructional hours within three Internship (137-1,645), Step-up (528-1,392), and Distance (144-947) programs.

In Table 2, we also report the distribution of instructional hours across content areas. As can be seen there, program types also differed dramatically by content coverage. For example, general education foundations and methods made up little more than 10% of the content of Distance programs but over half the content of Local programs. Across programs, emphasis was placed on methods courses and field experiences, so that the former made up roughly 56% of program content, and the latter an additional 24%. The strong emphases on methods and field work seem reasonable for alternative programs, most of which are geared for practicing teachers who lack preparation.

We correlated program length, cohort size, completion rate, total costs, cost per completer, and total instructional hours. We found that program length correlated significantly with cohort size ($r = -.43$, $p < .05$), cost per completer ($r = .40$, $p < .05$), and total instructional hours ($r = .63$, $p < .01$). Thus, longer programs tended to be smaller and to cost more. We also found that cost per completer was significantly related to cohort size ($r = -.52$, $p < .01$), total cost ($r = .44$, $p < .05$), and total instruction hours ($r = .62$, $p < .01$). All of these relationships are easily explained: Higher per completer costs were associated with smaller cohorts, larger total costs, and longer programs.

4.2 Graduate Survey

Respondents' ages, race and ethnicities, and previous employment are described in Table 3. As can be seen, AR participants generally were older than traditional college age, but Distance participants were younger on average ($M = 32.8$ years) than participants in other programs. Regardless of program type, most participants were employed before entering training. In Internship, Distance, and Step-up programs, most participants were employed in education. Local program participants were far more likely to have worked outside of education.

Table 3
Participant Demographics by Program Type

	Race/Ethnicity ^a				Previous Employment	
	Mean Age	% Women	% White	%Latino or African American	% Education	% Outside Ed
Internship (n = 7)	37.6	74.3	71.9	26.2	47.1	33.3
Distance (n = 4)	32.8	76.1	85.7	10.7	59.7	24.1
Step-up (n = 2)	39.1	95.8	100.0	0.0	77.8	22.2
Local (n = 2)	38.8	78.4	87.1	16.2	26.0	39.7

^a Respondents were first asked whether they were Latino or Hispanic, before being asked to identify their race. Hence, within program percentages may exceed 100%.

Roughly three fourths of the participants in Internship, Distance, and Local programs were women, and for Step-up programs, women made up 96% of participants. Given that 85% of special education teachers also are women, Internship, Distance, and Local programs recruited more men than would otherwise be expected. With regard to race and ethnicity, it is known that more than three fourths of all newly hired special education teachers are White. Among our program types, only Internship programs prepared proportionately fewer Whites and proportionately more Latinos and African Americans (26.2% compared to 17.4%, overall).

Salary. We asked survey respondents who were employed before entering training whether they were making more money, less money, or about the same amount of money teaching as they did in their previous jobs. We also asked them to estimate the difference. These findings are presented in Table 4.

Table 4
Participants Reporting Income Loss or Gain, by Program Type

Program Type		Increase	Loss	About the Same	Mean
Difference		Adjusted Mean Difference ^a			
Internship	n	45	17	11	\$9,306
	%	61.6	23.3	15.1	
Distance	n	6	3	2	-\$13,003
	%	54.5	27.3	15.1	
Step-up	n	6	0	1	\$12,584
	%	85.7	0	14.3	
Local	n	21	16	2	-\$9,512
	%	53.8	41.0	5.1	
All	n	78	36	16	-\$531
	%	60.0	27.7	12.3	

^aEliminated respondents who reported losing \$20,000 or more

In addition, we identified fifteen of the 131 survey respondents who answered this question who indicated that they had taken a salary cut of \$20,000 or more to enter special education teaching. In Table 4, we report mean salary change (weighted to reflect the population of completers) with and without this small subset of big losers.

Overall, 60% of the respondents reported making more money as teachers than they had in their previous jobs, and an additional 12.3% were making about the same. On average, Internship and Step-up program respondents made \$10,000 more as teachers, and Distance and Local program respondents made about \$10,000 less. When the 15 respondents who lost \$20,000 or more were eliminated from these computations, all four groups made more as teachers than they had previously, and the salary change averaged over \$10,000. Women (60.8%) were more likely than men (28%) to be making more as teachers than they had in their previous jobs, and salary change was also related to age.

Professional intentions. We asked respondents whether they planned to teach special education at the same school next year. Those who answered no were also asked to indicate whether they planned to teach special education at a different school, to teach general education at their current school (or at a different school), or to leave teaching altogether. We analyzed this information by program type and also by school demographics and context. We report these findings in Table 5.

Table 5
Employment Plans, by Program Type

Program Type		SE Same School	SE Different School	Gen Ed Same School	Di
Internship	n	92	9	5	
	%	78.6	7.7	4.3	
distance	n	21	0	1	
	%	84	0.0	4.0	
Step-up	n	8	1	0	
	%	88.9	11.1	0	
Local	n	42	3	9	
	%	67.7	4.8	14.5	
Total		163	13	15	
		76.5	6.1	7.0	3.3
		7.0	3.3	7.0	

Overall, more than three fourths of all respondents intended to remain in special education teaching at the same school. An additional 6%, planned to teach special education at a different school. Over 10% expressed their intent to remain in teaching but to transfer to general education, whereas only 7% expressed their intent to leave teaching altogether. Thus, from the perspective of special education, attrition reached 17%, a figure comparable to beginning teacher attrition estimates in the literature. All Step-up program graduates intended to remain in special education, but less than three fourths of Local program graduates expected to do the same. Over 20% of Locals intended to transfer to general education.

Hispanic teachers were most likely (82.4%) to express their intention to remain in their current special education jobs, but African Americans also were more likely than Whites (78.6% to 75.2%) to make the same assertion. It is important to note that 73.3% of Hispanic and 83.3% of African American respondents were teaching in high poverty schools (defined as having at least 50% of students eligible for free or fee-reduced lunch). They also were more likely to work in schools with high percentages of culturally and linguistically diverse students, and at low achieving schools. About 70% of Hispanic, 62% of African American, and 49% of White respondents taught in highly diverse schools, and nearly 93% of all African American respondents taught at schools where achievement was no better than average.

5. Discussion

The cost of the Internship and Distance programs we studied fell comfortably within ranges reported by Rice and Brent (2002) for programs at public colleges and universities. For non-certified teachers and paraprofessionals, Rice and Brent reported a range of \$7,380 to \$21,713/graduate (in 2006 dollars). Our

Internship and Distance programs averaged \$14,522 and \$10,537/completer, and our Step-up programs averaged \$14,318/completer. By contrast, Local programs, at \$5,567/completer, were less costly than the programs evaluated by Rice and Brent. Of course, that economy was achieved by substantially reducing instructional hours and admitting large trainee cohorts.

In many ways, our findings regarding participant demographics and program characteristics replicate findings from studies reported in the general education literature, particularly Humphrey and Weschsler (2007). Like theirs, our participants are older on average, and probably less well educated and professionally accomplished than alternative route proponents had hoped (Walsh & Jacobs, 2007). For example, most participants who were employed immediately before entering training worked in schools, and most were making more as teachers than they had in their previous jobs.

Local programs proved to be an interesting anomaly among the four program types. They were by far the shortest programs and offered the lowest proportion of special education content. On the other hand, they had the highest representation of participants entering from outside the field of education. Although Local programs were streamlined, participants completed a year of training before entering the classroom as teacher of record and, thus, did not provide the most expeditious access to teaching. Furthermore, graduates of Local programs were least likely to express intent to remain in special education, perhaps because their program required so little investment of time and effort. However, even though Local programs had the lowest per completer costs, potential high attrition (as presaged by general education transfers and 8% attrition) seems likely to inflate these costs in the future.

In many ways, Step-up programs fall at the opposite extreme of Local programs. They are more costly (\$14,318 vs. \$5,567), are smaller (22 vs. 95 participants), run longer (26 vs. 14.7 months), and require many more hours of study (897 vs. 146 clock hours). Although participants are roughly the same age, Step-up participants are more likely to be women, to be White, and to have worked previously in education. Most (86%) made more money as teachers. By contrast, only 53% of Local program graduates realized increases when they moved to teaching.

On the other hand, participants who started Step-up programs were highly likely to complete them (97%). Once teaching, they were more likely to remain in special education (100%) and remain in special education at the same school (89%) than graduates of any other program. By contrast, 23% of graduates of Local programs planned to transfer to general education positions, and 8% to leave teaching. These findings suggest that the dramatic difference in initial per completer costs are likely to attenuate as Local graduates transfer and quit and Step-up graduates persist in the special education classroom.

Also notable in our findings is the fact that the majority of programs are offered by teacher education programs at colleges and universities. Most are extensive, in terms of both clock hours of instruction and length in months. Most are comparable to degree programs offered on campus and are alternative only in the sense of catering to a non-traditional population of participants or offering programs in off-campus venues.

The prototypical alternative route program in special education bears little resemblance to those envisioned by NCLB. Although Internship and Distance programs do move teachers into classrooms on a fast track basis, such programs do not shorten training. As a result, special education AR programs attract few mid-career professionals, and most participants make more money as teachers than they did in their previous careers. Nonetheless, for special education, perhaps the single most important outcome is increasing supply. We know that states with substantial shortages are more likely to authorize alternative routes than states with smaller shortages. Only time will tell if these programs contribute to a reduction in out-of-field teaching, and only time will tell the extent to which graduates persist and long-term efficiencies are achieved.

References

- Cohen-Vogel, L., & Hunt, H. (in press). *Governing quality in teacher education: Deconstructing federal text and talk*. *American Journal of Education*.
- Cohen-Vogel, L., & Smith (2007) Qualifications and assignments of alternatively certified teachers: Testing core assumptions. *American Educational Research Journal*, 44, 732-753.
- Darling-Hammond, L. (2000). Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child. *New York: National Commission on Teaching and America's Future*.
- Feistritzer, C. E. (2007). *Alternative teacher certification: A state-by-state analysis 2007*. Washington, National Center for Education Information.
- Fowler, C. R. (2003). The Massachusetts signing bonus program for new teachers: A model of teacher preparation worth copying? *Education Policy Analysis Archives*, 11, 1-24.
- Humphrey, D. C. & Wechsler, M. E. (2007). *Insights into alternative certification: initial findings from a national study*. *Teachers College Record*, 109(3). Available at <http://www.tcrecord.org> (ID Number 12145).
- Nougaret, A. A., Scruggs, T. E., & Mastropieri, M. A. (2005). Does teacher education produce better special education teachers? *Exceptional Children*, 71, 217-229.
- Rice, J. K., & Brent, B. O. (2002). *An alternative avenue to teacher certification: A cost analysis of the Pathways to Teaching Careers program*. *Journal of Education Finance*, 27, 1029-1048.
- Rosenberg, M. S., Boyer, K. L., Sindelar, P. T., & Misra, S. (2007). Alternative route programs to certification in special education: What we know about program design, instructional delivery, and participant characteristics. *Exceptional Children*, 73, 224-241.

Rosenberg, M. S., & Sindelar, P. T. (2005). The proliferation of alternative routes to certification in special education: A critical review of the literature. Journal of Special Education, 39, 117-127.

Sindelar, P., Daunic, A., & Rennells, M. S. (2004). Comparisons of traditionally and alternatively trained teachers. Exceptionality, 12, 209-223.

Walsh, K., & Jacobs, S. (2007, September). Alternative certification isn't alternative. Washington, DC: Thomas B. Fordham Institute. Retrieved September 27, 2007 from <http://edexcellence.net/foundation/publication/publication.cfm?id=375>

Beyond the Rhetoric: Intentional Infusion of Cultural Competence in Teacher Preparation Programs

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Abstract

This monograph presents and invites discourse relative to the commonly regarded major challenge for schools in the United States of America. Through an examination of prospective teachers, practicing teachers, and colleges and universities in America, we challenge educational stakeholders to intentionally infuse a culturally competent curriculum in teacher education programs, thereby improving public education in the United States.

Keywords: cultural competence – teacher education – diversity – urban schools – student achievement

According to Lieberman and Miller 1996, “The major challenge for schools is this: ensuring that all students attain the skills, knowledge, and dispositions that they will need to be successful in the world that awaits them.” At a cursory view, the generalized statement resonates with many educators, legislators, and parents especially within this current age of accountability among American schools. Viewing the statement more critically, we ask the following questions.

1. Who will ensure that all students attain the skills...?
2. Whose skills, knowledge, and dispositions are the necessity?
3. By what measure is success determined and according to whose worldview?

We raise these few questions to generate conversation about the pivotal role the teacher occupies as a constant within the discussion about *schools, all children, skills, knowledge, and student success*. If we exhaust the first question, we might find that “... as a result of some teachers’ limited skills and the belief that their students are not capable of learning to a high level, many low income and minority students receive a steady diet of low-level material coupled with unstimulating, rote-oriented teaching” (Darling-Hammond, 2006, p. 223). What happens to those students whose teachers are guided by sin of low expectations? There is a plethora of research that indicates many teachers hold particularly low expectations for African American and Latino students, especially African American males treating them more harshly than other students, discouraging their academic achievement, and lowering their self-confidence (Irvine, 1990; Carter & Goodwin, 1994; Green, 2005, Sledge & Morehead, 2006).

Within the United States of America, there are additional statistics that reflect higher rates of discipline and suspensions among children of color, and disproportionate numbers of minority and English Language Learner (ELL) students in special education programs (Diller & Moule, 2005). The same populations are underrepresented in accelerated, gifted, and advanced placement programs (Ford & Moore, 2004; Harmon, 2004).

Further, Delpit (1995) contended that research continues to reinforce the link between student success / student failure and cultural differences. Delpit lamented, "It is hard to believe that these children can possibly be successful after their teachers have...so much negative indoctrination...there is a tendency to assume deficits in students rather than to locate and teach to strengths" (p. 172). When teachers operate from a deficit model of instruction, there is little room for students to grow or alter the initial perceptions that their teachers have of them even when student performance indicates growth.

The dialogue resulting from question #1 places the teacher in the center of the discussion. Placing the teacher centermost within the discussion causes participants within the discussion to think more critically about the formal preparation of teachers in colleges and universities. We must require that colleges and universities prepare prospective teachers not only to have a background knowledge of diversity (buzz term), but also to prepare prospective teachers to examine the role that culture plays socially and politically. Going deeper, the examination of culture must expand to include institutions, especially public schools.

Unfortunately, the examination of culture in public schools is not regarded as a major priority within American public schools. American schools are vehemently concerned with the attainment of skills, knowledge, and dispositions of students (question #2) as evidenced by the federal mandate of the *No Child Left Behind* legislation. The legislation requires that prospective teachers master the components of standardized teacher certification instruments that measure the prospective teachers' content knowledge in their academic majors and minors.

The same legislation also requires that all public school students in grades 3-11 participate in mandatory content-based standardized testing to determine the effectiveness of individual schools and the overall school district. Schools and districts deemed ineffective, not making adequate yearly progress (AYP), are labeled as failing schools and must adhere to punitive federal sanctions. Between the outcome and demographic data generated from the national testing programs, reference to the cultural contexts is only explored when highlighting achievement gap issues.

The preoccupation of skills, knowledge, and dispositions alone places insignificant emphasis on an equally important aspect of competence, cultural competence. In our attempt to examine question #2, we legitimately ask from a cultural perspective: whose skills, whose knowledge, and whose dispositions are we concerned about all students possessing. In America, cultural differences between teachers and the students they teach often times result in the lack of student success because their cultural, social, and/or linguistic characteristics are unrecognized, misunderstood, and misinterpreted, and devalued (Hillard, 1991; Delpit, 1995; Green, 2002; Ferguson, 2003).

For example, the 100 largest American urban school districts comprise less than 1% of the nation's school districts, urban schools educate approximately 30% of all students living in poverty and 40% of all nonwhite students in the United States (MDRC, 2003). Yet the majority of the America's teaching force is female, middle class, and monolingualistic (Ingersoll, 1999; Diller & Moulle, 2005). This critical disconnect between the background of the majority of the teaching force and arguably prospective teachers (Sledge & Morehead, 2006) continues to advantage students whose cultural background is European American. These students have an educational advantage over children from other backgrounds. Hence, culturally different students are forced to learn skills, knowledge, and dispositions other than their own. Sowers (2004) offered that the cultural differences result in incongruent worldviews and concepts about human nature, time, the natural environment, and social relationships.

The measure by which success is determined is even more complicated especially when worldview is injected into the discussion. Student success is much more than correct responses to answers on standardized tests that were not designed using a culturally competent framework. Success must be recognized as the teacher's ability to deepen students' understanding of the social, political, and economic forces which influence their decisions about their future and world in which they live. Additionally, success must be regarded as the ability for students to apply a critical approach to learning, decision making, and equity.

In order to move students in the aforementioned direction, prospective teachers must possess the professional acumen to do so accordingly. Prospective teachers must become the beneficiaries of a teacher preparation curriculum which requires teachers to look outside of their own realities which includes cultural conflicts of power, privilege, and class (Sledge & Morehead, 2006). Further, we agree that "... it is the responsibility of faculty...to adopt pedagogical approaches to help students [prospective teachers] learn how to have open, intercultural discussions about the multicultural nation and the world in which we live" (Frederick, 1995, pp. 83-84).

More importantly, in class learning, interactions, and field experiences must challenge the existing belief system and intentionally prepare prospective teachers to work effectively with children and families from diverse backgrounds in high needs schools. Finally, once we begin to infuse cultural competence in teacher preparation programs, we will notice significant academic changes in all American public schools, in teacher retention rates, and throughout colleges and universities overall.

References

- Carter, R., & Goodwin, L. Racial identity and education. In L. Darling-Hammond (ed.), *Review of Research in Education*, Vol. 20. Washington, D.C.: American Educational Research Association, 1994.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA.: Jossey-Bass.
- Delpit, L. (1995). *Other people's children : Cultural conflict in the classroom*. New York : New Press.
- Diller, J. & Moule, J. (2005). *Cultural competence : A primer for educators*. Belmont, Ca. : Thomson Wadsworth.
- Ferguson, R. F. (2003). Teachers' perceptions and expectations and the black-white test score gap. *Urban Education*, 38(4), 460-507.
- Ford, D. & Moore, J. (2004). The achievement gap and gifted students of color. *Understanding Our Gifted, (summer)*, 3-7.
- Green, R. L. (2002). An assessment of student achievement in Dallas Independent School District: Final report. East Lansing, Michigan:author.
- Green, R. L. (2005). *Expectations: How teacher expectations can increase student achievement and assist in closing the achievement gap*. Columbus, OH: McGraw Hill.
- Harmon, D. (2004). "Improving test performance among culturally diverse gifted students." *Understanding Our Gifted*, 18-22.
- Hilliard, A. (1991). Do we have the will to educate all children? *Educational Leadership*, 49(1), 31-36.
- Ingersoll, R. (1999). The problem of under qualified teachers in American secondary schools. *Educational Researcher*, 28(2), 26-37.
- Irvine, J. (1990). *Black students and school failure: Policies, practices and prescriptions*. New York: Praeger.
- Liberman, A., & Miller, L. (2004). *Teacher leadership*. San Francisco, CA.: Jossey-Bass.
- Sledge, J., & Morehead, P. (2006). "Pushing the envelope: The need for a suburban university to prepare prospective teachers as culturally competent practitioners." [Electronic Version]. *International Journal of Learning*. From <http://www.learning-journal.com>, v. 13, 1-7.
- Sowers, J. (2004). *Creating a community of learners: Solving the puzzle of classroom management*. Portland, OR.: Northwest Regional Educational Laboratory.

Reading Together For Life: Parent-Child Literature Discussions As A Model For Democratic Practice

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Abstract

The paper describes an intergenerational book discussion program. Upper elementary school children and their parents participated in facilitated library-based discussions that focus on children's literature broadly highlighting themes of democracy and citizenship. The study examined how this experience affects participants' reading for meaning through talk and understanding of focal themes in the socially situated context of family and school reading practices. Qualitative and quantitative data were obtained via observations and surveys, analyzed and coded for processes relating to themes, actions and interactions in discussions, and reading and discussion habits outside of the program. Preliminary analysis suggests young readers' increased understanding of focal themes in literature and the importance of co-construction of knowledge. Data collection is ongoing.

Keywords: Democratic practice - Literature Response - Intergenerational

1. Introduction

The focus of this paper is a two-year study of community based literature discussion groups involving parents and other caregivers and their fourth and fifth grade children. Families in the program, Together: Book Talk for Kids and Parents, participated in intergenerational discussion groups in libraries in a Northeastern state in the United States. Sites represented underserved urban and rural community libraries, with economically and culturally diverse participants. A children's librarian and graduate or postgraduate student in the humanities facilitated each discussion group, with facilitators working together to lead discussions featuring award-winning children's picture books and chapter books on themes relevant to participation and critique. Books and discussions between facilitators, parents and children are organized around "We the people," a theme of the National Endowment for the Humanities, with a focus on courage, freedom, and being American. The program recruits families with children deemed likely to need and want support in reading as well as children who want to read more widely for pleasure and information. Books were chosen from award-winning picture books and chapter books that would highlight the program themes.

1.1. Purpose and significance

This out of school program highlights the importance of comprehension scaffolded by discussion and interdisciplinary connections. It also provides a unique focus on the social and community aspect of literacy practices, with its emphasis on parent-child reading and talk in a community library. The project is based on the premise that literacy is not just a skill acquired in school settings, but is a social practice where the nature of the literacies interacted are embedded in the situation (Street, 2003).

1.1.1. Reading for life

The authors present this study as a useful model to reverse a national decline in life-long reading for pleasure. The report, *To Read or Not to Read: A Question of National Consequence* indicates that while there has been measurable progress in recent years in reading ability at the elementary school level, reading outside school appears to halt as children enter their teenage years (National Endowment for the Arts, 2007). The NEA report data reveals that the percentage of 13 year olds who read (for fun) on a daily basis declined from 35% to 30% between 2004 and 2007. This decline increased as children entered the teen years and moved on to adulthood. These trends have resulted in a decline in comprehension, and for adults, an overall decline in civic and social engagement (NEA, 2007; Gambrell, 2008).

1.1.2. School reading practices

In addition, the current emphasis on test-taking and scripted approaches to language arts and reading comprehension instruction, based on our observations in schools, and those of other researchers and educators, indicate that fluent readers have few opportunities to engage in sustained reading and meaningful discussion of literature in a social context that might bolster their reading for pleasure. Also lacking are opportunities to read and think about texts across curriculum areas with connections made to learning and active participation (Greenleaf, Schoenbach, Cziko, and Mueller, 2001; Short, 1999). Making time for discussions and connections is key to reflective, critical reading, and preparing students to engage in thoughtful analysis of the texts they will encounter as citizens in a democracy and as life-long readers. We are aware of teachers' roles in facilitating students' thoughtful co-construction of meaning about diverse literature (Enciso, 1994; Lewis, 1999; Moller, 2002). This model also enhances the ability to read subtextually, and intertextually (Vansledright, 2004), incorporating understanding the author's intention, perspectives, and information from different sources – an important component of interage discussions. The facilitated literature discussion group greatly enhances support for each child's zone of proximal development, providing the scaffolding necessary to support greater reading comprehension, connections to curriculum in local and global history (Vygotsky, 1978) and foregrounds critique and recognition of multiple perspectives.

However, it appears that literature discussions are not a standard practice in our schools. Nor is reading and talking about books in school enough to promote sustained practices in reading for pleasure. We welcomed the opportunity to study literature discussions in the library setting, a context that is open to all (Cushman & Emmons, 2002), provides accessibility to books, and is free of the many constraints dictating school literacy practices today, and is recognized as an authentic social practice. We believe this program offers possibilities for collaborative partnerships to connect home, school, and community contexts such as local public libraries.

This study examines the interactions among parents and their children in thematically focused literature discussion series at underserved urban sites. We were interested in seeing how parents and children could interact with facilitators in "hybrid literacies" (Cushman & Emmons, 2002) to experience learning and construct meaning about text that could not happen typically in schools (Mahiri, 2005), even in classrooms where literature discussions are occurring. We also looked at what makes some book discussions "better" than others—and what we might learn that would help future Together sites and anyone who may implement such out of school, intergenerational discussions. Our research questions are: 1) How do parents, children and facilitators scaffold one another's meaning making, or "cycles of meaning?" (Barnes, 1993), and: (2) What makes some book discussions richer in terms of three criteria (a) Intertextuality (meaningful connections between books read and community and world events, such as immigration); b) Equal interchanges between parents and children in terms of length and frequency and c) Facilitators' role in stimulating conversations that expand and reexamine text and theme. Currently, we have analyzed data from four urban sites and their participants' responses to texts read during six-week sessions.

The authors of the study, teacher educators, participate as researchers in the program. As the program developer and the evaluator, we make visits to each site to introduce, observe, record and assess. Data gathering continues as the program expands to new sites. In this paper, we use data to examine the first research question.

2. Conceptual orientation

The conceptual framework of this paper considers both the importance of the individual reader's engagement in personal response, and the belief that reading is ultimately socially constructed.

2.1. The literary transaction

Rosenblatt (1978) described the transaction that prepares readers to understand and analyze their own experiences and the experiences and histories of others, is an underlying theme of the study's framework. According to Rosenblatt, the content of the mental images the text sets off will be colored and influenced by the personal experiences of the reader. The facilitated literature discussion group

– a socially constructed literacy “event” (Heath, 1983, Street, 2003) - greatly enhances support for extending this transaction.

2.2. Co-constructing meaning

The ways in which talk helps to confirm, extend, or modify individual interpretations, creating a more nuanced and multi-leveled understanding of the text, is explored and documented in the studies and theories of Douglas Barnes (1993). Barnes described exploratory talk in small or large groups as talk that includes hesitations and changes of direction, tentativeness, assertions and questions, and maintained that, “in the course of the talk (readers) are in part exploring their responses to what they have read, but in an important sense they are also constructing them. And the construction is being done collaboratively” (1993, p. 27). Other researchers looking at the response of small, facilitated groups of students have documented an increased participation and sophistication in reading strategies (e.g. Eeds and Wells, 1984).

While there is a rich field of research on response and critical reading, there are few studies of family reading with fluent, older readers. Most studies of family reading examine experiences for very young learners – from infants to kindergartners (Wasik, 2004). Likewise, surveys of library-based programs that support reading for children and their families throughout the U.S. mention only one program targeted specifically for upper elementary children and their parents or caregivers, with the majority of programs focusing on fostering use of books and reading strategies for infants, toddlers, and preschoolers (Ward, C. 2007). Other studies look at family literacy and its impact, or lack of impact, on school reading. Research indicates that although rich and meaningful literacy events occur in working class homes (Heath, 1983), in the homes of children living in urban poverty (Taylor & Dorsey-Gaines, 1988), and in the homes of Latino families (Moll, Amanti, Neff, & Gonzales, 1992) there were few, if any, connections between literacy practices in and out of school, or connections to content area knowledge, such as social studies

3. Data Collection and Analysis Methods

While the program works in urban and rural settings, our focal sites for this study were urban. Literature discussion group size ranged from 8 to 12 families, a librarian and a graduate student in the humanities. Qualitative research methods were used to examine parent-child interactions, number of responses per participant category (facilitator, parent, child), the complexity of response, as well as connections to categories of group interactions. Data sources included field observation notes, audiotapes and videotapes of the discussions, and, follow-up interviews and creative art projects by participants. In response to funding requirements, written questionnaires were used to compare with qualitative sources. Data were coded for process to identify themes on the actions and interactions of intergenerational discussions, the participants’ responses to targeted books in the context of the themes as well as their reading and discussion habits outside the program (Miles and Huberman, 1994; Strauss & Corbin, 1998). Qualitative guidelines were employed to ensure study rigor

(Lincoln & Guba, 1985), including “thick description” of participants’ behaviors within their own contexts, allowing us “entry into the conceptual world of the respondents” (Geertz, 1973).

3.1. Data Interpretation

Results indicate that intertextual discussions emerged that explored and expanded focal themes of courage, freedom and being American. In this paper, we will discuss three of the patterns that emerged from the data: exploring themes that clarify ideas; cycles of meaning (Barnes, 1993); and building on the ideas and language of others. Each of the patterns that occur in the literacy events below highlight the socially constructed nature of reading as adults and children contribute to one another’s meaning-making.

3.1.1. Exploring themes that clarify ideas

Given the rich texts selected for discussion and the questions posed by facilitators, discussions that centered around themes went beyond the texts to offer parents and children a space to explore bigger issues related to courage, freedom, and being American. For example, in this observed session, the facilitators, parents and children were beginning to discuss *In the year of the boar and Jackie Robinson* (Lord, 1986) in the context of their previous picture book, *The lotus seed* (Garland, 1997). The following excerpt from the transcript of the session highlights the back and forth, the assertions and questions that characterize authentic collaborations, and co-constructing meaning.

Parent 1: What do you mean by being American?

Facilitator: That is a really good question—Samantha is offering the definition that America is a melting pot of many cultures; Michelle is offering the definition that is it the ability to hold certain identities. Do you have another idea?

Parent 2: To me it’s the way we share resources and need to work together to share those resources with one another. If we didn’t need to share resources then we would stay within our own—so I’m thinking being American isn’t any different than being human.

Parent 3: Being from Mexico and becoming a citizen of the US, I feel the difference in being American is having rights that I did not have before, for example when I travel back I have a passport—in this country if there is discrimination you have the right to fight it, in my country you don’t have that right—there you can see in the paper to say in a job ad-- don’t apply if you are a woman or over 35.... What? We don’t do that here. My experience is very different from my daughter’s because I grew up there and she doesn’t understand that and when we go back it’s a different world for her.

Child (*Daughter*): Oh - yeah I can’t even order a hamburger and fries at McDonalds!

Parent 3: A language barrier is one thing, I want to preserve the culture but at the same time I want her to speak fluent English—I want her to be treated equally—and want her experience to be different than mine growing up.

In this excerpt, parents explore what it means to them to be American. For the second mother, this reflection includes her life and the life of her daughter, as she uses her experiences in two nations to define herself as an American. For her daughter, it means only a language barrier, but she hears her mother's experiences and they become part of her response to the theme.

3.1.2. Cycles of meaning

Two discussions at different sites, one in a small city and one in a large urban library, illustrate the way that meaning was co-constructed, moving in circles from the text itself out to background knowledge, and personal experiences. Parents, facilitators and children incorporate one another's ideas and words. Both sessions focused on the picture book *The story of Ruby Bridges* (Coles, 2004), based on a first grade African American child's integration of a school in New Orleans, Louisiana. Parents and children explore the character and situation of this child, described in the text and illustrations as walking through angry crowds of white adults on her way to the classroom in which she was the only student.

Facilitator: What, why were people so angry at her? What didn't they like about what she's doing?

Child 1: They were racist, and didn't want her to go to school with them.

Child 2: Her saying they didn't know what they did could really have stirred them up...

Parent 1: She stayed in that classroom, all alone, all that time, with her teacher. She was self-assured enough to be alone.

Child 3: She thought older people didn't want her in school, but she followed her dream.

Child 1: Her dream that White people and Black people could go to school together. (*Following up on one another's conversations*)

Parent 2: Her support came from God; God gave her the strength.

Facilitator: Where else did she get her support from?

Parent 3: The government was protecting her, the Marshals...(providing background knowledge)

Children and parents listened carefully to one another, asking one another questions, answering them based on their information, and following up on one another's ideas – for example, expanding on the idea that Ruby had a dream to have white and black children going to school together. These comments also highlight intertextuality, as the group read *Martin's Big Words* (Rappaport, 2002) earlier in the program, and these actual words were in that book. As the conversation continues, a parent uses her own background knowledge to reply to the facilitator, expanding the younger participants' understanding of events during the American Civil Rights Movement.

In the second setting, parents, a caregiver, and their children also discuss *the Ruby Bridges* book. These discussion members examined Ruby's experience in the school, where she was one of the only children, and empathize with her situation; they then turn to the facilitator's question, Was Ruby a hero?

Child 1: It wasn't fair – she was lonely if there were other people there, they could be friends.

Child 2: I agree – she could have trusted them - they could have trusted each other.

Child 3: I think so too.

Child 1: If there'd been more kids, the crowd would be angrier, but for Ruby, if she was with other kids her confidence would have been stronger.

Facilitator: Do you think Ruby is a hero?

Child 2: I don't think she was a hero; she was an inspiration. Someone to look up to, but not a hero, a hero changes things.

Child 1: I agree. She didn't really do anything...

Parent 1: I disagree. I think she's a hero: look at what the afterword said...

Parent 2: To me inspiration and hero are the same. I think she's a hero.

Child 4: I think she's a hero because she changed things.

Facilitator: Is a hero the same as a leader? Is Ruby one?

Child 2: I think not a leader because a hero...

Child 5: I think she wasn't a leader....

Parent 3: She led the way, she moved to the next step.

Parent 4: She emphasized, like the judge said no segregation, but she was the body that changed it.

As the conversation cycles around, beginning with children's interest in Ruby's situation, it soon involves parents, children and facilitator. Together they confront the question of Ruby's role: Was she a hero? Was she a leader? As they talk, they use their individual understanding of these themes, move to close reading of the text ("look at what the afterword said"), and gradually shift back and forth to build meaning that fits the book, the time period ("the judge said no segregation") and their own feelings. Parent 4 summarizes these cycles of talk with her statement, "...but she was the body that changed it."

3.1.3. *Building on the ideas and words of others*

This pattern of talk follows the recursive cycle described above but was distinctive in the rich use of previous speakers' ideas and actual words or phrases by subsequent speakers. Although a parent might be more likely to introduce a term, children used the ideas and words of one another. An example of this occurred in the discussion of a young adult novel that includes elements of magical realism, *Skellig* (Almond, 2001) In this conversation, children and adults explore the nature of the title character – a being gradually described in the novel.

Child 1: You said was the story real or fantasy?

Parent: Or magical

Child 1: I think it was magical and fantasy because he wouldn't fly and get wings all of a sudden. I don't think it is a real thing to eat bugs

Facilitator: Why does the author bring in someone special?

Child 2: it makes the story more interesting – in every day life they have doctors so you want to put something that isn't there...

Child 3: I think he put Skellig in because he is a dead person and one of a kind and a lot of people aren't like that.

Child 4: I think that he is a mystery that he got the baby healed. He is unexpected. Not everyone could just heal a baby; he is like a super hero.

Facilitator: I hear many great ideas of what Skellig is or what he might be—what about those of you who haven't spoken—what do you think he is—can he be a combination of things?

Child 1: I think he is an angel and a human being mixed together. Because if he was a human being he couldn't heal the baby sister.

Child 4: I think that Skellig was a man, a bird and an angel, he was a man because of his figure, he was a bird because of his wings and he was an angel because of his mystical powers.

Child 3: I think he was an angel because he lived in the garage to help the family.

Mom: I think Skellig is the old reflection of Michael—who could not help his little sister at all—Skellig is dying and the baby is dying.... With the faith they all get stronger and save the baby.

In this conversation, child participants incorporate the terms magic and fantasy in their exploration of this character, and as new respondents enter the conversation, the idea of Skellig as an angel is introduced and taken up. Child 4 carefully categorizes all of the elements he recognizes in the character, and a parent introduces a new idea, a more realistic version of the story, that concludes this segment of the discussion.

3.1.4. Follow-up interviews and creative arts artifacts

Interviews conducted via email and telephone were held with participating families at the conclusion of the program at these four sites. As the second year of the program drew to a close, all participants were encouraged to respond to their experience with a poster, collage, drawing or letter. These interviews and artifacts were analyzed. Patterns that emerged revealed that parents and children characterized their participation as: 1) reading more meaningfully and for pleasure; 2) learning from, with and about each other; 3) valuing book talk with others, and 4) greater engagement in reading and discussing books as a family.

4. Discussion

Analysis revealed that children's and parents' questions and connections scaffolded one another's understanding of new ways of reading and enabled them to make connections to text and to the world. Sharing these layered perspectives enabled child participants to understand better the historical and contemporary issues in being American, as they discussed *In the Year of the Boar and Jackie Robinson* and *The story of Ruby Bridges*. Together they explored and clarified their thoughts about heroes and courage, and what it meant to be "different." Intertextual connections were made to *The Lotus Seed* and *Martin's Big Words*, as phrases and ideas from previous readings colored the interpretation of new texts. The *Skellig* discussion found adult and child readers grappling with reality and other worldly elements as they closely examined the text. Results of interview and letters indicate that parents gained a context that helped them understand their children's reading, and children saw reading in new and more complex way. Both expressed interest in reading more. As the

program continues in new communities, data will be added to our analysis and conclusions.

Educational implications

Constrained practices for teaching and experiencing reading in elementary schools are a concern to researchers and practitioners. Sites that provide alternate approaches to reading and responding to exemplary literature that relates to family, community, and global issues and enables parents and caregivers to share their knowledge may provide a productive model for observation and research. Our work also offers a framework for fostering school community partnerships.

5. References

- Almond, D. (2001). *Skellig*. NY: Laurel-leaf.
- Amrein, A.L. & Berliner, D.C. (2002). High-stakes testing, uncertainty, and student learning. *Educational Policy Analysis Archives*, 10 (18). [Online]. Available: <http://epaa.asu.edu/epaa/v10n18>.
- Applebee, A., Langer, J., Nystrand, M., and Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high school English. *American Educational Research Journal* 40: 3, pp. 685-730.
- Barnes, D. (1993). Supporting exploratory talk for learning. In Pierce, K.M. & Gilles, C. (Eds.). *Cycles of meaning: Exploring the potential of talk in learning communities* (pp. 17-34). Portsmouth, New Hampshire: Heinemann.
- Coles, R. (2004). *The story of Ruby Bridges*. NY: Scholastic.
- Cushman, E., & Emmons, C. (2002). Contact zones made real: in Hull, G. & Schultz, K. (Eds.). *School's Out: Bridging out-of-school literacies with classroom practice*. New York: Teachers College Press.
- Dorsey-Gaines, C. & Taylor, D. (1988). *Growing Up Literate: Learning from Inner-City Families*. Portsmouth, NH: Heinemann
- Eeds, M. & Wells, D. (1989). Grand conversations: An exploration of meaning construction in literature study groups. *Research in the Teaching of English*. 23, (1), 4-29.
- Enciso, P. (1994). Cultural identity and response to literature: Running lessons from Maniac Magee. *Language Arts*, 71, 524-533.
- Gambrell, L. (February 2008). *Reading Today*. Chicago: International Reading Association.

Garland, S. (1997). *The lotus seed*. NY: Voyager.

Geertz, C. (1973). *Thick description: Toward an interpretive theory of culture*. In Geertz, C. (Ed.) *The interpretation of culture*. New York: Basic Books.

Greenleaf, C., Schoenbach, R., Cziko, C., and Mueller, F. (2001). Apprenticing adolescent readers to academic literacy. *Harvard Educational Review* .71:1,79-129.

Heath, S.B. (1983). *Ways with words: Language, life and work in communities and classrooms*. NY: Cambridge University Press.

Lewis, C. (November, 1999). *Multicultural texts in community contexts: The politics of reader response*. NCTE. Denver, Co.

Lord, B.B.(1986) *In the year of the boar and Jackie Robinson*.New York: Harper Collins.

Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Mahiri, J. (Ed.). (2005). *What they don't learn in school: Literacy in the lives of urban youth*. New York: Lang.

Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage.

Moll, L.C., Amanti, C., Neff, D. & Gonzales, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice*. 31, 132-141.

Moller, K. (2002). Providing support for dialogue in literature discussions about social justice. *Language Arts*, 79, 467-477.

National Endowment for the Arts Executive Report (November 2007). *To read or not to read: A question of national consequence*. Washington, D.C.

National Reading Panel (2000). *Teaching Children to Read*. Washington, DC: National Institute of Child Health and Human Development.

Rappaport, D. (2002). *Martin's big words*. NY: Hyperion Books.

Rosenblatt, L. (1978). *The reader, the text, and the poem: The transactional theory of literary work*. Carbondale, IL: Southern Illinois University Press

Scholastic/Yankelovich (2006). *Kids and family reading report*. NY: Scholastic.

Short, K.G. (1999). The search for balance in a literature-rich curriculum. *Theory Into Practice*. 38, 130-137.

Strauss, A. & Corbin, J. (1998). *Basics of qualitative research*. Thousand Oaks, CA: Sage

Street, Brian. (2003). What's "new" in New Literacy Studies? Critical approaches to literacy in theory and practice. *Comparative Education*, 52, 1-19.

Vansledright, B. (2004). What does it mean to read history? *Reading Research Quarterly*. 39/3: 342-6.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Emotional Intelligence – The Cyprus Perspective

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Abstract

This paper presents a survey carried out in Cyprus regarding the awareness of University Professors and School Headmasters and Teachers regarding Emotional Intelligence (EI) and the implementation of EI in the School Curriculum. The survey conducted entailed the distribution of questionnaires. The data was analyzed using a statistical package and the summary of the analysis results are presented herein. The work presented is part of the European project LETHE- LEarning THrough Emotions – Project n° 129937-CP-1-2006-1-IT-COMENIUS-C21. This project aims at analyzing the situation in various European countries regarding Emotional Intelligence and the promotion of this concept into the School curriculum.

Keywords: Emotional Intelligence - School Curriculum

1. Introduction

The LETHE- LEarning THrough Emotions – Project n° 129937-CP-1-2006-1-IT-COMENIUS-C21 (Boldini and Bracchini, 2006) aims to first survey and analyze in various European countries the perceptions of university professors, school headmasters and school teachers regarding Emotional Intelligence (EI). It also aims to investigate the extent to which EI is incorporated in the School Curriculum. Through this survey analysis it aims to promote awareness of the concept within Universities and Schools and thus help in the incorporation of the concept in the curriculum of courses. Finally the project will result in the development of an e-portal that will provide an e-guide to EI for teachers and students.

We believe that our research will promote awareness amongst the schools and the various stakeholders (students, teachers, headmasters, parents) and will help in the efforts and push towards the introduction of EI into the school curriculum. EI has already started making an impact on the business sector in Cyprus, of course some years after its introduction in the US and Europe. Various organizations are offering training seminars on EI and its impact on the organizations, business, the Economy and Society in general. So EI is gradually being introduced into the business environment of Cyprus and indirectly into the Cyprus culture and Society. It is therefore expected that at some stage people will be introduced to this concept and receive training if needed. Thus, the introduction of EI into the school curriculum, whether people agree or not on whether it is recommended or not, is imperative, at least for students to acquaint themselves with the concept.

The rest of this paper is organized as follows: In Section 2 we provide a literature review and explain the concept of Emotional Intelligence. In Section 3 we present the analysis of the results of the survey, conducted through questionnaires, university professors and school headmasters and teachers in Cyprus. In conclusion, we briefly address the main issues arising from the analysis of the survey results.

2. Emotional Intelligence

"Emotional Intelligence" is a term that was first coined by psychologist Peter Salovey of Yale University and John Mayer of the University of New Hampshire. It was used to describe the ability to understand one's own feelings and the feelings of others, as well as the control that people have over those feelings, in a way that enhances living. The term was made widely known by Daniel Goleman in his 1995 groundbreaking book *"Emotional Intelligence: Why it can matter more than IQ"*. Goleman uses extensive scientific research to prove that people with high emotional intelligence tend to become more successful in life than those with lower emotional intelligence, despite their classical IQ scores.

The crux of this argument lies in understanding that emotions play a crucial role in determining how people feel, behave, act and react in their everyday lives. It is emotions that essentially "navigate" people's lives, and determine the way in which they communicate, the extent to which they perform, concentrate, absorb or process information, and the degree to which they portray motivation. *"[...] in navigating our lives, it is our fears and envies, our rages and depressions, our worries and anxieties that steer us day to day. Even the most academically brilliant among us are vulnerable to being undone by unruly emotions"* (Goleman, 1995). Emotions even impact upon the state of our physical health, as, according to Goleman, our central nervous system can affect our immune system, and thus there is a connection between people's emotional state and illness: *"People who experienced chronic anxiety, long periods of sadness and pessimism, unremitting tension or incessant hostility, relentless cynicism or suspiciousness, were found to have double the risk of disease – including asthma, arthritis, headaches, peptic ulcers, and heart disease"* (Goleman, 1995).

The relationship between emotions and the learning process is considered to be an important one. Traditionally, intelligence was directly linked to cognition and skills. In the case of cognition, a child's ability of understanding mathematical problems and equations was usually taken as a measure of his/her intelligence. In the case of skills, a child's technical ability, such as wood crafting, was taken as a sign of intelligence. Nevertheless, even though these classical types of measuring one's intellect could prove useful in estimating a student's grades and academic performance, they could often prove to be very poor indicators of one's professional and/or personal life success. So clearly there seems to be a missing piece to this puzzle. What is it, after all that essentially determines one's overall success in life?

As Gibbs accurately puts it: *"For most of this century, scientists have worshipped the hardware of the brain and the software of the mind; the messy powers of the heart were left to the poets. But cognitive theory could simply not explain the*

questions we wonder about most: why some people just seem to have a gift for living well; why the smartest kid in the class will probably not end up the richest; why we like some people virtually on sight and distrust others; why some people remain buoyant in the face of troubles that would sink a less resilient soul. What qualities of the mind or spirit, in short, determine who succeeds?" (Gibbs, 1995). So enters here Goleman's "emotional intelligence" concept, which suggests that the key to success is the individual's ability to reason with his/her emotions and use those emotions in a constructive way, which enhances the individual's performance as well as his/her social interactions. In fact, Goleman found that emotional intelligence was more important than cognitive intelligence and technical ability. And contrary perhaps to cognition and skill, emotional intelligence is something that can evolve, as it can be taught and it can thus be learned. As Goleman supports, through the learning process emotional intelligence can be acquired through practice, motivation and feedback.

More specifically, he supports, emotional intelligence has five elements. These are namely, self-awareness, self-regulation, motivation, social skill, and empathy: Self-awareness refers to the ability of knowing one's self and deeply understanding one's emotions; self-regulation concerns the way of handling one's feelings, so as to act and react appropriately; motivation is the idea of pursuing a goal with determination, despite possible setbacks; social skill is how people manage interpersonal relationships; and finally, empathy refers to the ability to recognize how other people feel. The learning process should involve acquiring all these competencies, as they enhance a student's confidence, interest, self-control, concentration, as well as his/her communication and cooperation skills.

"Nowhere is the discussion of emotional intelligence more pressing than in schools, where both the stakes and the opportunities seem greatest" (Gibbs, 1995). The role of emotional intelligence in schools indeed seems to be very important. The five elements of emotional intelligence (identified in 1.1 above) are essential components which may enhance a student's ability to process information, as well as his/her concentration, motivation and communication. If students learn how to control and use their emotions in a way that enhances learning and improves social contact, and also learn to understand the feelings of others, then they are more likely to succeed in their lives.

Emotional intelligence is not something that people are born with, but it can be acquired through time: *"When we think of brilliance we see Einstein, deep-eyed, woolly haired, a thinking machine with skin and mismatched socks. High achievers, we imagine, were wired for greatness from birth. But then you have to wonder why, over time, natural talent seems to ignite in some people and dim in others"* (Gibbs, 1995). The answer to this lies in the fact that the missing factor to this equation – emotional intelligence – can be acquired and raised through time. It ought to be emphasized, however, that if efforts to raise one's emotional intelligence start from an early age, i.e. from school, kindergarten (even within the family unit), then it is more effective. As Kusché and Greenberg support, *"although emotional growth takes place throughout life, childhood is a time of especially rapid maturation"* (Kusché and Greenberg, 2006). The role of emotional intelligence in schools can thus prove to be very helpful in raising students, who will be better equipped to succeed in their later life.

In order to raise an emotionally intelligent student, learning environments should be adaptive and transformative. They should be able to employ the principles of the theory of emotional intelligence, and educators should understand this approach and embody the fundamentals into their teaching. This is essential in order for students to succeed both academically, as well as professionally, but also – and more importantly perhaps – in their personal lives. *“Educators can point to all sorts of data to support this new direction. Students who are depressed or angry literally cannot learn. Children who have trouble being accepted by their classmates are 2 to 8 times as likely to drop out”* (Gibbs, 1995).

In other words, it is not only the marks that students score in tests and exams which reflect on their intellect. As Low and Nelson argue, *“test scores reflect only a small part of learning that is important in academic success, career effectiveness, and personal well-being. We lose the true concept of education when we equate education and resultant learning to information retention, information transfer, and test taking”* (Low and Nelson, 2005). What students need to acquire and develop is the ability to think and the way that they need to behave and react in certain situations. They need, in other words, to develop wisdom. *“One does not have to be old to be wise. Young children can learn skills that allow them to behave wisely and effectively, for example interpersonal skills, dealing with strong emotions, time management, goal achievement”* (Low and Nelson, 2005).

Educators then must teach children these elements, because developing a child’s character is important in raising an emotionally intelligent individual, who is more likely to succeed in his/her later life. According to Cherniss and Goleman, *“[...] it is character, not just how smart we are, that makes the difference between a fulfilled life and a wasted one. But in the new world of work, these abilities are more important than ever. With constant change and downsizing, people in every field need these competencies to survive. [...] Educators can prepare children for this new world of work by helping them to learn those socio-emotional competencies that are most critical for success. We owe our children nothing less”* (Cherniss and Goleman 2006).

3. Analysis of the Survey

In order to conduct the survey to investigate the perceptions and views of university professors and the school headmasters and teachers regarding Emotional Intelligence (EI), we designed a questionnaire that was divided into multiple-choice and open-ended questions. More particularly the questionnaire aimed at identifying the following:

- (a) the awareness and understanding of the concept of EI
- (b) how professors and teachers learned about EI
- (c) what training was provided to professors and teachers
- (d) whether professors and teachers believe that EI has been introduced in the school curriculum
- (e) whether professors and teachers agree with the introduction of EI in the school curriculum

- (f) whether professors and teachers agree with the way EI is incorporated in the school curriculum
 (g) how professors and teachers would introduce EI in the school curriculum.

6 University professors, 6 School Headmasters and 40 School teachers completed and returned the questionnaires. Their answers are summarized below. Figure 1 shows the familiarity of professors and teachers with the concept of EI. It clearly indicates that the University professors are more familiar with the concept. We have to point out however, that the professors that took part in this survey were mainly professors working in Departments of Education. Only 33% of the School Headmasters and Teachers are familiar with EI. In answering the question as to how they acquainted themselves with the concept of EI, the respondents listed four main sources of information namely, courses at University, books and articles, the Internet and conferences and seminars. 66% of professors received training on EI, however only 17% of the School Headmasters and 10 % of the School Teachers received any form of training (Figure 2). Training was received mainly through courses and conferences and seminars.

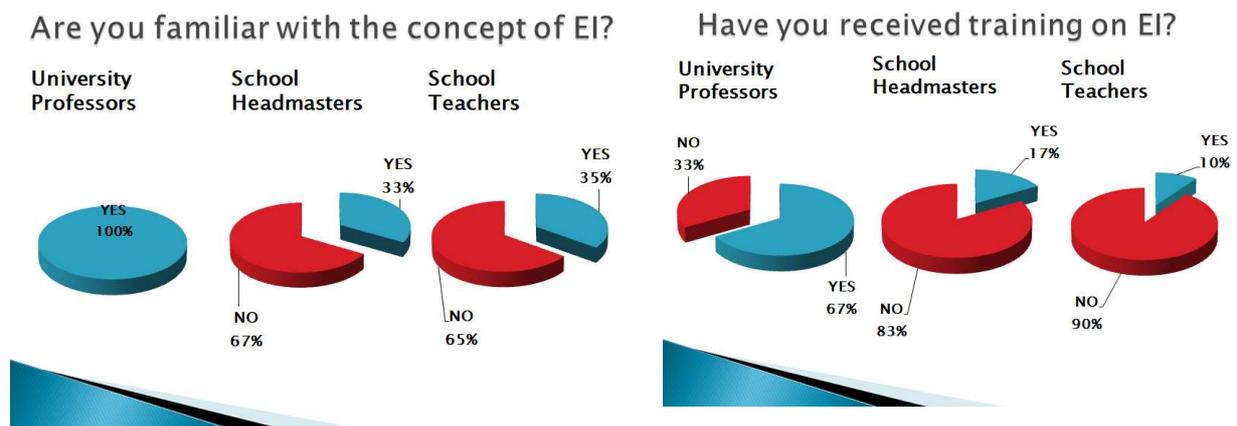


Figure 1: Awareness of EI

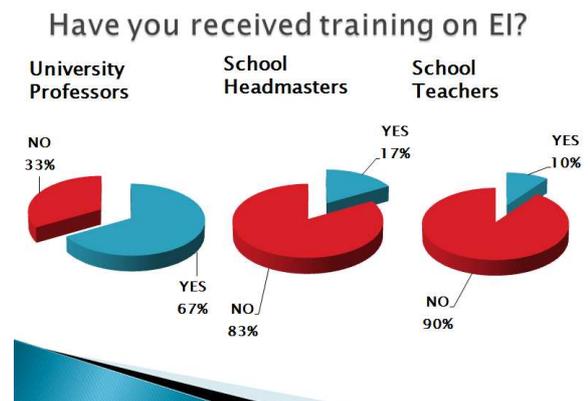


Figure 2: Training on EI Received

Figures 3 and 4 present the answers of those professors, headmasters and teachers who are familiar with the concept of EI, since those who are not familiar with the concept of EI, did not answer these questions. Nearly all agree that EI should be introduced in the school curriculum (Figure 3). The main reasons given for this is that EI:

- ▶ is crucial to children's success
- ▶ helps develop a more inclusive environment
- ▶ helps in building greater resilience to emotional problems
- ▶ improves emotional and social skills
- ▶ improves communication
- ▶ helps in expressing and learning how to deal with emotions
- ▶ helps in understanding and accepting others
- ▶ enhances people's ability to solve real life problems
- ▶ enhances self-confidence
- ▶ enhances team and leadership skills
- ▶ helps develop more balanced citizens

The only reservation for not introducing EI in the school curriculum was due to “EI is a very complicated issue and there are many disagreements found in the literature so it is not easy”.

Figure 4 shows that the vast majority of the respondents believe that EI has not been introduced into the School Curriculum. When asked how they would introduce EI, they expressed a variety of suggestions; these are listed below:

- ▶ part of education and humanities courses
- ▶ part of language, mathematics, physical sciences, music, art, physical education courses
- ▶ explicit course on EI
- ▶ train teachers
- ▶ involvement of parents
- ▶ specially designed class environment (e.g. No desks, only chairs in circle arrangement, etc.)
- ▶ through project and team work
- ▶ participation in clubs and societies and through event organization
- ▶ outdoor activities
- ▶ discussion groups.

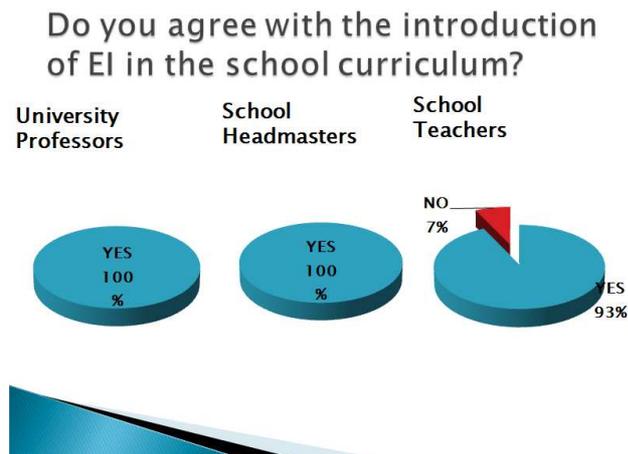


Figure 3: Do you agree to introduce EI in the school curriculum?

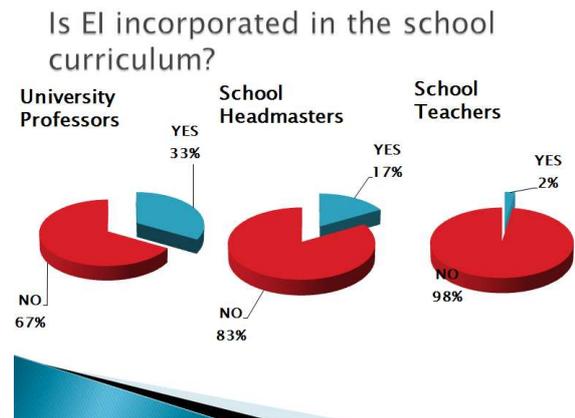


Figure 4: Has EI been introduced in the school curriculum?

4. Conclusion

This paper has presented the results of a survey conducted in Cyprus amongst University professors and School headmasters and teachers regarding Emotional Intelligence (EI). The main conclusions emanating from the results of the survey are:

- ▶ EI is a new “subject” in Cyprus
- ▶ There is lack of information regarding EI in Cyprus
- ▶ EI has not been introduced into the School Curriculum
- ▶ There are no case studies on EI to report on
- ▶ EI has to be introduced into the School Curriculum

We are currently evaluating the feedback received from all project partner countries and we will proceed by producing a comparison analysis. Once the comparison analysis is made a report discussing EI in the project partner countries will be developed and will be distributed to the various stakeholders of the project in order to help promote the concept of EI in the school curriculum.

References

Boldini, F. and Bracchini, M.R. (2006) 'LETHE- LEarning THrough Emotions – Project n° 129937-CP-1-2006-1-IT-COMENIUS-C21', Villa Montesca, Italy, <http://www.montesca.it/lethe/site/index.asp>

Cherniss, Cary and Goleman Daniel. (2006). 'From School to Work: Socio-Emotional Learning as the Vital Connection', in Maurice J. Elias and Harriett, Arnold (eds.), *The Educator's Guide to Emotional Intelligence and Academic Achievement: Social-Emotional Learning in the Classroom* (California: Corwin Press).

Elias, Maurice J. and Arnold, Harriett (eds.) (2006). *The Educator's Guide to Emotional Intelligence and Academic Achievement: Social-Emotional Learning in the Classroom* (California: Corwin Press).

Gibbs, Nancy (1995). 'The EQ Factor: New Brain Research suggests that emotions, not IQ, may be the true measures of human intelligence', *Time Magazine*: October 2. Web Reference: http://www.time.com/time/classroom/psych/unit5_article1.html

Goleman, Daniel (1995). *Emotional Intelligence: Why it can matter more than IQ* (London: Bloomsbury).

Johnson, Lori R., & Kaufhold, John A. (2005). 'The Analysis of Emotional Intelligence and Potential Problem Areas of Elementary Educators', *Education*, 125(4).

Kusché, Carol A. and Greenberg, Mark T. (2006). 'Brain Development and Socio-Emotional Learning: An Introduction for Educators', in Maurice J. Elias and Harriett, Arnold (eds.), *The Educator's Guide to Emotional Intelligence and Academic Achievement: Social-Emotional Learning in the Classroom* (California: Corwin Press).

Low, G., Lomax, A., Jackson, M., & Nelson, D. (2004). *Emotional Intelligence Development Model*. A Paper presented at the 2004 National Conference of the American College Personnel Association in Philadelphia, Pennsylvania.

Low, G. & Nelson, D. (2005). *Emotional Intelligence Academic Excellence*. An article published in the *TEXAS STUDY* magazine for Secondary Education (Spring 2005).

Teacher Stories of Conflict and Relationships in International Schools

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Abstract

Central to this paper are three international teacher stories of changing relationships during times of conflict. The conflicts in these three cases involve a.) a teacher and the administration of an international school, b.) a teacher and an international teacher recruitment organization, and c.) a teacher and a parent whose influence extended to the ruling family in the host country of the International School. This last story explores a changing governmental position that placed the teacher in physical jeopardy.

In each of the three cases, the teachers turned to the *International Schools Review* at <http://www.internationalschoolsreview.com/> to assist them with their conflict. In one case, the International Schools Review became highly politically involved, contacting government officials in many countries, as well as the media for assistance. Additionally, ISR used its website to mobilize its 10,000 international teacher membership and 20,000 daily readers of the organizations' website in order to ensure some measure of safety for the teacher involved.

The stories told by the teachers are the focus of this inquiry. It has been my intention in conducting this inquiry to add to our understanding of the landscape of schools, as it pertains to teachers' relationships. In particular, the relationships explored existed before, during and after the conflict that occurred in international settings.

Keywords: narrative education teacher international ethics

1. Introduction

Much of our understanding about teachers' relationships in schools may be found in specific stories told by narrative researchers (Bateson, 1989; Belenky et al., 1986; Clandinin, 1995; Florio-Ruane, S., 1997; Qoyawayma, 1992; Witherell & Noddings, 1991). Information about relationships can also be found in research that describes the characteristics of what encompasses a good relationship (Morgan, 1997; Sergiovanni, 1992; Strike, Haller and Soltis, 1988; Wheatley, 1999; Wheatley & Kellner-Rogers, 1996; Witherell and Noddings, 1991). I found no research, however, that focuses upon international teachers' relationships during times of conflict. This inquiry may offer possibilities for enhanced understanding within this area. How international teachers feel during conflict that affects them is another area that has not been widely researched.

The stories in this inquiry explore the feelings of three teachers caught in conflictual situations. Their stories are about how they made sense of and chose to respond to those situations. By understanding more about the people in educational organizations, it may be possible to come to some greater understanding of "the nature of human life as lived to bear on educational experience as lived."^{xliv}

2. Methodology: Narrative Inquiry

Connelly and Clandinin say of stories and people: "People by nature lead storied lives and tell stories of those lives, whereas narrative researchers describe such lives, collect and tell stories of them and write narratives of experience."^{xlv} It is through the transaction of learning from each other that the researcher and participants can begin to understand specific experiences within the context of stories which are told and retold in community. New understandings about the content and context of a situation *can* begin to open up possible new imaginings for future stories to be lived. Through the stories shared, new possibilities emerge that help both researcher and participant to simultaneously begin reconstruction of their lives: "A person is, at once, engaged in living, telling, retelling, and reliving stories."^{xlvi} This living of new stories can become an endless process, as differing perspectives continue to influence understanding.

Connelly and Clandinin further indicate that narrative inquiry is a form of empirical narrative where the stories, themselves, become the data for research interpretation. Data for narrative inquiry can be gathered from field notes, interviews, story telling, letter writing, autobiographical and biographical writing, and historical artifacts such as, letters, philosophy statements, newspaper articles and metaphors.^{xlvii}

The compiled narratives within this paper were collected through email correspondence with each of the teacher co-researchers over periods of 3 to 9 months. During the correspondence, each of the teachers was in their international school locale. I was teaching at the University level while also acting as the volunteer Teacher Advisor of the *International Schools Review*, an online website that services 10,000 international teacher members. Each historic artifact/piece of correspondence was automatically time dated within the sender section of the various emails, thereby recording authenticity.

Narrative Inquiry relies upon "apparency, verisimilitude and transferability as possible criteria" to consider when assessing the quality of the research."^{xlviii} The audience should be able to relate to the inquiry and to believe it. "A plausible account is one that tends to ring true. It is an account of which one might say, 'I

^{xliv} Connelly & Clandinin, 1990, p. 3

^{xlv} Ibid

^{xlvi} Ibid, p. 4

^{xlvii} Ibid, p. 5

^{xlviii} Ibid, p. 7

can see that happening'."^{xlix} The stories told within this paper belong to real teachers in real situations. The descriptions of their circumstances are believable. One of the stories portrays the feelings of terror the teacher was experiencing through the compelling language she used while in the midst of the event: "I do not feel safe. I am not safe. I need someone from the US to acknowledge the urgency of my situation and coordinate my release" (June 23, 2007). Another portrays the affront to human dignity the teacher felt during an attempt by a recruitment organization to unjustly punish her: "How unfortunate that teachers have so little recourse to justice" (May 8, 2007). The third teacher demonstrates weariness at the broken promises made to her; she simply wants to resolve the situation and move on with her life: "I really do want us to resolve this ASAP and get on with the business of teaching"

Narratives leave the audience with a sense that they are not finite. They are simply segments of a person's life waiting to be restoried in the future. Through the stories shared, new possibilities emerge that help both researcher and participant to simultaneously begin reconstruction of their lives: "A person is, at once, engaged in living, telling, retelling, and reliving stories."^l This living of new stories can become an endless process, as differing perspectives continue to influence understanding. This paper explores not only the specific historic incidences that occurred to drive these teachers' stories, but also their thoughts about the events that occurred, and their wonders and hopes for their futures having negotiated the difficult situations they found themselves in.

The narrative inquiry journey is often explained through the use of a metaphor. It seems appropriate that the metaphor used for working with teachers in an international setting be one that encompasses traveling to other worlds. Lugones writes: "Those of us who are 'world' travellers have the distinct experience of being different in different 'worlds' and of having the capacity to remember other 'worlds' and ourselves in them."^{li}

Lugones further explains the world traveling metaphor: "In describing my sense of world, I mean to be offering a description of experience, something that is true to experience even if it is ontological problematic."^{lii} From this perspective, one can see that my 'travelling' to each of the international teacher co-researchers "worlds" has involved more than a physical traveling across time, space and place as I/we reached out from of our various international locations to connect. It has involved traveling in an emotional and collegial sense where distance and time blurs and we stand on the same plain looking outward at the same situation from our differing perspectives but in such a way that we feel bonded together. From this position, I have come away with a deeper understanding of my teacher co-researchers as people within their "worlds." Through the storying we have done together, evolving from the hundreds of emails that passed between us, I became a part of their "worlds" just as they became a part of mine. Clark speaks about this interchange process: "People can interact in discourse as travelers if they write and read in ways that render

^{xlix} Ibid, p. 8

^l Ibid, p. 4

^{li} Lugones, 1987, p. 11

^{lii} Ibid

participation in discursive exchange a transformative act crossing an alien place rather than the more defensive act of occupying familiar places."^{liii}

3. Lessons Learned along the Road: My Story and Narrative

The assumption that many international school organizations are businesses concerned primarily with making money is reasonable. Teachers, on the other hand, have been trained to believe that schools should be more about the people and their relationships than about money. As an education professional, I have stood at this moral crossroads on many occasions. In the end, when money, politics or policy appears to become more important than the people within the school organization, I am not one to remain silent or inactive. As Greenleaf suggests, "People's caring for one another is the foundation on which a good society is built."^{liv} Strike, Haller and Soltis suggest that "our ability to empathize, to experience the wrong done to others as our hurt and the good done to others as our joy, is a large part of our desire to do right."^{lv} This 'desire to do right' is what led me to my philanthropic work with the *International Schools Review* and, eventually, to building relationships with each of the teacher co-researchers in this paper. Clandinin and Connelly indicate of narrative researchers: "Working in this space means that we become visible with our own lived and told stories. Sometimes this means that our own unnamed, perhaps secret stories come to light as much as do those of our participants. This confronting of ourselves in our narrative past makes us vulnerable as inquirers because it makes secret stones public."^{lvi}

Life is a journey. Today I continue to live out my traveling to other educational worlds both physically as an international educator and emotionally/collegially through the *International Schools Review* as the Teacher Advisor. I sometimes wonder which of these multiple 'I's' has become more important to me.

4. Narrative Inquiry and Research Relationships

Critical to narrative inquiry, is the development of a relationship between the researcher and the research participants. "Narrative inquiry is a process of collaboration involving mutual story telling and restorying as the research proceeds."^{lvii} Narrative Inquiry is a process that requires the researcher to become actively involved in the lives of others. In narrative inquiry, "both the practitioners and the researchers feel cared for and have a voice with which to tell their stories."^{lviii}

^{liii} Clark, 1998, p. 16

^{liv} In Sergiovanni, 1992, p. 115

^{lv} Strike, Haller & Soltis, 1988, p. 103

^{lvi} Clandinin & Connelly, 2000, p. 62

^{lvii} Connelly & Clandinin, 1990, p. 4

^{lviii} Ibid

Shabatay offers a description of a 'relationship' with the following:

"We are able to think, imagine, and feel how the other is thinking, imagining and feeling. We do this neither by projecting our own feeling onto the other nor by remaining detached but by being open to that which is taking place in the person before us. This we can do to some extent before we know a person well. But a full 'making present' occurs in closer relationships where we are able to experience what the other is experiencing. Buber refers to this as 'imagining the real', or experiencing the other side' or 'inclusion'. *And* we can do is respond to what the stranger shares with us. But that response can be a caring response."^{lix}

As I think about Shabatay's description of a good relationship, I wonder how it was that the three teachers in this paper came to encounter such uncaring attitudes from others in their organizations as exhibited in their stories.

5. The Teachers: Lavinia Telling her story

"In April, 2007, I took up a position as a KG2 English Teachers for a privately owned school in Kuwait. At the end of June I renegotiated my contract for a salary increase. I was also verbally pledged private accommodations in front of the Business Manager and the Assistant Principal. I signed my contract and went on my summer vacation to South Africa, taking with me my key to my apartment" (August 20, 2007).

Over the summer, the entire administrative team was replaced, including the Assistant Principal who had witnessed the verbal clause about my single accommodation. On August 20, 2007, the new School Director contacted me, "insisting that I resign myself to the fact that I'm to have a roommate despite my repeated objections to sharing with anyone. The school wanted an answer from me by Wednesday to say I agreed to shared accommodation before they would issue me with my return air ticket." I contacted my old Vice Principal to see if I had misunderstood the verbal agreement. He assured me I had not so I would not commit to the school's demands.

6. Lavinia's story continues

On August 20, 2007, I sent an email to Dr. Barbara Spilchuk at ISR to see if she could assist me: "I could do with some help and insight; please can you tell me legally where I stand and what I ought to do?" She arranged to mediate the situation between myself and the school with the new Vice Principal, a lady she knew. I was very surprised when I immediately received a ticket to fly to Kuwait from the school as the outstanding housing issue had not been resolved. "I'm sorry" I told the Vice Principal. "I need to know where I stand on this issue. I now feel that I need some assurances in place before I embark on any flight to Kuwait" (August 29, 2007). Emails went back and forth and nothing seemed to be resolved.

^{lix} In Witherell & Noddings, 1991, p. 149

I again wrote to Dr. Barbara: "Barbara, I'm just so tired of this whole episode. I'll send you the subsequent correspondence we've had and maybe you can make head or tails of why, where and how to proceed? I really do want us to resolve this ASAP and get on with the business of teaching" (Sept. 3, 2007).

Two weeks later, with no agreement in place, I was, once again, out of a job and my personal belongings were now locked in a school apartment in Kuwait while I was sitting in South Africa.

7. Lavinia looks to the future

"With hindsight I see I should have gotten the wording in my contract changed but I was still a newbie to Kuwait and international teaching and so took the Business Manager's word at face value" (Sept. 13, 2007). I've learned from that experience. I will not be so trusting next time around. Forewarned is forearmed.

8. The Teachers: Layne Telling her story

I accepted a contract to teach in Turkey in February, 2007. I traveled there on my own time and money in March to meet with the school administrators. Upon arrival, I was treated to a very rushed visit of the school. I found out at that time that a promised round trip ticket for my spouse would not materialize. I also discovered that the students portrayed by the school representative during my interview as being primarily the children of ex-pats, instead appeared to be children of middle and upper class Turkish nationals. These issues combined presented a very different scenario to that promised to me during my February interview and one I would never have agreed to.

Upon returning to France, in early April, 2007, I asked my Recruitment agency for support, understanding, compassion and mediation to remove myself from this situation. I was shocked to find, however, that the tone of correspondence from my Recruitment associate representative would go from supportive and understanding at the outset to threats of black-balling and legal action within a month and a half:

"In reviewing your various communications, including your latest email, with our attorney and with our collection agency, we have been advised to grant no exception to you and to stick with our stated policies. Unless we receive your check for \$1,050 promptly, we will do the following:

- Turn the matter over to our very persistent collection agency, along with all your contact information. They are highly motivated and have collected 100% of the delinquents we have turned over to them in the past 10 years. They will collect \$2100 from you, as you have agreed to pay the cost of the collections and they charge 50%.
- notify all recruitment agencies that you have reneged on a contract with IICS and refuse to honor your agreement with Search Associates.

- contact all those who wrote a reference for you and will notify them of the same, and we will also notify them that you have also refused to honor your agreement with Search Associates.

You can resolve this now by doing the right thing. If you do not wish to do that, you will cause yourself a lot of problems, and in the end you will be forced to pay \$2,100 instead of \$1,050" (May 6, 2007).

That letter was followed by another from an executive assistant:

"Layne, we are not going to waste any more time dealing with you. If _____ does not receive your check by 20 May, we will turn the matter over to a collection agency. We will be guided by our lawyers as to contacting other Recruitment Agencies and your referees. Please do not communicate with us further, other than to send the check" (May 7, 2007).

9. Layne's story continues

Immediately after receipt of these two pieces of correspondence, I contacted Dr. Barbara Spilchuk of the *International Schools Review* for her assistance. Dr. Barbara wrote the following on my behalf to the Recruitment Agency involved:

"I have to wonder how many threats it takes to whip one young teacher into shape. Wouldn't a reasonable compromise have worked better? I believe Layne indicated that if SEARCH guaranteed that they would not red-flag her file, she would be more than willing to pay the penalty fee. Now that looks like a win-win to me" (May 11, 2007).

On May 13, 2007, I received the following email from an executive with the recruitment agency: "In reviewing the various e mails, I am getting an uneasy feeling that we have not treated you well. Though most of these did not come from me, as the "boss" I must accept the ultimate responsibility. As Harry Truman said, 'The buck stops here.'"

On June 1, 2007, the following 'deal was offered to me:

1. My file would not be red flagged.
2. I would not be blacklisted in or out of the organization.
3. The Recruitment Agency would not to call my referees.
4. I would pay her fine immediately.
5. I could register with this and another recruitment agency for the Bangkok Fair.

10. Layne: Thinking about the future

As it turns out, I chose not to go to the Bangkok Fair because my husband was transferred to North America. As I look back, however, I am left with the following wonders about the events that transpired:

“Whilst overseas and in a world that is already quite different than that to which one is accustomed, there is, indeed, often an insidious fear of the most final repercussion to be dealt a teacher if deemed “unmanageable” or a “liability” by any entity with more authority – ostracizing her/him professionally. This is an additional stress, and one that creates a cynicism often pervading an international educator’s attitude towards measures necessary for self-preservation. How unfortunate that teachers have so little recourse to justice.

Recruiting agencies are in a unique position in that they can help provide a support system for international teachers by holding themselves and international schools accountable for their inappropriate actions. It is a shame that the diversely rich resources of the agencies are not used to their full potential in order to make a positive ethical difference in education instead of simply a mundane financial gain (May 8, 2007).

I’ve decided that in order to help others, I must tell my story...so here it is” (October, 23, 2007).

11. The Teachers: Katherine Telling Her Story

“I am a Middle School Vice-Principal at a school in Kuwait. I have been employed here for 6 years at the same school. One of my primary responsibilities is student discipline. On March 8, 2006, three boys in grade 5 were suspended for fighting. I interviewed the boys, met with my principal and followed normal procedure. There is no stigma here regarding suspension. It’s a normal consequence for fighting; all students are aware of this and the procedure is clearly defined in our Parent Handbook.

In the afternoon of March 8th, I received a phone call from one of the boys’ fathers, a powerful man in Kuwait. He called to inform me that this situation was “personal,” and that he planned to “destroy” me. This conversation, which lasted about 9 minutes, was littered with profanities and threats. On March 11, 2006, the parents met with me, my principal and our director to discuss the suspension. The father requested that if there was an issue involving his child that I would call him immediately.

On April 27, 2006, I was requested to write a synopsis of events and to visit the Ministry of Education to answer questions regarding the suspension, describe the room in which the boys spent the school day and provide a copy of our handbook.

In June 2006, the father transferred his children to a different private school in Kuwait. Also, we received notification from the Ministry of Education that in-school suspensions were no longer to be applied; instead, parents must be contacted to take their children home.

In February 2007, I learned that a case had been filed against me at the Jabriya Police Department in Kuwait; the charge was “illegal detainment” of his son on March 8, 2006. I answered questions from the police in my director’s presence, with the Consul from the US Embassy present. My lawyer was also present. The

police did not suggest that there was any reason for me to be concerned as all of the questions were answered to the apparent satisfaction.

On June 13, 2007, I was at the Kuwait International Airport intending to fly to Bahrain. I was stopped at immigration where I was informed that there was a case against me, pending further investigation and that a travel ban had been placed on me. I had not been informed. My lawyer had not been informed. This travel ban was placed upon me 15 months after the boy was suspended. The parent said that he would make this personal and this seems to be what he is intent upon doing. On Saturday, June 16, 2007, I visited the Vice Consul at the American Embassy who informed me that he sympathized but could do nothing to lift the travel ban. I was told the following Wednesday that my file would be transferred to another agency for review so the ban could be lifted. Five working days later, the whereabouts of my file was uncertain.

Several Kuwaiti families are aware of my situation but they are not in a position to help or they don't want to get involved. They have ALL said that I should go to my embassy because my embassy can help me. The fact that the embassy can't seems shocking to everyone.

Yesterday, June 20, 2007, I received a paper which lifted the travel ban. This waiver had been granted by the Kuwait Minister of the Interior. Not long after the Minister released me, he reverted his decision. I went to the airport last night, only to learn that I couldn't leave. I am in fear for my safety. If the Embassy can't help me, then who can? I contacted the FBI in Riyadh, Saudi Arabia yesterday and talked to a man who couldn't give me his last name. He was non-committal but did suggest that he thought the embassy should be able to get me out.

I do not feel safe. I am not safe. I need someone from the US to acknowledge the urgency of my situation and coordinate my release. I committed no crime. I am simply the victim of 'wasta' which roughly translates into 'influence/pressure' at a high level.

I am writing to ISR to ask for your assistance. Please help me" (June 23/2007).

12. Katherine's story continues

"Barbara, I'm out of the GC. I'm not sure how I got out of the country. I was notified by text message that the travel ban was lifted but I didn't know how long the ban would be lifted for. I left immediately. This entire situation is surreal. I'm just an ordinary person and I don't know how this situation reached this level. My friend contacted you initially which was the best help, ray of hope, I have received. Don't let others forget about me. With the timing of this ban (summer and everyone out of Kuwait) and the parents' connections, without you I would have been doomed. Thank you for your tremendous support that has sustained me during the past month. Now that I am out of Kuwait and have had some time to reflect, the situation I was in does not seem less dangerous or less urgent. I am only more grateful for your words of wisdom and your efforts to

make others aware of my terrible experience. You and your organization mean the world to me.

ISR's publication of my initial letter reached thousands of readers. Your letters to U.S. politicians and the American Embassy in Kuwait created a sense of urgency in a bureaucracy where I had no importance; I believe the travel ban was lifted (so I could leave) only due to your collective efforts. I don't want to think about what could have happened. The level of corruption that was reached was shocking but I've addressed that before. Now, I have to concentrate on the future and make a conscious effort to not think about how much I loved being a part of Al-Bayan. I feel traumatized but very, very lucky because of your support which ultimately was my salvation/protection.

I realize that my experience was unusual but it did happen. Teachers and administrators employed in Kuwait need to know that travel bans exist and these bans can be enforced arbitrarily. Before accepting a position in the GCC, educators should take this into consideration. I hope that this message is coherent enough - I'm a wreck. Thank you again for your compassion and for addressing my dire situation. I did feel the love" (July 02, 2007).

13. Katherine: Thinking about the future

It has been some time now since this episode in my life happened. Although I was found not guilty in the courts in Kuwait, remembering still upsets me (October 11, 2007). There is no going backwards, however. "Barbara, you wrote a beautiful paper about 'moving on' and that's what I want to do with as much dignity as possible. I need to concentrate on my future now and count my blessings" (October 16, 2007).

14. Wondering About the Teachers' Stories

Strike, Haller and Soltis suggest that "growth as a moral agent, as someone who cares about others" is a compelling matter in education because "as educators we are first and foremost in the business of creating persons."^{lx} Sergiovanni speaks about the caring side of schools in the following way: "The heart of professionalism in teaching may be a commitment to the caring ethic."^{lxi} Lugones characterizes a caring relationships as one built upon "loving perception."^{lxii} Frye suggests "that the loving eye is 'the eye of one who knows that to know the seen, one must consult something other than one's own will and interests and fears and imagination."^{lxiii} Lugones agrees "as long as I do not understand Frye to mean that I should not consult my own interests nor that I should exclude the

^{lx} Strike, Haller & Soltis, 1988, p. 84

^{lxi} Sergiovanni, 1992, p. 53

^{lxii} Lugones, 1987, p. 8

^{lxiii} In Lugones, 1987, p. 8

possibility that my self and the self of the one I love may be importantly tied to each other in many complicated ways."^{lxiv}

I wonder if we are "consulting our own interests" in situations where those we love "ignore us, ostracize us, render us invisible, stereotype us, leave us completely alone, interpret us as crazy. All of this *while we are in their midst*."^{lxv} Lugones suggests that in these types of relationships, she feels that "their world and their integrity do not require me at all."^{lxvi} She further indicates that "There is no sense of self-loss in them for my own lack of solidity. But they rob me of my solidity through indifference, an indifference they can afford and which seems studied."^{lxvii} It is in these situations and in these relationships that Lugones suggests we perceive others "arrogantly in their turn."

I also wonder where the humanity was for these teachers working a long way from their families in unfamiliar places, teachers who were hoping to 'world' travel to learn about other cultures but who, instead, learned to perceive others they met along the way with 'arrogant perception'. For the first teacher, clearly there was an element of fear involved as she tried to work through a process of negotiation with a school that had already threatened her employment. For the second teacher there was real anger and confusion at the threats to blackball her by the recruitment agency. And for the third, there was not just a perception of danger and terror during the period of her unlawful confinement while a lack of government advocacy for her situation was apparent. Her situation was real; it was frightening and it mobilized the entire *International Schools Review* membership and other readers of the website world wide to advocate for her.

Clearly, when our relationships are not built with 'loving perception', we do great harm to one another. As Elliott says, "If we had a keen vision and feeling of all ordinary human life, it would be like hearing the grass grow and the squirrel's heart beat, and we should die of that roar which lies on the other side of silence."^{lxviii} The stories told by the three teachers in this paper are part of that 'roar which lies on the other side of silence' in international teaching.

References

Bateson, M. (1989). *Composing a life*. Toronto, ON: Plume/Penguin.

Belenky, M., Clinchy, B., Goldberger, N. & Tarule, J. (1986). *Women's ways of knowing: On development of self, voice and mind*. New York, NY: Basic Books, HarperCollins.

^{lxiv} Ibid

^{lxv} Ibid, p. 7

^{lxvi} Ibid

^{lxvii} Ibid

^{lxviii} In Belenky et al., 1986, p. 3

Clandinin, J. (1986). Rhythms in teaching: The narrative study of teacher's personal practical knowledge of classrooms. *Teaching and Teacher Education*. 2(4), 377-387.

Clandinin, J. (1993). *Searching for connections: Struggling for community: Collaborative research in teacher education*. Edmonton: University of Alberta Publication Services.

Clandinin, J. (1995). Stories of possibilities. *Early Childhood Education*. 28(2), 4-8.

Clandinin, J. & Connelly, M. (1994). Personal experience methods. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research*. (pp. 423-427). Thousand Islands, CA: Sage.

Clandinin, J & Connelly, M. (1995). *Teachers' professional knowledge landscapes*. New York, NY: Teachers College Press.

Clandinin, J. & Connelly, M. (1996). Teachers' professional knowledge landscapes: Teacher stories-Stories of teachers-School stories-Stories of schools. *Educational Researcher*. 25(3), 24-31.

Clandinin, J. & Connelly, M. (1997). Asking questions about telling stories. In C. Kridel (Ed.), *Writing educational biography: Explorations in qualitative research*. (p. 202-209). New York, NY: Garland.

Clandinin, J. & Connelly, M. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco, CA: Jossey Bass Inc.

Clandinin, J., Davies, A, Hogan, P. and Kennard, B. (1993). *Learning to teach: teaching to learn - Stories of collaboration in teacher education*. New York, NY: Teachers College Press.

Clark, G. (1998). Writing as travel, or rhetoric on the road. *College Composition and Communication*. 49(1), 9-23.

Connelly, M. & Clandinin, J. (1986). On narrative method, personal philosophy, and narrative unities in the story of teaching. *Journal of Research in Science Teaching*. 23(4), 293-310.

Connelly, M. & Clandinin. (1986a). Rhythms in teaching: The narrative study of teacher's personal practical knowledge of classrooms. *Teaching and Teacher Education*. 2 (4), 377-387.

Connelly, M. & Clandinin, J. (1987). On narrative method, biography and narrative unities in the study of teaching. *The Journal of Educational Thought*. 21(3), 130-137.

Connelly, M. & Clandinin, J. (1988). Studying teachers' knowledge of classrooms: Collaborative research, ethics and the negotiation of narrative. *The Journal of Educational Thought*. 22(2A), 269-282.

Connelly, M. & Clandinin, J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*. 19(4), 2-13.

Connelly, M. & Clandinin, J. (1994) Telling teacher stories. *Teacher Education Quarterly*. 21(1), 145-158.

Crites, S. (1971). The narrative quality of experience. *Journal of the American Academy of Religion*. 39(3), 292-311.

Denzin, N. & Lincoln, Y, (Eds.) (1994). *Handbook of Qualitative Research*. Thousands Oaks, CA: Sage Publications.

Florio-Ruane, S. (1997). To tell a new story: Reinventing narratives of culture, identity, and education. *Anthropology & Education Quarterly*. 28(2), 152- 162.

Lopez, B. (1989). Landscape and narrative. *Crossing open ground*. (pp. 61-71). New York, NY: Vintage Books.

Lugones, Maria. (1987). Playfulness, "world"-traveling, and loving perception. *Hypatia*. 2(2), 3-19.

Noddings, N. (1986). Fidelity in teaching, teacher education, and research for teaching. *Harvard Educational Review*. 56(4), 496-510.

Qoyawayrna, P. (1992). *No turning back: A Hopi Indian woman's struggle to live in two worlds*. Albuquerque, NM: The University of New Mexico Press.

Sergiovanni, T. (1992). *Moral leadership*. San Francisco, CA: Jossey-Bass Inc.

Spilchuk, B. (2000). *When Principals Engage in Public Acts of Resistance: Stories of Relationships*. Unpublished doctoral dissertation. Edmonton, AB: University of Alberta.

Strike, K., Haller, E. & Soltis, J. (1988). *The ethics of school administration*. New York, NY: Teacher's College Press.

Wheatley, M. (July 4-9, 1999). *Bringing life to change* (audio cassette). Unpublished paper. Edmonton, AB: 8th International Conference on Thinking.

Wheatley, M & Kehlner-Rogers, M. (1996). *A simpler way* (audio cassette). Sausalito, CA: Berrett-Koehler Press.

Witherell, C. & Noddings, N. (1991). *Stories lives tell: Narrative and dialogue in education*. New York, NY: Teachers College Press.

The Introduction of Virtual Realities to Extend Rural High School Classrooms

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Abstract

The question guiding this paper, based on Australian and Canadian research, is how students graduating from small schools in rural communities make educational and career decisions regarding non-local environments about which most have little first-hand experience but to which they must re-locate for further education and work. The aim of the research was to show how e-learning and the integration of virtual and face to face instruction can extend educational environments for rural students, particularly for those contemplating leaving school. By linking traditional face to face instruction with virtual educational environments rural school classes can, for part of a school day, engage with non-local peers and their teachers. Scales of social contact with the non-local world together with students' perceptions of it were examined to develop measures of contexts of awareness. The results indicated disparities within rural communities based on the nature and quality of contact with the non-local world.

Keywords: Awareness – Career – Cybercells – Rural - Virtual

1. Introduction

The issue of some young rural people being more isolated from post-secondary school educational and career opportunities than others while living within the same community is not well-recognized in spite of the social and educational implications that it entails. A move from a rural to an urban community and school is not merely a physical change of location for students; it involves intellectual and emotional adjustments and rural school leavers can experience these in different ways (Bell, 1987; Chenoweth and Galliher, 2004). Young people within a rural Queensland community that was the focus of a small-scale study, outlined below, experienced geographical isolation in different ways (Stevens, 2007). Geography contributed to social differentiation by influencing their objective and subjective engagement with the non-local world, thereby shaping post-secondary educational and vocational outcomes (Stevens, 1998). For some young rural school leavers the problem of what to do at the conclusion of compulsory education is confusing: where should they go to complete their secondary education? Which senior high school courses are required for enrolment in possible future higher education courses? For many rural students completing year ten there is doubt that they will be able to compete with their urban counterparts who have been educated in much larger schools and who do not face the disruption of having to leave home to complete years eleven and twelve. Beyond these immediate concerns, many young rural school leavers face

the issue of making personal sense of the non-local world that has, in some cases, never been experienced (Stevens, 1988; Stewart, 2003).

2. Research in Rural Australia

There is an Australian policy issue in the provision of education in small schools in rural communities (Golding, 2001; James, et.al.,1999). In most societies it is too expensive to justify appointing full or even part-time teachers in specialized areas of the curriculum where there are very few students. The Queensland community that was the focus of the Australian study only provided full time education to year ten at the time of the research, after which students and their families had to make choices, particularly if further high school education was desired or career opportunities were sought that were not locally available. Governments in Australia and other developed countries have often provided financial assistance for families of senior students in rural communities to enable them to complete their education in urban centres. Within some rural families, generations have been educated in boarding schools (Baker and Andrews, 1991). Other rural students spend considerable amounts of time traveling from their homes in small communities to schools in larger centres. A variety of electronic ways of providing education for the most isolated young rural Australians has included the School of the Air which has enabled many to receive instruction in their own communities from a central institution (Stevens, 1994). More recently e-learning has changed the nature of distance education for students in rural communities (Stevens, 2003). There have been many ways of providing education for rural Australian high school students and some of these have been innovative and have extended learning opportunities. However, at the conclusion of high school, which was at year ten for the rural students who were the subject of this study, decisions had to be made about what to do next. Enrolment in years eleven and twelve meant leaving home and resuming studies in a larger school in another place. Local employment opportunities were limited, particularly for girls, and traditional rural jobs such as jackaroos and jillaroos (male and female station hands respectively) were scarce. The transition from a small rural school to a larger urban institution was often complex, particularly for families with little experience of life beyond rural Queensland. It is at this point that some young rural Australians feel particularly isolated.

A study was undertaken to explore how young people leaving school in a rural community made their post year ten educational and career decisions. While education to year twelve is now locally available, at the time of the study, the most senior year of high school in the Queensland rural community was year ten. It was difficult to claim that rural students had educational opportunities equal to their urban counterparts when they could not undertake full high school courses in their own community (Henry, 1989; McGaw et.al.,1977). The study began with a broad question, identified three decades earlier by the Schools' Commission (1975) and the Commission of Inquiry into Poverty in Australia (1976;1978) that young people in rural schools did not enter higher educational institutions in numbers proportionate to their urban counterparts. Partly on this basis, the Schools Commission identified rural schools in Australia as being educationally disadvantaged along with women, migrants and aborigines. The evidence for the claim that rural students were disadvantaged was acknowledged

to be slight by the Schools' Commission and there was a call for research into the issue. A decade later the same issues were prominent in the provision of Australian rural education (Boomer, 1987; Commonwealth Schools Commission, 1988). The issues raised by the Commonwealth Schools Commission and the Commission of Inquiry Into Poverty formed the basis for an exploratory study into the question of the nature of rural educational disadvantage in a small and isolated Queensland community.

It was possible to identify four distinct social groups in the Queensland community of 1,800 people, located in the central north of the state: the graziers, a small middle class of professionals and managers, the working class whose wages came mostly from jobs on the shire council or railway and the aborigines. In addition to these distinct groups, there was a small transient population of shearers and agricultural labourers. Each group had a different relationship with the community. Because of the size of their holdings, graziers almost always lived well beyond the town although some kept a second residence there in which their wives and school-age children lived during the week, returning to the station for weekends. Graziers were often prominent in civic affairs and many belonged to a members-only club that was considered by most local people to be exclusive. Very few people in the professional-managerial group had children at the local high school. This group included bank managers, teachers, nurses and visiting medical people. Most were too young to have children of high school age and those that did usually left the community before their offspring were old enough to be enrolled. The third group – the rural working class – was most numerous in the local school while the fourth group, the aborigines, mostly lived on the edge of town and frequented their own church and pub. Unemployment was very high in the aboriginal sector of the community.

After spending some time in the rural community as a non-participant observer, the focus of the research emerged from an unlikely place – a petrol pump. The pump attendant commented on the university vehicle that the writer was driving and asked if he was the person currently studying the local school. He said he wished that his daughter could attend such an institution but added that this would not be possible for financial reasons. He earned too much in his current job to be eligible for full government assistance, but too little to be able to afford full secondary education elsewhere. The family was both too rich and too poor to be able to afford post-compulsory education, in this case, education beyond year ten. They were too rich to be eligible for full government subsidies and too poor to be able to afford the difference between a partial subsidy and the cost of full secondary education beyond the community. At the time of this conversation the writer had spent long enough in the Queensland community to realize that it was both socially and economically differentiated. The aborigines had their own government-funded pathways to further education, while graziers had long favoured boarding school education for their sons and daughters and most could, with the assistance of accountants, qualify for full government subsidies. Almost all of the students in the Queensland school were in neither of these categories. They were not aborigines and they were not the sons and daughters of graziers. They were members of the majority group in this community – the rural working class, about whom little has been written. How rural working class students perceived the non-local world where post school educational and most career opportunities were located, depended on their knowledge of and contact with

other places. It also depended to some extent on the financial resources of their families.

The study used both participant and non-participant observation in the school and its community. Data were gathered by questionnaires and interviews with year ten students, their families, teachers, the principal, and selected members of the community (eg, priests and business people). Data were recorded in note form and then analyzed. A class of 30 year ten students was selected for study (boys N=14; girls N=16) and these were categorized according to their scale of social contact with the non-local world and their awareness of it. The scale of social contact with the non-local world provided an objective measure of the extent to which the 30 students had traveled beyond their community. Five dimensions were considered in classifying the scale of students: (i) Local: those who had never been beyond the local town and its environs (ii) NQ: those who had had contact with other towns in North Queensland; (iii) Qld: those who had traveled throughout the state of Queensland; (iv) Australia: those who had traveled to other parts of Australia and, (v) Australia+: those who had visited other countries. Students were asked about the nature and extent of their contact with extended family, peers and significant others in each of these five dimensions in categorizing them. For example, a student whose extended family, peers and significant others were all in North Queensland was identified as belonging to the second category.

As well as considering students' scale of contact with the non-local world, their perceptions of it were also examined through their "contexts of awareness." As in the case of scale of social contact, students were classified as (i) Local, (ii) North Queensland, (iii) Queensland, (iv) Australia and (v) Australia +. Unlike the concept of scale, through which it is possible to consider objectively who a student has contact with, awareness contexts are subjective in that a student identified what information about the non-local world (in this case their educational and occupational possibilities) they had and the sources from which this was obtained. It was possible for a student to be low in scale of contact in that all his or her interactions were local, but high in awareness contexts because his or her understanding of the non-local world was extensive, coming from such non-local sources as newspapers, books, television and correspondence.

Those who were categorized as Local or NQ were classified as being low in terms of social contact while those who were in the other groups (Qld, Aust, Aust +) were considered to be high in terms of social contact. Because of the subjective nature of these judgements a colleague was asked to check the researcher's categories used in these classifications. After a detailed explanation of the study, the colleague independently reached the same conclusions as the writer for all students in respect of both classifications (scale of social contact and scope of awareness contexts).

By bringing scale and awareness contexts together, four student "types" emerged. Type one students (N=12) were low in scale of social contact (defined within a radius of 160 kilometres to 240 kilometres of their home) and low in the scope of their awareness contexts (Lc&La). Type two students (N=9) were low in scale of contact but high in terms of awareness contexts (Lc&Ha), while type three students (N=9) were high in both scale of contact and awareness of the non-local world (Hc&Ha). It was not surprising that there were no type four

students (Hc&La). The educational experiences and the outcomes of the group of 30 Year 10 students that was studied differed according to their student 'type', based on their scale of social contact and their contexts of awareness of the non-local world. The existence of type two students inherently posed the question how young people who were low in terms of contact with the non-local world could have a high awareness of it?

The post year ten educational and vocational choices that were made by types one, two and three students differed from one other. Of the 12 Type One (Lc and La) students, two chose professional occupations, one chose a white-collar occupation, three chose blue-collar occupations, five chose routine/unskilled jobs and one was uncertain about what to choose. Two-thirds of Type One students chose occupations of an unskilled, manual nature. Those Type One students who chose professional and white-collar occupations were all girls.

Most Type Two (Lc and Ha) students' career choices excluded routine/unskilled occupations. Over one-third both aspired to and expected to enter professional occupations. Of the nine Type Two students, four chose professional occupations, three chose white-collar occupations and two chose blue-collar occupations. Type Two girls' occupational choices were higher than those of Type Two boys; only one girl did not aspire to either a professional or a white-collar occupation.

The 9 Type Three (Hc and Ha) students' career choices covered a wider range than their Type Two counterparts. Three chose professional occupations, two chose white-collar occupations, three chose blue-collar occupations and one chose a routine/unskilled occupation. While Types Two and Three students differed from Type One students in that their overall career choices were either professional or white collar, Type One students (who were the most isolated in educational terms), made more limited career choices. Geographical isolation appeared to constrain the range and type of choices these students made.

In this study an attempt was made to ascertain whether the students believed that the vocational choice they aspired to matched their expectations. Almost all the boys in the study (86 per cent) provided a match between their occupational aspirations and expectations, but only 38 per cent of girls' aspirations matched their expectations. A partial explanation for this was reluctance on the part of many students, particularly those with least experience and knowledge of the non-rural world (Type One students), to leave the community. For some students, particularly those classified as Type One, any local job, even if it was unskilled and low-paid, was preferable to migrating to an urban centre in search of further education or a career. For girls, there were very limited local employment opportunities, which compounded the difficulty of the post Year 10 decision. Reluctance to leave familiar surroundings is at best a partial explanation for the mismatch between the girls' aspirations and expectations. The very fact of living in a town with a strict sexual division of labour in which paid work was mostly undertaken by men obviously interacted with isolation and had a compounding effect.

Students were influenced in making their post-secondary educational and career decisions in several ways: by their nuclear and extended families, by their local and non-local peers, by the school and by significant others. There were differences between types one, two and three students in terms of the influences

on their post year ten decisions. Only one of the types one and two girls cited her father as an influence on her post year ten decision, while four out of five type three girls did so. All type one boys listed their father as an influence on the decision while type two girls were strongly influenced by their mothers. The school had very little influence on the post year ten decisions of type one boys, with only one citing this institution as an influence.

Compared to family and school influences, peers had a relatively small impact on students' post year ten decisions. Students were more influenced by local than non-local peers and were influenced only by peers of the same sex. Significant others influenced relatively few students. However, when present, the significant other influence was very strong because it came from people mostly in the chosen occupation of the student or from related media.

The educational aspirations (what students would like to do) and expectations (what students think they will do) about continuing school after year ten, were matched for 25 of the 30 students (83%) in this study. All type 1 students' aspirations and expectations were matched, but those for a third of the type 3 students did not do so. More girls both aspired to, and expected, a tertiary education than boys (56% of girls and 29% of boys). The occupational aspirations and expectations of students revealed a possible sex difference: whereas 86% of boys provided a match between their occupational aspirations and expectations, only 38% of girls provided such a match. In respect of the types 1 and 2 girls with a mismatch, the predominant trend was for expectations to be lower than aspirations. It appeared that for these students remaining in their rural community and doing any job was preferable to leaving and fulfilling their aspirations.

Eleven of the twelve type 1 students were able to identify their occupational expectations; 5 listed routine jobs, 3 blue collar, 1 white collar, and 2 professional occupations. This meant that 8 of the 11 students (73 %) listed occupations which are considered to be unskilled or manual skilled. Seven of the nine type 2 students were able to identify their occupational expectations: 1 listed a routine occupation, 1 blue collar, 2 white collar, and 3 identified professional occupations. Five of the seven type two students (71 %) listed clerical, managerial or professional occupations. Finally, eight of the nine type 3 students were able to identify their occupational expectations; of these, 1 listed a routine job, 1 blue collar, 1 white collar, and 5 identified professional occupations. Six of eight type three students (75 %) listed clerical, managerial or professional occupations.

These results suggest that types 2 and 3 students can be distinguished from their type 1 peers in that they had expectations for employment generally considered to be higher in occupational status. It is difficult to distinguish clearly between types 2 and 3 students but it appeared that type 3 students had a greater orientation towards professional choices, although the numbers involved were too few to draw a firm conclusion.

3. Partial Replication in a Rural Canadian School

A partial replication of the Australian study in rural Atlantic Canada (Tucker and Stevens, 1999) investigated the educational and career aspirations and expectations of students in a graduating class in a rural High School located on a small island off the coast of Newfoundland in Eastern Canada. Recent research indicates that there are differences between youth in rural and urban settings in terms of transition from school to work, the social context in which this takes place, and the options that are available (Genge, 1996; Looker, 1993).

A number of variables were examined including: the number and type of science courses taken by students, grades achieved in these courses, use of the Internet and other information technologies to gain career information, parental occupation and level of education, student use of teachers and guidance counselors as career resources and the involvement of families in deciding what to do upon each student's graduation. Sixty-two students in the graduating class were given an open response questionnaire to complete. This indicated that 22.6% of the students aspired to occupations in the service industries, 16.1% aspired to artistic, literary, performing arts and related occupations and 14.5% aspired to careers in medicine and health, the natural sciences, engineering and mathematics. It is notable that no students in the graduating class aspired to traditional local careers in the fishing industry.

There was considerable variation among the sixty-two graduates in terms of the careers to which they aspired and thirty-three different careers were listed. The most frequently aspired to career was that of physician (9.7%), with careers in the Coast Guard second (8.0%) and careers in the Armed Forces (6.4%) third. To measure career aspirations and expectations two scales were used. The General Educational Development Scale (GED) and the Specific Vocational Preparation Scale (SVP) are both sub-scales of the Canadian Classification and Dictionary of Occupations (CCDO) (Minister of Supply and Services Canada, 1990). Both the GED and the SVP measure various aspects of education and training time required for any particular career. This can ultimately be used as a measure of an individual's commitment to attaining various careers. The GED scale ranges from a low of one to a high of six, while the SVP ranges from a low of one to a high of nine. For career aspirations, the percent of responses which had a GED value of four or more (66.1%) indicate relatively high levels of aspiration overall. For SVP measures, those that had value of six or more (75.8%) also indicate relatively high levels of aspirations. These values drop somewhat for career expectations. The percent of responses which had a GED value of four or more (56.5%) indicate slightly lower levels of aspiration overall. For SVP measures, those that had value of six or more (61.3%) also indicate slightly lower levels of aspirations. Positive Spearman's rho correlations (.585 $p < .01$), were found between GED levels for career aspirations and career expectations. Positive correlations (.622, $p < .01$), were also found between SVP levels for career aspirations and career expectations. There are positive Spearman's rho correlations between the GED levels for career aspirations and attainment in science courses (.520, $p < .01$), as well as, attainment in academic science courses (.496, $p < .01$). A negative correlation was found for nonacademic courses (-.389, $p < .01$). Similar findings were found between the SVP for career

aspirations and attainment in science courses (.390, $p < .01$), as well as, attainment in academic science courses (.353, $p < .01$). There were also positive Spearman's rho correlations between the GED levels for career expectations and attainment in science courses (.477, $p < .01$), as well as, attainment in academic science courses (.437, $p < .01$). A negative correlation was found for nonacademic courses (-.289, $p < .05$). Similar findings were found between the SVP for career expectations and attainment in science courses (.367, $p < .01$), as well as, attainment in academic science courses (.389, $p < .01$).

4. The Introduction of Virtual Realities

The Australian and Canadian rural studies point to the importance of teachers being aware of students' need to make sense of the non-local world to which many must migrate in search of work or further education at the conclusion of their secondary schooling (Abbott-Chapman and Patterson, 2001). The studies also indicate the need for rural high school classes to be extended so that students awareness of the non-local world can be increased. A Canadian program has been initiated that attempts to bridge the gap between pre-service and in-service teachers based on cybercells in which the issue of rural student perceptions of the non-local world can be raised and considered (Stevens, 2008). A cybercell is a face-to-face group whose members extend their discussion to include virtual visitors (Stevens and Stewart, 2005). This recent addition to the lexicon of e-learning describes the integration of actual and virtual discussions, meetings and classes and has particular application in internet-based networks of schools (Stevens, 2005). Cybercells provide teachers with opportunities to discuss their respective work with other teachers on-site and on-line and also for students to discuss their work with other students, including peers in urban schools. Cybercells enable teachers and students to engage in both actual and virtual environments thereby extending rural classrooms in terms of teaching and learning. Through the introduction of cybercells, rural high school classes can be enhanced and, potentially, the world-view of students who attend them can be expanded.

Teachers in Newfoundland and Labrador schools are, increasingly, expected to provide instruction between sites as well as in traditional classrooms. The introduction of cybercells for teachers increases awareness of recent networked changes in school organization in Newfoundland and Labrador, particularly in the majority of schools that are located beyond major centres of population. In this process the world view of their students is extended beyond their rural communities to link with teachers and students in other places. In opening traditional on-site classrooms to other classes for part of the school day, using the internet, collaboration between teachers becomes essential and collaboration between students is encouraged. Collaboration between students and teachers across diverse networked sites facilitates the building of shared realities, including the reality of the non-local world to which many will migrate for further education and jobs. In building shared realities between rural and non-rural students, (and their teachers), mutual understanding can be fostered.

5. Conclusion

The Australian and Canadian studies of rural student educational and career decisions are each part of broader concerns about the provision of opportunities for young people who are educated in rural communities (Abbott-Chapman and Patterson, 2001; Healey and Stevens, 2002). It is anticipated that the introduction of virtual teaching and learning structures within and between small schools will counter and, possibly, reduce, disparities between students in rural communities in ways in which they engage with the non-local world. The creation of virtual educational environments linking small rural schools and, within them, cybercells, provides new ways for geographically-isolated students to engage with and experience the non-local world before they physically enter it.

References

- Abbott-Chapman, J. and Patterson, C. (2001) Improving Post-School Outcomes of Rural School Leavers, *Australian Journal of Education*, Vol. 45, No. 1, pp: 35-47
- Baker, R. & Andrews, J. (1991), Parental reasons for sending children to a rural day and boarding school, *Education in Rural Australia* 1 (1), pp. 21-25.
- Bell G. (1987) "Circumstances Surrounding Career Decision Making For Most Rural Students" in Reeves D.T. (ed), *Working Together: Rural Communities and Education*, Society for the Provision of Education in Rural Australia
- Boomer G. (Chair) (1987), *Schooling in rural Australia: Report to the Commonwealth Schools Commission*, Curriculum Development Centre, Canberra.
- Chenoweth, E. & Galliher, R.V. (2004) Factors Influencing College Aspirations of Rural West Virginia High School Students, *Journal of Research in Rural Education*, Vol. 19, No. 2
- Commission of Inquiry into Poverty in Australia, *Poverty and Education*, (1976) Canberra, Australian Government Publishing Service
- Commission of Inquiry into Poverty (1978) *School, Community and Work : Urban and Rural Aspects*, Canberra, Australian Government Publishing Service
- Commonwealth Schools Commission (1988) *Schooling In Rural Australia*, Canberra, Curriculum Development Centre.
- Genge, E. (1996). *Initial Transition from High School, Decisions and Aspirations of Rural Newfoundland and Labrador Youth*. Unpublished Master's Thesis, Memorial University of Newfoundland
- Golding, B. (2001) *Great Divides in Learning: Youth Pathways in Rural and Remote Australian Towns*, ACER, Corporate Communications

Healey, D. & Stevens, K.J. (2002) Student Access to Information Technology and Perceptions of Future Opportunities in Two Small Labrador Communities *Canadian Journal of Learning and Technology / La Revue Canadienne de l'Apprentissage et de la Technologie*, Vol. 28, No. 1, Winter, p.7-18

Henry, M. (1989), The functions of schooling: Perspectives from rural Australia, *Discourse: The Australian Journal of Educational Studies* 9 (2), pp. 5-21.

James, R., Wyn, J., Baldwin, G., Hepworth, G., McInnis, C & Stephanou, A. (1999) *Rural and Isolated School Students and their Higher Education School Choices*, National Board of Employment, Education and Training, Higher Education Council, Canberra.

Jarvis, S. (1990) *Rural Students and Post Grade 10 Education in Tasmania: A Study for the Country Areas Program*, Department of Education and the Arts, Tasmania

Looker, E.D. (1993). Interconnected transitions and their costs: Gender and urban/rural differences in the transition to work. In P. Anisef and P. Axelrod (Eds.), *Schooling and Employment in Canada* (pp. 43-64). Toronto, ON: Thompson Educational Publishing.

McGaw, B., Warry, R. S., Varley, P. & Alcorn, J. (1977), Prospects for school leavers', in *Commission of Inquiry into Poverty - School leavers: Choice and opportunity*, Australian Government Publishing Service, Canberra.

Minister of Supply and Service Canada (1990), *Canadian Classification and Dictionary of Occupations*, Ottawa, Canadian Government Publishing Service.

Schools Commission, (1975), *Report for the Triennium 1976 - 1978*, Canberra, AGPS.

Stevens, K.J. (2008) Cybercells for Virtual Teaching and Learning, In: Goran D. Putnik & Maria Manuela Cunha (eds), *Encyclopedia of Networked & Virtual Organizations*, Hershey, PA and New York, Idea Group Reference, pp: 385 - 390

Stevens, K. J. (2007) Objective and Subjective Engagement with the Non-Local World by Rural School Leavers, *International Journal of Rural Psychology*, 2007(August), pp: 1-13

Stevens, K.J. (2005) The Integration of Virtual and Actual Classes in Sparsely Populated Regions, In: Kinshuk, Demetrios G Sampson & Pedro Isaias (eds) *Cognition and Exploratory Learning in the Digital Age*, IADIS Press

Stevens, K.J. (2003) Virtual Educational Structures and Processes for the Management of Knowledge Between Sites in Sparsely-Populated Regions, In: Stewart Marshall and Wal Taylor (eds) *Information Technology in Regional Areas*, Central Queensland University, Rockhampton, Australia, pp:386-392

Stevens, K.J., (1998) Rural Education, Policy and Teaching, [2nd Edition], In: Elizabeth Hatton (ed) *Understanding Teaching: Curriculum and the Social Contexts of Schooling*, Sydney and London, Harcourt Brace and Co, pp: 389 - 400

Stevens, K.J. (1994) Australian Developments in Distance Education and their Implications for Rural Schools, *Journal of Research in Rural Education*, Vol. 10, No. 1., Spring, pp.78-83

Stevens, K. & Stewart, D. (2005) *Cybercells – Learning in Actual and Virtual Groups*, Melbourne, Thomson-Dunmore

Stewart, A.E. (2003) *Post School Outcomes for 'The Island' Students and their Views on Place and Identity: Year 10 to Year 11 in a Rurally Remote Area*, PhD Thesis, Hobart, University of Tasmania

Tucker, C. and Stevens, K. (1999) Where Do We Go From Here? Post-High School Educational and Vocational Choices of Students Leaving a Small Rural Canadian Community, *Journal of Critical Inquiry into Curriculum and Instruction*, Vol. 1, No. 3 (Summer)

Les chefs d'établissement scolaire et le processus de planification stratégique : le modèle québécois

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Résumé

Dans la foulée de la réforme de l'éducation, le gouvernement québécois a adopté depuis une décennie, un mode de gestion axé sur les résultats et l'imputabilité. Ce changement organisationnel ayant pour but la réussite du plus grand nombre d'élèves a contraint les établissements et les organismes scolaires à réaliser un plan de réussite exigeant des chefs d'établissements l'appropriation et l'intégration d'un nouveau mode de gestion incluant la gestion du changement et la planification stratégique. Cette communication présente les résultats d'une recherche qui vise à circonscrire les changements émergents dans les pratiques des chefs d'établissement reliées au processus de gestion stratégique. Cette recherche qualitative menée selon un modèle inductif-interprétatif a pour objectif l'élaboration d'un cadre conceptuel propre à la problématique en contexte identifiant les composantes d'un modèle de gestion stratégique incluant les éléments statiques et dynamiques le composant qui pourront être intégrés dans le programme de formation des futurs gestionnaires.

Mots clés : Changement – Gestion stratégique – Planification – Recherche inductive.

Introduction

L'étude des nouvelles pratiques organisationnelles orientées vers la réussite éducative en milieu scolaire exige un regard pluridimensionnel sur les changements émergents. Bien qu'une certaine centration au niveau des aspects pédagogique et curriculaire semble dominer le contexte actuel de réformes, il apparaît de plus en plus évident que les processus de gestion inscrits au cœur même du fonctionnement des établissements scolaires tant au niveau pédagogique qu'administratif se doivent d'être considérés. Il est nécessaire de s'y attarder pour étudier les interrelations existantes et essentielles entre le mode d'apprentissage et les moyens d'en assurer la pérennité, les interactions entre les acteurs scolaires et les dynamiques internes à l'établissement. Ainsi est-il pertinent de traiter de la problématique organisationnelle générée par l'implantation du processus de gestion stratégique prescrit par la LIP québécoise.

1. Problématique

L'évolution de la société québécoise et de son système scolaire repose en grande partie sur les grandes tendances d'un État et d'un appareil gouvernemental modernes. Dans ce cadre, l'État joue plusieurs rôles. Selon Leclerc (2001), il a joué au fil du temps les rôles d'*encadreur*, de *correcteur*, d'*orienteur* et de *modulateur*. Dans cette évolution, le système scolaire québécois, adhérant à la préoccupation mondiale pour la réussite éducative des pays développés est directement interpellé par les changements survenus à la suite de la convergence de ces différents rôles étatiques. Ainsi, le système scolaire est-il amené à relever de nouveaux défis stratégiques, tels la décentralisation, la rationalisation des dépenses publiques et à l'opérationnalisation des moyens d'y parvenir dans un souci d'efficacité et d'efficience.

Dans ce contexte de performance, d'efficacité organisationnelle et d'efficience administrative, « *la conjoncture impose aux agents de l'éducation de profondes mutations managériales et comportementales* » (Leclerc, 1996). Le système scolaire québécois est dorénavant géré selon un modèle, centré sur les résultats. S'inscrivant dans la foulée de Crozier et Friedberg (1977) qui proposent une analyse stratégique de la gestion comme système ouvert, Sergiovanni, Burlingame, Coombs, Thurston (1999) affirment que l'école, confrontée à des questions d'équité, d'excellence, d'efficacité et de choix modifiant la gestion, se mute de plus en plus en une organisation politique. Selon Derouet et Dutercq (1997), la gestion des écoles, s'inscrit dans la logique de l'efficacité organisationnelle dans un esprit de rationalisation de type industriel.

Le gouvernement québécois reconnaît la vision et la stratégie comme éléments clés de la dynamique éducative. La gestion stratégique en constitue ainsi le processus organisationnel. Les concepts d'alliance stratégique, de compétences clés, de facteurs d'évolution, d'environnement, de processus de décision et de planification stratégique, de transversalité (Morsain, 2000) composent dorénavant le vocabulaire en gestion scolaire. Selon la nouvelle gouvernance publique, la décentralisation des pouvoirs et des responsabilités aux différents niveaux décisionnel demeure l'enjeu fondamental. Afin de favoriser une gestion plus responsable, ouverte et équitable, le concept de stratégie sera placé à l'avant-scène du fonctionnement des trois paliers organisationnels en éducation.

Le ministère de l'Éducation, du Loisir et du Sport (MELS), associé au niveau stratégique, planifie les grandes orientations et la mission éducatives; puis, les commissions scolaires, dont relève la dimension davantage tactique du système scolaire (FQDE, 2008), veillent à la réalisation de leur propre plan stratégique et à l'atteinte des objectifs régionaux; au niveau opérationnel, les établissements scolaires à titre d'espaces d'intervention élaborent, implantent et évaluent leur plan de réussite (LIP, 2008). L'importance de la direction de l'établissement est déterminante face à l'efficacité de l'école.

1.1. Gestion du changement

Tenter de comprendre les changements en éducation conduit inévitablement à considérer l'environnement éducatif actuel. Pivot du système éducatif provincial l'établissement scolaire québécois est situé, au même titre que l'ensemble des paliers éducatifs, dans un environnement externe complexe. Cet environnement comporte les environnements politique, juridique, social, économique, environnement technologique et scientifique.

Le processus de planification stratégique pourrait être abordé sous divers aspects, nous le traiterons sous le couvert de la gouvernance locale (niveau établissement) et de l'environnement politique considérant l'adoption d'une législation gouvernementale comportant un mode de gestion axé sur les résultats et la reddition de compte dans l'ensemble des ministères. Le tableau suivant présente les principales modifications aux lois et règlements qui influencent le mode de gestion des chefs d'établissement.

Tableau 1 - Principales modifications de la LIP et de règlements

Adoption de la LIP	Loi 107 (1988)	Création des conseils d'orientation Mise en évidence des droits et responsabilités des enseignants
Amendement de la LIP	Loi 180 (1997)	Création des commissions scolaires linguistiques Abolition des commissions scolaires confessionnelles Création des conseils d'établissement (c.é.) Élaboration du nouveau programme de formation basée sur les compétences des élèves
Amendement de la loi de l'administration publique	Loi 82 (2000)	Concept d'imputabilité Reddition de compte pour tous les ministères gouvernementaux québécois
Amendement de la LIP	Loi 124 (2001)	Implantation du concept d'imputabilité en référence à la loi 82 Implantation du processus de planification stratégique au niveau des commissions scolaires et des plans de réussite pour les écoles
Règlement ministériel	(2003)	Implantation d'un nouveau processus gouvernemental d'évaluation des élèves
Décret 699-2007	(2007):	Nouvelles dispositions du Régime pédagogique de l'éducation préscolaire, primaire et de l'enseignement secondaire

Le système éducatif québécois vit un changement organisationnel majeur assimilable au processus de planification stratégique. Conformément à la Loi sur l'administration publique (LAP), le MELS a développé certaines procédures en éducation dont l'implantation d'un Plan Stratégique 2000-2003 et la mise en

place d'une stratégie d'intervention, *Agir Autrement*, pour la réussite éducative au secondaire en milieux défavorisés. Dans le Plan stratégique 2005-2008, sont exposés les orientations, les axes d'intervention, les objectifs, les indicateurs de résultats visés qui constituent des moyens permettant à tous les partenaires du système éducatif de travailler à la réussite éducative. L'orchestration d'un mode de planification stratégique au sein de l'établissement scolaire, incluant le plan de réussite, conduit à reconsidérer conjointement l'approche de gestion dont le type de pilotage auxquels les chefs d'établissement doivent souscrire dans la recherche de concertation et de partenariat.

2. Recherche québécoise

Obligation est faite aux chefs d'établissement scolaire de gérer dans le cadre du plan stratégique qui MELS visant la réussite du plus grand nombre. Localement, en partenariat avec le Conseil d'établissement et les employés, ils doivent construire projet éducatif et plan de réussite pour leur établissement. Ils sont invités à faire face à la situation du décrochage scolaire qui perdure en innovant et doivent désormais adopter et intégrer dans leurs pratiques un mode de gestion stratégique intégrant responsabilités administrative et pédagogique stipulées dans la LIP pour la réussite scolaire du plus grand nombre des élèves et étudiants. Au printemps 2000, le MELS a adopté des mesures pour concrétiser son engagement à l'égard de la réussite. La LIP oblige, depuis 2002, l'ensemble des établissements scolaires à élaborer et à mettre en œuvre un plan de réussite constituant la mise en action concrète du projet éducatif de l'école. Le plan de réussite, produit direct du nouveau mode de gestion imposé aux écoles, concerne l'ensemble des acteurs de l'école, et de premier chef le directeur de l'établissement.

Intéressée par les perceptions des directeurs à l'égard du processus de planification stratégique dorénavant prescrit par la Loi sur l'instruction publique (LIP), cette recherche en cours, subventionnée par le Fond de québécois de recherche Société et Culture (FQRSC), entreprise en 2004, sera terminée fin 2008. Ses hypothèses de base sont : des processus différenciés de gestion existent en milieu éducatif; ils produisent des effets divergents à incidences encore non-identifiées sur la réussite éducative. Ces hypothèses ont mené aux objectifs de recherche qui suivent.

2.1 Objectifs de la recherche

La recherche portant sur la pertinence du processus de planification stratégique des établissements scolaires a pour objectif de définir l'écart entre le mode de gestion des directions d'école et le mode de gestion optimal pour contrer l'abandon scolaire.

Cette recherche souhaite définir la manière dont les directions d'écoles se sont approprié le nouveau mode de gestion prescrit par la loi, afin de le confronter à un mode de gestion favorisant de manière optimale la réussite des jeunes. La recherche a également pour objectif de dégager les éléments prévisionnels pertinents à la construction d'instruments « stratégiques-innovants » de gestion

scolaire propre à l'atteinte de la réussite éducative.

Toutefois, l'atteinte de ces objectifs a nécessité la réalisation de phases préalables : l'élaboration d'un cadre conceptuel propre à la gestion stratégique ; la définition du mode de gestion actuel des écoles; l'identification des composantes de la gestion stratégique en tant qu'éléments statiques et dynamiques visant à être implantés ainsi que l'évaluation de l'orientation de ce processus de gestion.

3. Cadre conceptuel

3.1 Changement organisationnel

Lors de l'implantation, la réforme du système éducatif, mise en place par le MELS, a rencontré des difficultés qui sont liées à la planification du changement organisationnel nécessaire à plusieurs paliers du système éducatif. Pour améliorer la capacité de gérer le changement dans les établissements d'enseignement dans le cadre de la décentralisation administrative et soutenir cette réforme de l'éducation, la LIP a été amendée à plusieurs reprises (Loi 180, 124, 118, 35). D'une part, plus de pouvoirs ont été accordés au niveau de l'établissement, d'autre part, l'opérationnalisation au niveau de la reddition de compte des établissements et des organisations scolaires fut accentuée.

Plusieurs approches sont proposées par les chercheurs pour gérer le changement : l'approche hiérarchique, l'approche du développement organisationnel, l'approche psychologique, l'approche structurelle, l'approche politique, l'approche de gestion stratégique et les approches s'inspirant des théories du chaos et de la complexité.

Le modèle hiérarchique, popularisé par les théories classiques du management, s'appuie sur une vision mécaniste de l'organisation. La stratégie prescriptive identifiée par Nutt (1986), le modèle autoritaire proposé par Herman-Taylor (1985) et le modèle unitaire de Harrison (1985) sont représentatifs de cette perspective.

La conception de l'organisation de l'École des relations humaines, misant sur le développement organisationnel, considère que le changement sera un succès organisationnel si les gestionnaires réussissent à promouvoir des valeurs de participation et de consensus.

Les tenants de l'approche psychologique mettent l'accent sur la réaction des personnes face au changement ; ils s'attardent aux réactions négatives ou défensives (Coch et French, 1947) en lien avec les croyances et les attitudes individuelles. Ils considèrent un changement adéquat si l'on réussit à vaincre les résistances naturelles des personnes (Lewin, 1976).

L'approche structurelle traite des organisations qui réussissent à implanter avec succès un changement en se distinguant des autres par leur structure et leur capacité d'adaptation aux exigences du changement. Cette approche est issue

des travaux précurseurs de Burns et Stalker (1961) qui ont popularisé l'idée d'organisations de forme organique favorisent la réussite du changement.

L'approche politique véhicule que les difficultés liées à l'implantation d'un changement dépendent de la poursuite d'intérêts particuliers de la part d'acteurs influents de l'organisation. Les changements sont considérés comme des jeux de pouvoir organisationnel dont le résultat constitue un ajustement aux pressions internes et externes (Harrison 1985), aux stratégies et aux interactions des différents acteurs et sur leurs interactions (Barley 1986; Crozier 1963; Scheirer 1981; Hage 1999; Friedberg 1993) dans processus politique de mobilisation.

Au début des années 80, les chercheurs ont remis en question les approches présentées qui ont en commun une conceptualisation du changement en tant que processus principalement incrémentiel et évolutif et ont commencé à voir le changement comme processus discontinu et révolutionnaire (Demers 1999; Allaire et Firsirot 1985; Miller et Friesen 1984; Greenwood et Hinings 1988). Cette nouvelle approche préconise la gestion stratégique où le changement est lié à la transformation radicale de la culture, de la stratégie et de la structure d'une organisation.

Récemment, la vision du changement, événement imprévu et occasionnel, a cédé la place à une vision où la seule chose prévisible, c'est le changement (Demers 1999). Ainsi, les organisations apprennent à travers l'action collective en exploitant la somme des connaissances disponibles au sein de la collectivité (Cohen et Levinthal 1990; Fiol 1994, 1996; Huber 1991; Nonaka 1994). Le changement est l'affaire de tous et le dirigeant, un agent facilitateur de changement parmi d'autres (Demers 1999). Les approches les plus récentes relatives au changement s'inspirent des théories du chaos et de la complexité (Gleick 1987; Waldrop 1992). Les organisations sont ici des systèmes complexes, dynamiques, adaptatifs, oscillant entre ordre et désordre. Selon les théories de la complexité (Anderson 1999), le comportement de systèmes complexes peut être très sensible et influencé par de petits écarts initiaux. L'augmentation de la participation permet d'améliorer la capacité de l'organisation, de lui donner un sens (McDaniel, 1997; Ashmos, Huonker et McDaniel, 1998). Les théories de la complexité, expliquent que le changement sera encouragé par la complexification de l'organisation interne, la communication et la participation, stimulant l'auto-organisation, l'adaptation à la diversité environnementale et l'apprentissage (Lichtenstein 2000).

La littérature scientifique explique abondamment les difficultés d'implantation de changement dans les organisations et le présente comme un phénomène complexe où les organisations, tel le système éducatif, semblent nettement améliorer la capacité de son implantation par le fonctionnement en système complexe d'action et d'adaptation à travers l'action, l'expérimentation et l'apprentissage collectif.

3.2 Le concept de planification

La planification, définie en des termes simples comme étant le *processus par lequel on détermine les objectifs à atteindre et la manière d'y parvenir* (Bergeron, 2001), est un concept qui ne fait pas unanimité. Caractérisés par une

manière différente de percevoir l'introduction d'un changement et la programmation d'objectifs, Soubrier (2000) met en perspective six courants ayant marqué le concept de planification, soit *l'approche rationaliste, l'approche holistique, la planification sociale, le nouvel humanisme, la planification fondée sur l'adaptation des systèmes et l'approche pragmatique*.

Chacune de ces approches permettent de faire ressortir différentes dimensions spécifiques de la planification pouvant être identifiées à : i) une pensée organisationnelle fonctionnaliste; ii) une pensée socio-systémique ; iii) une pensée interactionniste ; iv) une pensée politique et v) une pensée stratégique. Selon *l'approche rationaliste* issue des travaux de Frederic W. Taylor (1912), un groupe de décideurs élaborent des objectifs à atteindre, formulent un ensemble de moyens pour y parvenir, prédisent les extrants et évaluent les moyens nécessaires afin de déterminer ceux qui seront privilégiés.

Née des limites de l'approche rationaliste, *l'approche holistique* tient davantage compte de la complexité du monde réel ne pouvant être compris et prédit uniquement par des liens de causalité. Deux courants caractérisent cette approche. *Le courant philosophique*, principalement soutenu par Mannheim (1940), dont la prémisse est que tous les éléments d'une société sont dépendants et le *courant découlant des sciences classiques*, élaboré principalement par le biologiste von Bertalanffy à l'aide de sa théorie générale des systèmes, opposée au processus analytique d'appréhension de la réalité. L'approche systémique repose sur quatre concepts fondamentaux : *l'interaction, la globalité, l'organisation et la complexité* (Soubrier, 2000).

Soutenue principalement par Davidoff (1965) ainsi que par Peters et Waterman (1983), *la planification sociale* se base sur la prémisse suivante : *puisque une société se compose de nombreux groupes d'intérêts aux objectifs souvent contradictoires, un système de planification doit tenir compte des valeurs et objectifs de chacun* (Soubrier, 2000). Ainsi, cette approche préconise la participation de tous les citoyens au processus de planification.

Également en opposition à l'approche rationaliste, l'approche humaniste intègre les valeurs et les sentiments des individus à l'intérieur des sciences et des modèles de développement sociaux. Dans cette approche, trois modèles s'imposent : la *théorie du développement social* proposée par Charles Hampden-Turner (1970), la *théorie de la planification transactionnelle* élaborée par John Friedman (1973) et la théorie de la planification transactionnelle qui affirme que la bonne société n'existe que par son réseau de relations sociales consistant à protéger et agrandir constamment l'espace de dialogue réduit par la planification sociale.

Cinq théories découlent de *la planification fondée sur l'adaptation des systèmes*, soit l'adaptation mutuelle partisane l'incrémentalisme, la théorie centrée sur les relations interpersonnelles, la théorie de la société active ainsi que l'analyse stratégique des systèmes d'action concrets. Lindbloom (1965) présente la théorie de l'adaptation partisane comme étant la coordination des efforts des individus sans l'intermédiaire de superviseurs, d'objectifs communs ou de règles, afin de déterminer leurs fonctions de travail ou leurs relations à l'intérieur d'une organisation.

Quant à *l'incrémentalisme*, méthode d'intervention utilisée afin d'introduire un changement à l'intérieur de systèmes sociaux, elle est représentée par Likert (1961) qui créa la *théorie centrée sur les relations interpersonnelles* et par Etzioni (1968) qui a élaboré *la théorie de la société active*.

Crozier et Friedberg (1977), tenants de *l'analyse stratégique des systèmes d'action concrets*, s'opposent à toutes les approches mentionnées précédemment, celles-ci ne tenant pas compte des relations de pouvoir qui s'établissent entre les acteurs du système.

L'approche pragmatique se fonde uniquement sur le bon jugement et l'adaptation des actions à la réalité quotidienne niant la planification à long terme qui risque de nuire au bien-être des individus.

3.3 Qu'en est-il des processus stratégiques?

En premier lieu, le terme « processus » navigue entre deux courants : l'un davantage mécaniste considérant ce concept comme « un ensemble d'activités et de ressources liées qui transforment des éléments entrants en éléments extrants (Mongin, 2002 : 10), l'autre davantage interactionniste inscrivant l'organisation comme l'interaction et le mélange de flux énoncés par Mintzberg. Le processus se représentant comme une boucle sans fin menant à un résultat prévu mais non prévisible compte-tenu du besoin constant de rétroaction sur l'action organisationnelle et sur ses acteurs.

Selon Findler (2002) tout processus stratégique doit prendre en compte les objectifs à long terme, l'environnement externe, les forces internes à l'organisation, la culture de l'entreprise et les attentes des acteurs. Ainsi la stratégie recouvre à la fois les objectifs à atteindre et la voie pour y parvenir d'où l'importance d'y associer le processus de planification stratégique comme l'outil d'opérationnalisation de la stratégie proposée.

3.4 La planification stratégique

La planification stratégique, processus sur lequel s'appuie le nouveau mode de gestion de l'administration gouvernementale québécoise, a d'abord été conçue pour le secteur privé et les grandes entreprises. Notion critiquée à cause du long terme mais introduite dans les manuels d'administration dans les années 1960, elle a apporté l'intégration de la notion de temps à la planification. Bryson (1988) en a adapté les concepts au secteur public et aux organisations sans but lucratif.

3.4.1 Définitions du concept de planification stratégique

La planification stratégique favorise une grande productivité ainsi qu'une capacité accrue d'adaptation aux contingences internes et externes (Soubrier, 2000). Elle stimule la communication entre chaque élément d'un système, sollicite la participation des principaux acteurs du système et crée une synergie dans toute l'organisation. Inspirée également des outils mis au point par la planification à long terme, elle introduit une variable nouvelle, essentielle à l'adaptation du

système à son environnement, la *stratégie* qui permet l'identification des rapports de force et jeux de pouvoirs dans l'organisation.

Kaufman (1991) relie étroitement la planification stratégique à la pensée stratégique, qu'il définit comme étant la manière dont les membres d'une organisation pensent, appréhendent, voient et créent leur futur dans l'entreprise. Selon lui, la planification stratégique est un processus formel de définition des éléments nécessaires à la réalisation de résultats souhaités qui comprend les éléments suivants: une vision du monde souhaité pour les générations futures (méga) ; et une mission ou but pour l'organisation (macro) et des objectifs stratégiques établis afin de réaliser la vision (méga) et la mission (macro) de l'organisation.

Selon Bryson (1995), propose un modèle complet pertinent dans le cadre de la présente recherche, affirme que le processus de planification stratégique *permet à une organisation de prendre des décisions fondamentales quant à sa vocation, à son type d'intervention et aux raisons de son action*; il propose un processus de planification stratégique dix étapes (Soubrier (2000)). La complexité des différentes étapes, la manière de les relier entre elles, la flexibilité du modèle ainsi que la précision des termes utilisés font du modèle de Bryson (1995) en dix étapes celui qui explique le mieux le processus de planification stratégique. C'est le modèle le plus pertinent pour la compréhension de la problématique soulevée dans la présente recherche ainsi que pour l'analyse des données recueillies auprès des sujets interrogés.

4. Méthodologie et collecte de données

Le projet de recherche, portant sur la pertinence du processus de planification stratégique tel que prescrit par la LAP et par la LIP, est mené selon les caractéristiques de la recherche qualitative (Guba et Lincoln, 1982; Huberman et Miles, 1994).

La méthodologie a été expérimentée et validée lors d'études antérieures (St-Pierre, 2002). Cette recherche utilise la *grounded theory* développée par Glaser et Strauss (1967) qui est à la fois un processus d'induction, de déduction et de vérification (Strauss, 1987). Cette méthode fondée sur la conceptualisation des observations empiriques à partir de situations sur le terrain et sur la formation de relations entre ces concepts de façon à en saisir la réalité complexe, cette approche comporte un processus de formulation d'hypothèses, puis de falsification de ces hypothèses tout au long du processus d'analyse. Il en résulte ainsi des propositions explicatives valides pour la situation problématique ou les phénomènes observés qui constituent un point de départ pouvant justifier des recherches ultérieures. Comme mode de scientificité, cette recherche utilise une démarche de falsification - réfutation - de production de connaissances (Popper, 1978) et permet d'éviter le piège de la *boucle de l'induction* (Chalmers, 1988).

4.1 Échantillonnage et collecte de données

La position épistémologique du chercheur ainsi que la méthodologie de recherche utilisée ont déterminé la valeur inhérente des données de type qualitatif. Elles ont été choisies car elles permettent de saisir la complexité des situations empiriques et de la traduire en variables nuancées. Ces données descriptives sont axées sur la compréhension du processus en cours et non uniquement sur le produit. Elles ont été obtenues à partir d'entrevues semi-dirigées, dans cinq commissions scolaires québécoises, auprès de trente directions d'écoles.

Une seule question fut posée : *Que pensez-vous du processus de planification stratégique tel qu'il a été prescrit aux écoles québécoises dans le cadre de la réussite éducative?* L'analyse des données a traversé les étapes de codification des observations, d'élaboration de catégories conceptuelles, d'intégration des composantes multidimensionnelles de l'analyse à l'objet de la recherche, de modélisation ou reproduction de l'organisation des relations structurelles ou fonctionnelles caractérisant le phénomène à l'étude. Le logiciel d'analyse de données qualitatives Atlas/ti a été utilisé pour la codification des données recueillies.

5. Analyse : Les facteurs en émergence

Une première codification, effectuée sur plus de 50 % des entrevues, a permis l'émergence des codes les plus souvent énoncés par les sujets interrogés. Un premier regroupement a mis en évidence trois axes d'analyse du processus de planification stratégique (plan de réussite): l'axe structurel regroupant les éléments à caractère statique et structurel; l'axe organisationnel lié aux éléments dynamiques et opérationnels du processus; l'axe relatif aux acteurs scolaires traitant des dimensions individuelles, collectives et interrelationnelles du processus.

Au niveau organisationnel, le code qui revient le plus souvent est celui de *processus*. En fait, le processus est défini par le Robert (1994) comme étant *un ensemble de phénomènes, soit tout ce qui se manifeste à la conscience par l'intermédiaire des sens, et conçu comme actif et organisé dans le temps*. De plus, un processus contiendrait des interfaces floues devant être expliquées et comprises, sans quoi elles mènent à l'ambiguïté, à l'incompréhension et aux difficultés de gestion. Cette première mise en évidence de facteurs en émergence permet de croire qu'un manque de communication et de formation à l'égard de la gestion d'un processus mène aux difficultés vécues par les directions actuelles devant appliquer un nouveau mode de gestion initié par le MELS et prescrit par la loi. Cette première phase d'analyse permet de constater que les concepts même de processus de planification stratégique et d'opérationnalisation portaient à confusion, certains associant le plan de réussite à la démarche à mettre en place, d'autres l'associant à la rédaction d'un document visant l'atteinte de résultats. Certains soulevèrent la complexité du processus et la difficulté de se l'approprier. D'autres mentionnèrent le principe de reddition de compte comme un mandat supplémentaire dans un contexte d'imputabilité grandissante et de surcharge organisationnelle.

Au niveau structurel, deux codes émergent de la codification sommaire, soit *la planification stratégique* et *le plan de réussite*. Le code *planification stratégique* est souvent associé à la commission scolaire, alors que le code *plan de réussite* est plus souvent associé par les directions aux écoles. Il est de plus ressorti que le plan de réussite apparaît comme une prescription gouvernementale ayant une logique propre. La codification sommaire permet également de percevoir l'appropriation de certains codes par les directions d'écoles, ce qui se traduit notamment par l'utilisation d'un vocabulaire personnel et coloré qualifiant ces codes. Les sujets ont associé le *plan de réussite* aux termes «*outil de réflexion*», «*exercice*», «*enveloppe englobante*», «*cadre d'opérations*», «*carcan*», «*devoir*», etc. Certains ont manifesté aussi leur ignorance concernant les nouveaux règlements et les nouvelles procédures à mettre en place, concédant que le manque de temps et la surcharge les empêchent de traiter ces dossiers d'une façon plus approfondie.

Au niveau des acteurs, un dernier code émerge davantage de la codification sommaire, soit le code *commission scolaire*. Ce terme fait référence aux acteurs impliqués dans le processus de planification stratégique, et indique que la commission scolaire semble jouer un rôle important dans ce processus au regard des personnes interrogées. Le fait que les écoles aient à rendre des comptes à la commission scolaire pourrait peut-être expliquer sa présence fréquente dans l'analyse préliminaire où elles furent identifiées comme un interlocuteur important dans le processus de planification stratégique. Les données présentées ci-dessus sous forme de codes en émergence représentent un aperçu de l'analyse plus approfondie qui sera effectuée sur l'ensemble des données recueillies. Intéressante, cette analyse embryonnaire ne permet toutefois pas l'émergence de réseaux et de modèles complexes, ce que permettra l'analyse plus approfondie.

6. Discussion

L'analyse partielle et sommaire des données de recherche recueillies permettent la formulation de quelques propositions provisoires, mais tout de même utiles à ce stade-ci de l'étude. Ainsi, le processus de planification stratégique semble interpellé très sérieusement par les chefs d'établissement consultés. Si nous nous référons aux étapes du modèle la planification stratégique de Bryson (1996) il apparaît que les chefs d'établissement sont conscients de l'entente initiale à formuler entre les divers personnels de l'école et les membres du conseil d'établissement ; toutefois il émerge une certaine confusion quant au mandat qu'ils doivent exercer et aux étapes à suivre. Concernant la seconde étape visant la détermination des rôles, il semble y avoir une polarisation sur l'importance jouée par la commission scolaire et une lacune au niveau de la détermination des rôles et des fonctions de l'organisation. Cependant malgré ce «*flou organisationnel*», le projet éducatif apparaît être le point d'ancrage du processus et de l'élaboration du plan de réussite, bien que pour certaines écoles québécoises en 2004, les plans de réussite ont précédé le projet d'établissement. Il apparaît aussi que le processus consultatif que les directions ont enclenché afin de correspondre aux exigences de la LIP correspond à l'examen des forces et des faiblesses de l'environnement externe permettant de procéder à l'identification des problèmes stratégiques spécifiques à chaque école. Toutefois, la sixième

phase du modèle, est apparue comme problématique faute d'expérience et d'appropriation du vocabulaire de la gestion axée sur les résultats (ex. indicateur de performance, outil, évaluation, etc.). La septième étape relative à l'adoption du plan de réussite est toutefois réalisée en conseil d'établissement en concordance avec le respect de la LIP. Les étapes suivantes du modèle de Bryson concernant le processus d'évaluation du plan de réussite et de son examen critique ont été peu abordées, car le processus en 2004 en était encore à ses débuts. Il est donc intéressant de constater que malgré un manque de formation ou d'informations, les directions d'écoles soient parvenues, mais non sans peine, à la réalisation du plan de réussite de leur établissement.

Conclusion

Les changements organisationnels découlant de la Loi de l'administration publique (LAP, 2000) (www.map.gouv.qc.ca) et qui ont été adoptés dans le cadre de la Loi de l'instruction publique (LIP, 2002) (www.meq.gouv.qc.ca) ont non seulement complexifié la gestion scolaire traditionnelle, mais ils en ont fait éclaté les cadres structurels fonctionnalistes pour tenter une reconstruction dans une approche davantage interactionniste en lien direct avec la pensée socio-constructiviste.

L'émergence d'un nouveau modèle en gestion impose la nécessité de la redéfinition du rôle du directeur d'établissement et des compétences attendues, de la complémentarité/partenariat entre l'université et le milieu, de l'harmonisation des modalités de formation aux pratiques actuelles de gestion et la production à court terme du modèle de formation en émergence.

Références

- Allaire, Y., Firsirotu, M., 1985. How to Implement Radical Strategies in Large Organizations, *Sloan Management Review* 26.
- Allison, G., 1971. *Essence of Decision*. Boston, Little Brown and Compagny.
- Anderson, P. 1999. Complexity Theory and Organization Science, *Organization Science* 10(3), 216-232.
- Argyris, C., Schön, D. 1978. *Organizational Learning*. Addison-Wesley.
- Argyris, C. 1982. Creating Long-term Organizational Change, dans P.S. Goodman (dir.) *Change in Organizations*, San Francisco, Jossey-Bass Pub., p. 47-86.
- Ashmos D.P., J.W. Huonker et R.R. McDaniel 1998. Participation as a complicating mechanism : The effect of clinical professional and middle manager participation on hospital performance, *Health Care Management Review* 23(4), 7-20.
- Assemblée nationale (2003) *Loi sur l'instruction publique*, L.R.Q., c. I-13.3, Bibliothèque nationale du Québec : Les Publications du Québec
- Assemblée nationale (2008) *Loi sur l'instruction publique* consulté el 25 avril 2008 <http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=orientations> extrait du site
- Bareil, C. 2004. *Gérer le volet humain du changement*. Montréal : Édition transcontinentale et Fondation de l'entrepreneurship.

- Bareil, C., Savoie, A. 1999. Comprendre et mieux gérer les individus en situation. Montréal : Éditions Transcontinental ; Québec : Éditions de la Fondation de l'entrepreneurship.
- Barley. 1996. *The new world of work*. London : British-north american research association ; Washington : National Planning Association ; Toronto : C. D. Howe Institute.
- Bergeron, P. G. 2001. *La gestion dynamique : Concepts, méthodes et applications*, Les éditions Gaëtan Morin, Montréal.
- Bryson, J.M., Farnum, A.K. 1996. *Creating and Implementing your Strategic Plan*. San Francisco: Jossey-Bass.
- Burns, T. et G. Stalker. 1961. *The Management of Innovation*. London, Tavistock Pub.
- Coch, L., French, J.R.P. 1947. Overcoming Resistance to Change, *Human Relations 1*, 512-532.
- Cohen, H. 1998. The Performance Paradox. *Academy of Management Executive 12(3)*, 30-40.
- Cohen, W., Levinthal, D. 1990. Absorptive Capacity : A New Perspective on Learning and Innovation, *Administrative Science Quarterly 35*, 128-152.
- Courpasson, D. 1998. Le changement est un outil politique, *Revue Française de Gestion*, septembre-octobre (120), 6-16.
- Crozier, M. 1963. *Le phénomène bureaucratique*. Paris, Éditions du Seuil.
- Crozier, M., Friedberg, E. 1977. *L'acteur et le système*. Paris, Éditions du Seuil.
- Davidoff, P. 1965. *Advocacy and Pluralism in Planning*. J.A.I.P. vol.XXXI.
- Durant, D. 1996. *La systémique*, (7^{ème} édition). Paris : Presses universitaires de France, 1979.
- Demers, C. 1999. De la gestion du changement à la capacité de changer. L'évolution de la recherche sur le changement organisationnels de 1945 à aujourd'hui, *Gestion 24(3)*, 131-139.
- Derouet, J.-L., Dutercq, Y. (1997). L'établissement scolaire, autonomie locale et service public. Paris : ESF.
- De Bruijn, H., et al. 2002. *Process Management*. Netherlands : Kluwer Academic Publishers.
- Etzioni, A. (1968). *The Active Society: A Theory of Societal and Political Process*. New York: The Free Press.
- Fédération des commissions scolaires du Québec, 2008. Consulté le 25 avril 2008 extrait de <http://www.fcsq.qc.ca/>
- Fidler, B. 2002. *Strategic Management School Development: Leading your school's improvement strategy*. Great Britain: Paul Chapman Publishing.
- Fiol, C.M. 1994. Consensus, Diversity, and Learning in Organizations, *Organization Science 5*, 403-420.
- Friedberg, E. 1993. *Le pouvoir et la règle*. Paris, Éditions du Seuil.
- Friedman, J. 1973. *Retracking America: A Theory of Societal Transactive Planning*. Garden City, New York: Doubleday.
- Gersick C. 1991. Revolutionary Change Theories : A Multilevel Exploration of the Punctuated Equilibrium Paradigm, *Academy of Management Review 16*, 10-36.
- Glaser, B.G., Strauss, A.L. 1967. *Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine de Gruyter.
- Gleick, J. 1987. *Chaos : Making a New Science*. New York, Penguin Books.
- Gouvernement du Québec (2000). *Loi sur l'administration publique*, Québec : Éditeur officiel du Québec.

- Greenwood, R., Hinings, C.R. 1988. Design Archetypes, Tracks and the Dynamics of Strategic Change, *Organization Studies* 9, 293-316.
- Guba, E.G., Lincoln, Y.S. 1982. Epistemological and methodological base of naturalistic inquiry. *Educational Communication and Technology Journal* 29, 2 pp. 75-92.
- Hage, J.T. 1999. Organizational Innovation and Organizational Change, *Annual Review of Sociology* 25, 597-622.
- Hampden-Turner, C. 1971. *Radical Man: the Process of Psycho-Social Development*. Garden City N.Y.: Anchor Books. Originally published in 1970 by Shenkman.
- Hammersley, M. 1992. What's wrong with Ethnography? London: Routledge.
- Harrison, S. 1985. Perspectives on Implementation, dans *Health Services Performance*, sous la direction de A.F. Long et S. Harrison. London, Croom Helm,
- Harvey, E., Mills, R. 1970. Patterns of Organizational Adaptation: A Political Perspective, dans M.N. Zlad (dir.) *Power in Organizations*. Nashville, Vanderbilt University Press.
- Hasenfeld, Y. 1980. Implementation of Change in Human Service Organizations : A Political Economy Perspective, *Social Service Review* 54, 508-520.
- Herman-Taylor, R.J. 1985. Finding new Ways of Overcoming Resistance to Change, dans J.M. Pennings et coll, *Organizational Strategy and Change*. San Francisco, Jossey-Bass Pub, p. 383-411.
- Huber, G.P. 1991. Organizational Learning : An examination of the Contributing Processes and the Literatures, *Organization Science* 2
- Huberman, A.M., Miles, M.B. 1991. *Analyse des données qualitatives*. Bruxelles: De Boeck.
- Hussey, D. E. 1991. *Introducing Corporate Planning* (4ième édition) New York: Pergamon Press, 1971.
- Johnson, G., Scholes, K. 1999. Exploring Corporate Strategy: Text and cases (5th edn) Harlow: Pearson Education.
- Kaufman, R., Herman, J. 1991. *Strategic Planning in Education*. Basel : Technomic Publishing Co., Inc.
- Lacaze, J.P. 1979. Introduction à la planification urbaine. Paris : Éditions du Moniteur.
- Leclerc, J. 1996. *En éducation, la nécessité d'une autre gestion*. Québec: Presses de l'Université du Québec.
- Leclerc, J. 2001. Gérer autrement l'administration publique. Québec : Presses de l'Université du Québec.
- Lewin, K. 1976. Field Theory in Social Science. Harper.
- Lichtenstein, B.B. 2000. Self-organized Transitions : A Pattern Amid the Chaos of Transformative Change, *Academy of Management Executive* 14(4), 128-141.
- Likert, R. 1961. *New Patterns of Management*. New York: McGraw-Hill.
- Lindblom, C. E. 1965. *The Intelligence of Democracy*. New York: Free Press.
- Ministère de l'Éducation, du Loisir et du Sport (2000). *Plan stratégique 2000-2003*, Bibliothèque nationale du Québec.
- Mintzberg, H. 1980. *The Structuring of Organizations*. New Jersey : Englewood Cliffs
- Mougin, Y. 2002. *La cartographie des processus*. Paris : Éditions d'Organisation
- Morsain, M.A. 2000. *Dictionnaire du management stratégique*. Paris : Belin.
- Nonaka, I. 1994. A Dynamic Theory of Organizational Knowledge Creation, *Organization Science* 5.

- Nutt, P.C. 1986. The Tactics of Implementation, *Academy of Management Journal* 29(2).
- Peter, T., Waterman, R. (1983). *Le prix de l'excellence*. Paris : InterÉditions.
- Quinn, J.B. 1980a. *Strategics for Change. Logical Incrementalism*. Homewood, IL. Irwin
- Rojot, J. 2003. *Théorie des organisations*. Paris : Éditions ESKA.
- Sergiovanni, T.J., Burlingame, M., Coombs, F.S., Thurston, P.W. (1999). *Educational Governance and Administration*. 4th edition. Boston : Allyn and Bacon.
- Scheirer, M.A. 1981. *Program Implementation : The Organizational Context*. Beverly Hills, CA, Sage.
- Strauss, A. 1987. *Qualitative Analysis for Social Scientists*. Cambridge : Cambridge University Press.
- Séguin, F. et J.F. Chanlat. 1983. *L'analyse des organisations*, Tome 1 Les théories de l'organisation. Montréal, Gaëtan Morin.
- Simon H.A. 1945. *Administrative Behaviour*, 2e édition. New York : Free Press.
- Simon, H. A. 1957. *Models of man*. New York: John Wiley & Sons.
- Soubrier, R. 2000. *Planification, aménagement et loisir*, Les Presses de l'Université du Québec, Sainte-Foy, Québec.
- Waldrop, M.M. 1992. *Complexity*. Simon & Schuster.

La place des technologies de l'information et de la communication dans le contexte hospitalo-scolaire

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Résumé

Le droit à la scolarité récemment rappelé dans la loi du 11 février 2005 précise, entre autre, que quelle que soit la situation d'un enfant, la République lui doit une scolarité en tous points, égale à celle des autres enfants. C'est dans ce cadre législatif que nous nous sommes interrogés sur la question de la poursuite de la scolarité des enfants hospitalisés par le biais des TIC (Technologies de l'information et de la communication). L'accès aux TIC donne des moyens d'envisager des solutions pour la scolarisation des enfants malades, ceci en évitant une double injustice : celle de la maladie et celle de l'exclusion scolaire. Ce travail exploratoire permet de décliner les différents dispositifs techniques existants de l'éducation nationale et du milieu associatif dans les hôpitaux. Par l'intermédiaire d'entretiens semi-directifs auprès de quelques acteurs de la vie éducative, il apparaît que l'utilisation des TIC est une complémentarité humanisante à l'enseignement traditionnel.

Mots clefs : scolarisation – handicap – milieu hospitalo-scolaire – médiations humaine et technique (TIC)

1. Introduction

Nous commençons par nous intéresser aux textes relatifs à la scolarisation des enfants en situation de handicap pour ensuite, dans un première partie, mettre en avant l'obligation et le droit scolaires pour ces personnes. Ces textes serviront, d'une part, de cadre législatif et permettront d'autre part de mettre en corrélation les dispositifs techniques existants et leur importance dans ce contexte sur le plan national.

Dans une première partie, nous déclinons de manière non-exhaustive, les dispositifs déjà existants au niveau de l'éducation nationale et du milieu associatif et ferons un descriptif sommaire pour chacun d'eux. Dans une deuxième partie, par l'intermédiaire des entretiens menés, nous aborderons l'analyse du discours pour tenter de faire émerger la place réelle des TIC et de leurs effets dans les services concernés. Nous concluons enfin, par les perspectives de recherche actuelles que l'étude exploratoire nous a permis d'envisager. Nous pourrons, dès lors, analyser un dispositif dans ses usages et approfondir le concept d'humanisation dans ce contexte.

2. Des technologies de l'information et de la communication au service des élèves hospitalisés

2.1 Regard rétrospectif sur la législation en vigueur

Il ressort des textes officiels que les notions d'obligation scolaire et de devoir sont incontournables pour la grande majorité du public, s'y ajoute la notion de droit pour ceux qui ne peuvent pour des raisons de santé ou de handicap (1) s'inscrire dans le système ordinaire.

Même si la loi d'orientation de 1975 en faveur des personnes handicapées affirme le droit des enfants et adolescents handicapés de bénéficier d'une scolarité en milieu scolaire ordinaire ou spécialisé, la réalité sur le terrain est loin d'être aussi évidente et l'intégration de ces élèves se heurte à des nombreux obstacles (locaux non-adaptés, manque de personnel pour l'accompagnement etc).

En 1989, la loi d'orientation déclare l'élève au centre du système scolaire et met en place des technologies nouvelles comme facteur d'individualisation des apprentissages : « l'informatique est une technique et une science autonome. Mais c'est également un outil d'enseignement permettant une meilleure individualisation de l'apprentissage, des situations pédagogiques nouvelles et le développement de capacités logiques et organisatrices. Elle peut être notamment mise au service des élèves qui courent un risque d'échec scolaire. » rapport annexé à la loi d'orientation sur l'éducation n°89-486 du 10.07.1989

Cette même loi sur l'éducation concerne aussi les enfants et adolescents atteints de troubles de la santé, quel que soit leur lieu d'accueil : hôpital, centre de rééducation, soins à domicile. Ce droit est réaffirmé dans la circulaire de 1998 qui précise certaines modalités pour les enfants atteints de troubles de la santé qui évoluent sur une longue période.

La circulaire de 2003, évoque, elle, la scolarisation des enfants malades (ou atteints d'une pathologie chronique) avec la mise en place de trois dispositifs d'aides personnalisées d'accompagnement scolaire : projet d'accueil personnalisé (PAI), projet personnalisé de scolarisation (PPS), service d'assistance pédagogique à domicile (SAPAD)

1. *Le terme d'handicap s'applique, il faut le préciser, à toute personne que la maladie ou l'accident prive ponctuellement de pouvoir profiter d'une scolarisation « normale »*

Enfin, la loi du 11 février 2005 portant sur l'égalité des droits et des chances, à la participation et la citoyenneté des personnes handicapées modifie le paysage institutionnel notamment en matière d'éducation en posant les principes suivants : garantir aux personnes handicapées le libre choix de leur projet de vie, améliorer leur participation à la vie sociale et les placer au cœur des dispositifs qui les concernent. L'enjeu de cette loi est de donner un contenu au droit à la compensation du handicap.

2.2 Quelques dispositifs pour la scolarisation des enfants à l'hôpital

Indépendamment de la loi de 2005, il apparaît que les droits à la scolarité des personnes handicapées et/ou en longue maladie sont de plus en plus renforcés. Des moyens sont mis en place pour accompagner la scolarité, parmi eux, les technologies de l'information et de la communication.

Il existe des dispositifs sur le territoire français que nous tenterons d'énumérer ci-dessous. En voici, quelques exemples prédominants et non-exhaustif :

2.2.1 Docteur Souris

L'association s'est donnée pour mission d'apporter aux enfants et adolescents hospitalisés un ensemble de moyens et de services leur permettant une communication facilitée avec leurs proches ou d'autres patients, un accès à l'Internet et l'utilisation de microordinateurs pour se distraire, s'informer ou poursuivre leur scolarité.

Cette association a pour buts de : mettre en place une solution technologique, s'engager à la maintenir, et surtout apporter ces services aux jeunes patients gratuitement et en ne demandant aux centres hospitaliers qu'une petite participation au projet.

A cette fin, l'association recueille des moyens humains et matériels, elle élargit sans cesse le cercle de ses partenaires, entreprises, fondations, organisations qui contribuent financièrement aux projets ainsi qu'à l'achat de matériels et de logiciels.

En 2003, un premier hôpital, Trousseau à Paris, était équipé de portables et d'un réseau sans fil. Les éducateurs et éducatrices ont été formés pour gérer le parc de portables et l'administration du système (gestion de l'annuaire, création de comptes, paramétrage de la messagerie). En 2004, deux autres hôpitaux parisiens, Necker - Enfants Malades et Robert-Debré ont été équipés, et en 2005 et 2006, trois autres hôpitaux à Lyon et plus récemment à Nice et Toulouse. Chaque nouveau déploiement est assujéti à une logistique lourde : équiper l'ensemble de l'hôpital d'un réseau Wi-Fi, former le personnel, assurer la maintenance.

C'est un dispositif qui ne cesse de prendre de l'envergure, nous pouvons le citer comme dispositif dynamique avec une volonté d'accroître ses objectifs initiaux.

2.2.2 Les Hostonautes®

Lancé depuis 2000 par un opérateur téléphonique, le dispositif les Hostonautes® permet aux enfants hospitalisés ou en convalescence de poursuivre leur scolarité avec le centre scolaire de leur hôpital ou leur école d'origine, et de garder un lien avec leur environnement familial et social, en mettant à leur disposition les moyens suivants : connexion Internet, multimédia. Ce dispositif garantit la connexion au chevet du malade ; Les Hostonautes®, c'est aujourd'hui six hôpitaux ouverts entre 2000 et 2006 : Marseille (La Timone), Nancy (Brabois), Montpellier (Arnaud de Villeneuve & Lapeyronie), région parisienne (Raymond Poincaré), l'hôpital Armand-Trousseau à Paris et d'autres plus récemment. Tous ont prolongé la collaboration, accru l'équipement et enrichi les usages.

Pour ce projet, l'opérateur offre un accompagnement et un soutien sur la durée :

- Une convention de partenariat d'un an
- La fourniture et l'installation des équipements
- La formation des enseignants
- Le soutien technique

Ce dispositif va faire l'objet d'une observation plus importante dans le cadre de ma recherche, il sera le dispositif de référence pour l'analyse des usages et pour l'approfondissement de certains concepts sous-jacents.

2.2.3 L'enfant @ l'hôpital

Créée en 1986 pour les enfants et les adolescents malades ou handicapés, l'association « L'enfant@l'hôpital » assure dans toute la France, à la demande et sur mesure, la chaîne complète de l'informatique : équipement, accompagnement, et surtout, création et animation de forums culturels via internet. Depuis huit ans l'association a mis en place des forums Internet privés via Kanari, puis Kolibri, plate-forme de communication.

En 2006, « l'enfant à l'hôpital » accompagne une cinquantaine de services pédiatriques et plus de 3000 enfants. L'association est présente dans les grands hôpitaux parisiens, comme Trousseau ou l'Institut Curie, dans plusieurs services pédiatriques d'Ile de France, mais aussi à Montpellier, Strasbourg, Lyon ou Grenoble. De surcroît, elle intervient, de plus en plus dans des petits services pédiatriques isolés, de provinces.

L'association "L'enfant à l'hôpital" a toujours eu pour mission l'équipement et l'accompagnement informatique de l'enfant malade et de ceux qui l'encadrent, pour une meilleure continuité scolaire. Fournis par l'association, l'ordinateur et son contenu, sont pour elle les outils de cette continuité. En vingt ans, plus de cent services pédiatriques français ont ainsi été dotés. L'association a également contribué à former l'environnement des enfants malades, professeurs des écoles, mais aussi bénévoles ou membres du personnel médical, en les réunissant pour des échanges de compétences et d'élaboration de projets.

La qualité de leur site internet et de sa mise à jour attestent, sans conteste, que c'est une association qui pérennise ses actions, et ceci grâce au soutien de nouveaux partenaires et à la volonté des acteurs d'optimiser la technique au profit de ce public.

2.2.4 L'hôpital, c'est la vie

L'opération "L'hôpital, c'est la vie" est multi partenariale à l'initiative EDF Basse-Normandie en 1995. Ont été concernés par cette opération les enfants et adolescents malades ou accidentés, en convalescence ou hospitalisés, qu'ils soient scolarisés en écoles maternelle et élémentaire, au collège ou au lycée.

Ce dispositif a été intégré au dispositif d'assistance pédagogique à domicile en faveur des enfants atteints de troubles de la santé. L'opération a pour but de rompre l'isolement du jeune malade en lui permettant de poursuivre sa scolarité, notamment par un système de visioconférence.

Cependant, à notre connaissance, cette opération a été interrompue, nous ne savons pas à ce jour si le projet a été relancé dans ce département. Le principe était pourtant innovant et prometteur au regard des résultats énoncés lors de l'entretien avec l'inspecteur de l'éducation nationale chargé de l'ASH (AIS) de l'époque.

2.2.5 Comecole

Mis en place à titre expérimental en 2004, ce dispositif s'appuie sur les avancées des TIC pour favoriser le maintien d'un lien pédagogique avec l'école et d'un lien social avec l'environnement proche. Ce projet concerne les enfants malades hospitalisés ou non, pour une période de trois mois ou plus, scolarisés dans l'enseignement élémentaire du département du Rhône. Une expérimentation a été menée en 2004 puis en 2005 avec deux enfants lyonnais. De plus, les enseignants de l'école d'origine sont formés aux outils de visioconférence et de téléphonie mais également accompagnés dans leur démarche pédagogique.

Et puis, afin de pérenniser ce projet, pour que les futurs enfants malades puissent en bénéficier, l'engagement des structures partenaires (Education Nationale, Hospices Civils de Lyon, Ville de Lyon, Alysem, Lumière contre la Leucémie) devrait être renforcé par d'autres collectivités territoriales.

Le projet Comecole propose d'installer trois ordinateurs équipés de webcams et reliés à l'Internet : l'un dans la chambre de l'enfant à l'hôpital, le deuxième dans sa classe d'origine, le troisième chez ses parents.

Les informations quant à ce dispositif ne peuvent pas être plus actuelles, le site internet n'étant plus actif à ce jour.

2.2.6 *Cyberhosto*

Il s'agit d'une association créée en 1998 à l'hôpital des enfants du CHU de Toulouse. Elle regroupe des professionnels de santé et des bénévoles, dans le but de permettre aux enfants hospitalisés de vaincre leur isolement, de communiquer avec leurs proches et de s'initier à la découverte de l'informatique et du web durant leur séjour à l'hôpital.

Des ordinateurs sont reliés à Internet et sont présents dans les lieux de vie des enfants hospitalisés (chambre, école, salle de jeux). Des portables sont également disponibles pour les enfants qui ne peuvent pas se déplacer du fait de leur état ou de leur pathologie. Le but de l'association est de faire de l'hôpital un lieu de vie, de rencontre et de découverte et pas seulement un lieu de soins.

Cependant, depuis 2006, le site internet de cette association n'est pas mis à jour, nous ne savons pas si l'association continue son développement dans cette ville. De la même manière que, Comecole, les initiatives locales restent pourtant des références représentatives pour faire évoluer et renforcer les pratiques et les usages à long terme.

2.2.7 *Sparadrap*

Sparadrap est un lieu de ressources ouvert à tous, animé par une équipe d'une dizaine de permanents, un président, des personnes-relais dans plusieurs villes de France, des bénévoles et de nombreuses personnes de terrain.

L'association n'intervient pas directement auprès des enfants et des familles dans les services hospitaliers, pour leur proposer régulièrement des activités, un soutien matériel ou des réunions d'entraide, ses interventions ont plutôt lieu ponctuellement dans les services et sont toujours liées à un projet particulier : décoration ou aménagement d'espace, création d'un livret, recherche-action, enquête, formation d'une équipe, réalisation d'un film etc.

Ses principaux sujets concernent : l'environnement des enfants malades, les activités à l'hôpital, l'accueil, l'information et la préparation, la présence des parents à l'hôpital, la prise en charge non médicamenteuse de la douleur, l'éthique, la législation.

C'est un outil riche en informations concernant tous les sujets ou domaines qui ont attiré à l'environnement hospitalier. De plus, le site internet étant mis à jour régulièrement, les informations sont des plus actuelles.

2.2.8 *Point de vue relatif à ces dispositifs*

Cette présentation des différents dispositifs suggère bien que les initiatives sont nombreuses et souvent associatives et que ces actions concordent effectivement avec la volonté politique affirmée dans la loi de février 2005. En cela, l'introduction des TIC s'avère être une réponse possible au maintien du lien scolaire de l'enfant malade et ceci à double titre, d'une part pour l'institution et d'autre part pour l'enfant en situation de handicap. Dans tous les cas, le lien

reste un facteur prédominant comme garantie du maintien de la scolarisation mais également, du contact avec l'environnement familial dans une perspective socialisante voire thérapeutique.

3. Quels apports des TIC à l'école de l'hôpital

L'existence des différents dispositifs et initiatives associatives pose la question de l'utilisation des TIC dans le contexte hospitalo-scolaire à des fins pédagogiques et humanisantes.

La poursuite de la scolarisation des enfants malades est-elle vraiment facilitée et l'humanisation de leur hospitalisation est-elle aussi améliorée grâce aux TIC ? Telles étaient les questions de recherche auxquelles nous avons voulu nous intéresser dans cette première étude.

Les TIC dans le contexte hospitalo-scolaire sont présentées comme *support innovant utilisé à des fins pédagogiques susceptibles d'augmenter le bien être de l'enfant, de favoriser son développement personnel et social et de minimiser le choc de l'hospitalisation.*

Il est apparu qu'une fois que le cadre législatif était posé à travers les textes officiels, il devenait important de s'intéresser à la place des TIC à des fins pédagogiques dans ce contexte et en fin de compte prouver que l'humanisation peut contribuer à apporter des améliorations tant au niveau pédagogique, psychologique que thérapeutique (Stora, 2005).

C'est précisément le développement personnel et social de l'enfant malade qui renvoie au concept d'humanisation. De plus, appliqué aux TIC, le concept d'humanisation se définit par les fonctions de médiation, de lien et d'altruisme rendues possibles par un support matériel : l'ordinateur.

Le rapport entre les technologies et l'humanisation pourrait paraître paradoxal, voire incompatible : ce paradoxe fait l'objet du travail de recherche actuelle.

3.1 Conduite des entretiens semi-directifs

L'entretien semi-directif apparaît être l'outil le plus pertinent pour recueillir les informations qui vont étayer notre étude. Par cette méthode ont été mis en évidence l'orientation et le cheminement de pensée des interlocuteurs interrogés quant à l'existence même de l'école à l'hôpital et de l'utilisation des technologies dans ce contexte.

Nous avons interrogé quatre acteurs différents : un inspecteur de l'éducation nationale chargé de l' AIS, une enseignante chargée de promouvoir les TIC à l'école de l'hôpital, une directrice d'une école à l'hôpital et un animateur socio-culturel de l'hôpital.

Les entretiens ont consisté à aborder les thèmes suivants dans le meilleur déroulement suggéré par le cours de la conversation. L'analyse thématique a permis de faire ressortir de ces différents témoignages que l'utilisation des TIC

ne constitue pas une fin en soi dans la dimension pédagogique et d'ouverture vers l'extérieur. L'outil devrait, avant tout, être pensé et utilisé sur la base d'une stratégie pédagogique cohérente et adaptée en fonction du public et de la pathologie tendant ainsi à améliorer et à poursuivre la scolarité des enfants et adolescents malades. L'utilisation des TIC doit trouver son application dans une réflexion pédagogique et dans une adoption de l'outil de la part de tous les acteurs de la vie éducative et socio-culturelle.

De plus, les problèmes de santé sont des altérations qui occasionnent inévitablement des souffrances, des perturbations dans la vie quotidienne, les équipes éducatives ont donc grand intérêt à ouvrir l'espace de compréhension, d'adaptation et de motivation auprès de l'élève malade. (Le Monde, 2006) Cependant selon un entretien, il semble que : « *pour les collèges et lycées, c'est une association de professeurs bénévoles qui en font bien plus que l'école, dans ce cas là, la loi du 11 février 2005 n'est pas respectée. Ce que l'on a évoqué au colloque, ce qui est important, c'est le lien avec le domicile. Mais qui assure ce lien ? est-ce l'enseignant de l'hôpital, ou l'enseignant de l'enfant malade ?* » Il reste quelques interrogations, non résolues à ce jour. De ce point de vu, les dispositifs en place nécessiteraient des réajustements en terme de continuité notamment pour les élèves scolarisés dans le secondaire.

Il va sans dire que la modification de ses repères temporels et de son image affecte l'enfant malade (Bourdon, Roy, 2006), la place de l'école et l'utilisation des TIC sont alors, on ne peut plus essentielles car elles permettent de lutter contre l'isolement lié à la maladie, à l'hospitalisation en garantissant cette continuité.

Par ces objectifs, l'enseignement dispensé, la présence de l'enseignant et de l'éducateur, redonnent à l'enfant, son statut d'élève en lui assurant une continuité d'être, une identité et une place d'élève et de citoyen à part entière.

Les personnes interrogées s'accordent à dire que l'utilisation des TIC est un bon support pour l'école à l'hôpital mais qu'elle n'est cependant pas le seul et l'unique moyen de fonctionner pédagogiquement, ni même la seule réponse pour faire face aux difficultés rencontrées. Le rôle de l'enseignant peut être aussi à l'origine d'un tel discours : les propos recueillis vont plutôt privilégier la médiation humaine au chevet de l'enfant plutôt que de mettre en exergue les bénéfices de la médiation technique.

Dans cet accompagnement, il est aussi important de ne pas omettre les parents qui ont un rôle important dans la facilitation de la mise en place de la scolarisation; leur adhésion est, en effet, primordiale. (L'enseignement public, 2003)

3.2. Vers une formalisation du lien entre l'enfant hospitalisé et l'extérieur

Le lien évoqué est, sans aucun doute, la condition *sine qua non* de la réussite d'une scolarisation sans rupture, de l'amélioration de la qualité de vie à différentes périodes et du bien être physique et psychologique de l'enfant à des moments précis de l'évolution de son état de santé.

Le lien entre l'intérieur et l'extérieur devrait de ce fait, être au cœur du dispositif technique : l'école, l'hôpital et le domicile sont les trois pôles nécessaires à prendre en compte pour pallier aux éventuels dysfonctionnements.

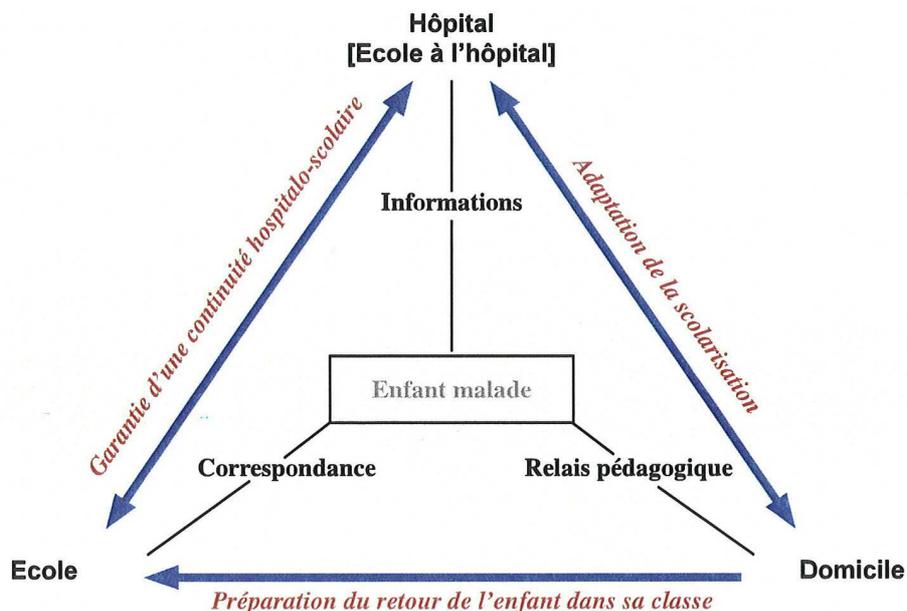
Pour l'enfant et même les parents, l'école à l'hôpital et le support technique sont des rappels des repères de la vie à l'extérieur, qui permettent d'atténuer l'angoisse de l'enfant, de dédramatiser, autant que faire se peut, cette étape douloureuse. La présence des TIC et des multimédias devrait donner des moyens d'envisager des solutions pour la scolarisation des enfants malades. Ces procédés confèrent à l'apprentissage scolaire sa configuration collective et sociale. Cependant, il va sans dire que les différents dispositifs ne remplacent pas, la présence des enseignants, ni la richesse des interactions humaines qu'un ordinateur et un programme aussi éducatifs, pédagogiques ou ludiques soient-ils, peuvent *à priori* apporter. Une enseignante exprime le fait qu'« *il n'y a pas de substitution de la relation humaine, la relation entre enseignant et enfant reste, et ceci malgré l'outil que l'on intègre parfois dans la relation.* » d'où la question de savoir si l'outil peut avoir des effets humanisants.

Cependant, de toute évidence, même si les effets positifs de l'utilisation des TIC, notamment au niveau de l'humanisation de l'environnement et du quotidien de l'enfant, paraissent être démontrés, il n'en reste pas moins vrai que l'utilisation de l'outil est étroitement soumise à l'adhésion du personnel éducatif et se trouve de fait subjectivement liée aux représentations et convictions de chacun.

Les TIC ne sont pas, de prime abord, humanisantes pour l'enfant, pour le devenir, leurs fonctionnalités et leurs usages doivent dépasser l'aspect purement pratique c'est à dire d'échange de cours, de travail sur des exercices, d'accès à internet. On ne peut évidemment pas attendre, par la seule présence de la technique qu'elle humanise l'environnement scolaire de l'enfant, c'est aux différents acteurs (enseignants, éducateurs, ergothérapeutes, parents) de tenter d'humaniser la technique.

Le schéma ci-dessous démontre l'ensemble des liens qu'il peut exister entre l'école, l'hôpital et le domicile. Il y a effectivement une dimension plus humaine à saisir, et ceci peut être par le lien EHD et par tous les aspects définis par le biais du schéma.

* fig.1.- EHD Lien entre Ecole, Hôpital et Domicile par les TIC

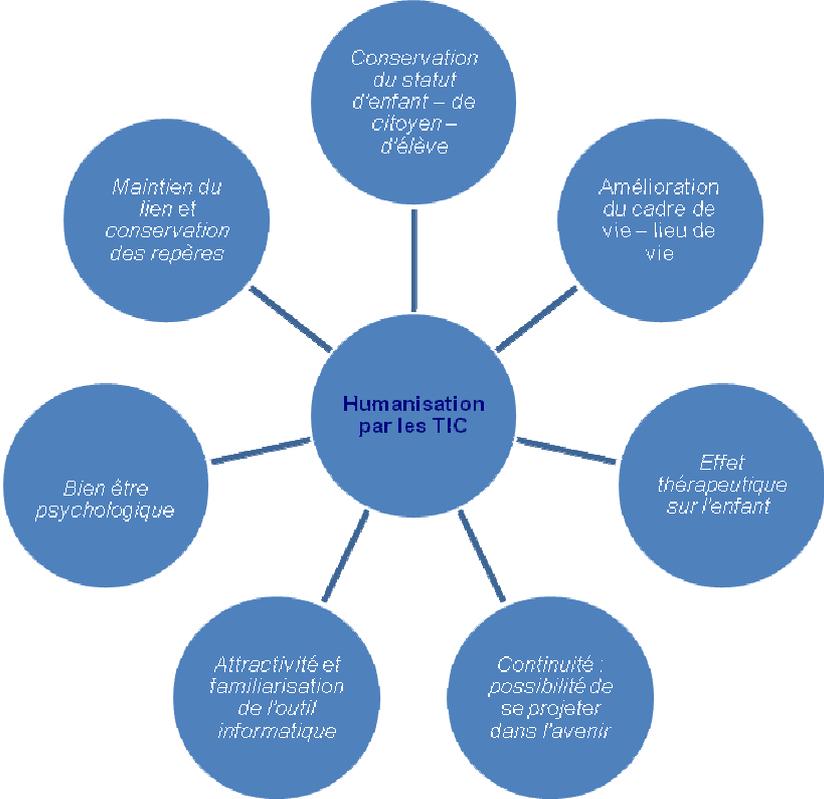


4. Perspectives de recherche - Discussion

Ce premier travail de recherche aura permis de nous familiariser avec le milieu scolaire à l'hôpital, avec la prise en charge des enfants malades pour leur scolarisation et le recensement des dispositifs techniques existants (TIC) en faisant l'analyse de leur utilité et de leurs effets humanisants. Cet état des lieux et les perspectives actuelles du projet de recherche doctoral s'inscrivent d'abord dans le choix d'un établissement hospitalier fonctionnant avec un dispositif technique reconnu, puis dans l'étude des usages et dans l'analyse des effets sur l'enfant malade. Il s'agira aussi de penser, à plus long terme, à l'éventualité d'instaurer une continuité cohérente avec les établissements scolaires référents et le domicile et pourquoi pas de songer à une nouvelle expérience d'usage spécifiquement adaptée à ce cas de figure. La recherche menée en sera d'autant plus empirique et significative quant aux conclusions inhérentes au concept d'humanisation par les TIC mais aussi quant à la réalité du principe républicain d'égalité des droits et des chances.

Cette étude exploratoire nous aura permis de dresser un état des lieux et de conclure que l'humanisation et en particulier par les TIC se nourrit des aspects suivants que nous tenons de ces entretiens. Le travail de recherche actuel repose sur l'approfondissement du concept dans ce paysage, illustré par le schéma suivant, point de départ de la réflexion.

* fig.2 – déclinaison de l’humanisation par les TIC à l’hôpital



Références

BOURDON, P., ROY J. *Enfants malades ou accidentés, quand l'école va au domicile*, Paris, Delagrave, 2006

FEDERATION GENERALE DES ASSOCIATIONS DEPARTEMENTALES DES PUPILLES DE L'ENSEIGNEMENT PUBLIC, *L'École partagée - l'accompagnement de l'enfant et de sa famille*, Paris, INJEP, 2003

STORA , M. *Guérir par le virtuel. Une nouvelle approche thérapeutique*, Paris, Presses de la Renaissance, 2005

Loi n°75-534 du 30 juin 1975

Loi d'orientation sur l'éducation n°89-486 du 10.07.1989

Circulaire n°2003-093 du 11-6-2003

Loi n° 2005-102 du 11 février 2005

The Relationships between Global Knowledge and Global Attitudes of Junior High School Students: Utilizing Structural Equation Model

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Abstract

The main purpose of the present study was to explore the relationships between global knowledge and global attitudes of the junior high school students. Using survey questionnaire, subjects were 1,017 students in central Taiwan and data were analyzed by descriptive statistics, MANOVA, and structural equation modeling. The results of this study include 1. The global knowledge of subjects was not enough, but their global attitudes were positive; 2. There were significant difference among information resources in global knowledge; 3. The correlation between students' global knowledge and global attitudes were positive; 4. Subjects' global knowledge can predict global attitudes; 5. Global knowledge can be effectively composed of global correlation systems, global issues, cross-cultural understanding and global history-geography; 6. Global attitude can be effectively composed of tolerance and appreciation, life and human rights, global dependence, communication and cooperation, war and peace, global responsibility, global thinking and local action. The suggestions are also concluded.

Keywords: global knowledge - global attitude - structural equation modeling

1. Introduction

In our rapidly changing society, an urgent need exists for schools to address and infuse global awareness into curriculum instruction. Students are increasingly confronted with many issues that require a global education focus. According to Kirkwood (2001), these students will face a new world order thereby creating a need to acquire a global education. He states students' daily contacts will include individuals from diverse ethnic, gender, linguistic, racial, and socioeconomic backgrounds. Moreover, students will experience some of history's most serious health problems, inequities among less-developed and more-developed nations, environmental deterioration, overpopulation transnational migrations, ethnic nationalism, and the decline of the nation-state.

All children, regardless of their race and culture, have a right to be educated and must be given tools to help them develop attitudes, knowledge, and skills necessary to become competent, responsible, and humane citizens of their community. Children need to develop cross-cultural skills and attitudes in order to become effective citizens in a very diverse and pluralistic world (Burnouf, 2004). Merryfield (2002) posits the question, "Did teachers possess sufficient

knowledge of relevant cultures, their beliefs, felt needs, histories, political economies and their past and present relationships with the United States to be able to provide students with the necessary background information?" (p. 148). This question needs to be further explored and there is no better time than now due to the dilapidating state of our planet to begin to address the concern for a more holistic and deeper understanding of the world.

It has been a little more than 20 years since the term global education was coined. The goals we associate with global education are important part of the curricula of many other nations for a variety of reasons. Whatever the reasons, global education is worldwide movement (Tye & Kniep, 1991). Global education in schools during the 1930s focused on other places, people and countries. In the 1940s and 1950s education about other countries, and teaching about the world was unconnected and independent. There was a strong emphasis on knowing about countries, rather than understanding and analysis similarities and differences between them (Dyer, 2004).

What is the global education? There are many definitions of global education. Hanvey (1982) explored education for a global perspective which included dimensions of perspective consciousness, state of the planet awareness, cross-cultural awareness, knowledge of global dynamics, and awareness of human choices is that learning which enhances the individual's ability to understand his or her condition in the community and the world and improves the ability to make effective judgments. It concludes the study of nations, cultures, and civilizations, including our own pluralistic society and the societies of other peoples, with a focus on understanding how these are all interconnected and how they change, and on the perspective on world issues, problems and prospects, and an awareness of the relationships between an individual's enlightened self-interest and the concerns of people elsewhere in the world. Kniep (1989) has argued that the structure of global education should include four components that are derived from present and historical realities: a. the study of human and universal values, such as human rights, value, dignity, and worth of all human beings; b. the study of global system, such as economic, political, ecological, and technological systems; c. the study of global issues and problems, such as peace and security issues, developmental issues, environmental issues, and human rights issues; d. the study of global history, such as connections and exchanges among civilizations.

According to Pike and Selby (1999) and Hicks(2003), there are four dimensions of global education. First, issues dimension embraces five major problem areas (and solutions to them): inequality/equality; injustice/justice; conflict/peace; environmental damage/care; alienation/participation. Second, spatial dimension emphasizes exploration of the local—global connections that exist in relation to these issues, including the nature of both interdependency and dependency. Third, temporal dimension emphasizes exploration of interconnections that exist between past, present, and future in relation to such issues and in particular scenarios of preferred futures. Fourth, process dimension emphasizes a participatory and experiential pedagogy which explores differing value perspectives and leads to politically aware local—global citizenship.

Anderson (1990) defined global education involves learning about those problems and issues which cut across national boundaries and about the

interconnectedness of systems—cultural, ecological, economic, political, and technological. Tye and Tye (1992) pointed out that global education also involves learning to understand and appreciate our neighbors with different cultural backgrounds from ours; to see the world through the eyes and minds of others; and to realize that all peoples of the world need and want much the same things. Diaz, Massialas, and Kantholpoulos (1999) defined global education as having three kinds of outcome: cognitive, affective, and participatory. The cognitive dimension is the knowledge which the individual possesses of other cultures and how the world systems operate, the affective is the extent to which the individual empathizes with the values of other cultures, and the participatory is the willingness to take a stand on issues. Therefore, curriculum for the future society must then possess multicultural and international content, in order to promote in students cognitive, affective, and participatory outcomes (Clarke, 2004).

Global education has been viewed by its proponents as both a goal and a source of school change. All children, regardless of their race and culture, have a right to be educated and must be given tools to help them develop attitudes, knowledge, and skills necessary to become competent, responsible, and humane citizens of their community. Children need to develop cross-cultural skills and attitudes in order to become effective citizens in a very diverse and pluralistic world (Burnouf, 2004). Global education is critical in preparing young people for participation in the increasingly interconnected and culturally diverse world. Students must understand the ramifications of local-global connections in a world in which they affect and are affected by the daily decisions and actions of people all the planet (Merryfield, 1995). According to Hicks (2003), most of adolescents feel that it is important to learn about global issues at school in order to make better choices about how they might lead their lives.

What will students gain from a global education program? Hendrix (1998) addressed the scope of the global education curriculum must be determined by the philosophy of an evolving world, an analysis of the current realities in which students live, an analysis of the requirement of world citizenship in the twenty-first century, and an understanding of those realities from the viewpoint of history, humanities, policy studies, and other fields. The advocates would agree with that students should have more understanding of a culture's language, literature, history, economics, and politics. Moreover, students should increase awareness of the need for interdependence among nations. Furthermore, students ought to have communication skills through knowledge of another language (Boaz, 1985; Hendrix, 1998). In addition, Hanvey (1982) provided another model through which to organize a global education curriculum was developed. This model consists of the five dimensions: perspective consciousness, state-of-the planet awareness, cross-cultural awareness, knowledge of global dynamics, awareness of human choices. Merryfield and White (1996) propose that selecting global issues, cultural-social issues, development issues, economic issues, and environmental issues stress the presentation of multiple perspectives on issues and the interconnectedness of the world.

Taiwan's educational system has grown and expanded and now needs to take steps to upgrade the quality of education. Globalization has greatly influenced education, economy and politics. Like other nations of the world, Taiwan is zealously working to improve national competitiveness. Looking at the present situation of Taiwan's society, the Ministry of Education has come up with the

overall educational goal summed up in "Creative Taiwan, Eye on the World." Three core approaches support the implementation of this motto: adaptability in nature and ability, embracing globalization, and supporting the disadvantaged. From 1998 to 2002, the Ministry of Education (MOE) implemented 12 key points in educational reform including global education.

Specifically in international cultural education, Taiwan government established scholarships, promoted cooperation and exchange with overseas educational institutions, fostered participation in international scholarly symposiums, publicized overseas study programs and counseling, encouraged overseas study trips for students in senior high school or vocational school. There are three approaches to fostering a global vision. Most importantly, MOE provides cross-cultural interaction opportunities. Many schools have established foreign student affairs sections that assist foreign students with visa application and extension, and in dealing with most daily life matters. Up to 63.78% of foreign students are from other Asian countries such as Malaysia and Thailand; 36.22% of them study in technology-related fields. The above policies promote students on understanding cultural diversity. Furthermore, the MOE has important policies that seek to internationalize Taiwan's education, including enhancing international competitiveness, increasing cultural understanding, establishing the "Study Abroad Loan Program."

Researchers have explored the definition, aims, dimensions, goals, and programs of global education, with the rapid growth and prevalence of globalization. Over the past several years, a still small but growing number of individuals and organizations in Taiwan has been working to improve the quality of adolescents international or global education. However, few studies on adolescents' global awareness and attitudes previously existed. In educational research, students' attitudes toward global issue, global history, cross-cultural understanding, and global system are often viewed as important variables for realizing global education. In contributing to the body of research in this area, the current study investigates the global knowledge and global attitudes of junior high school students and explores the relationships between global knowledge and global attitudes of junior high school students.

2. Method

2.1. Subjects

The subjects in this study were 1017 junior high school students from central Taiwan. The subjects included 485 males and 532 female, and social-economic status of subjects was as follows: 142 high social-economic status students (14% of samples), 217 middle social-economic status students (21% of samples), and 658 low social-economic status students (65%). Resources of global information of subjects included: 477 subjects from television and videos (52%), 315 subjects from the Internet (34%), 70 subjects from newspaper and magazines (7%), and 73 subjects from friends, teachers, and parents (7%). Prior to completing the anonymous questionnaire, students were provided with a brief explanation of appropriate response procedures.

2.2. The Questionnaire

The study utilized a questionnaire to assess junior high school students' understanding toward global knowledge and their awareness toward global attitude. Students completed a background information form and a "Global Knowledge Survey (GKS)" and "Global Attitude Scale (GAS)."

2.2.1 Global Knowledge Survey

Based upon the work of Pike and Barrows (1979) and Petrie's (1988), and by consulting with teacher educators in social studies, 60 multiple-choice items were chosen for the survey. These multiple-choice items could be divided into four major dimensions. The first part, consisting of 12 items, assessed students' knowledge of global system including politic, economy, and universal system. The second part, consisting of 32 items, explored their realization of global issue including technology, population, ethnicity, energy resources, food, ecological environment, health and hygiene, and globalism. The third part, consisting of 8 items, investigated their knowledge of cross-cultural understanding on culture and religion. The fourth part, consisting of 8 items, acquired their understanding of global history and global geography. Each item rated on bipolar yes-no statements, and students were scored to get one point if they correctly answered the item. Estimate of test-retest reliability coefficient for the first and second surveys is .90. Estimates of reliability coefficient, utilizing Cronbach's alpha, are .88 and .92 for 1st and 2nd surveys, respectively.

2.2.2 Global Attitude Scale

Based upon the work of Sampson and Smith (1957) and Petrie's (1988), and by consulting with teacher educators in social studies, 45 items were chosen for the questionnaire. These items were divided into seven subscales assessed students' global attitudes of tolerance and appreciation, life and human right, global dependence, communication and cooperation, war and peace, global responsibility, global thinking and local action. Each item rated on bipolar agree-disagree statements on a 4-point Likert scale (1=strongly disagree, 4=strongly agree), and students were asked to report the one that most accurately describes their awareness toward global attitude. Estimates of reliability coefficient for seven subscales, utilizing Cronbach's alpha, is ranging from .60 to .76.

2.3. Statistical analysis

Descriptive statistics was conducted for each component of global knowledge as well as for the seven aspects of global attitude. MANOVA were used to examine global knowledge scores of global system, global issue, cross-cultural understanding, and global history and geography as the dependent variables with global knowledge resources as the independent variables. A significant MAVOVA was followed by *Scheffé* test to determine differences between means.

In order to investigate the conceptual framework, the study utilizing structural equation modeling hypothesized a factorial structure of the global knowledge and global attitude. The model is shown schematically in Figure 1.

tolerance &

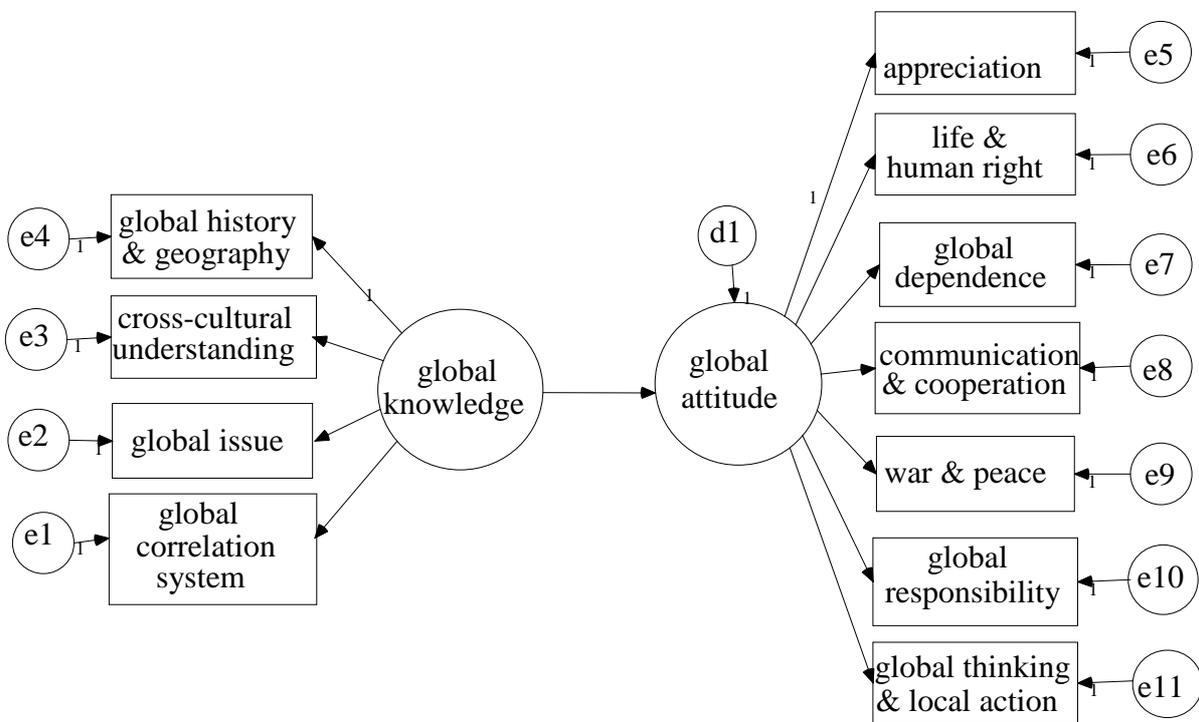


Figure 1 Hypothesized Model

Analyses were conducted in the structural equation model-fitting program, Analysis of Moment Structure (Amos) software package 7.0, first of all,

confirmatory factor analysis was applied to test the validity of each latent factor. Second, structural equation modeling was used to examine the validity of the hypothesized model shown in Figure 1.

The model evaluation criteria used to test the fit of the models are the chi-square statistic (χ^2), GFI, CFI, TLI, RMSEA, SRMR, and critical N. It should be noted that the χ^2 statistic is sensitive to sample size; therefore, alternative goodness-of-fit indices have been used for the present study (Schumacker & Lomax, 2004). Values of .90 and above for GFI, CFI, and TLI indicates a reasonable fit (Byrne, 2001). Values of RMSEA of .05 indicated close fit, and values in the vicinity of .08 indicate fair fit (Browne & Cudeck, 1993). Hu and Bentler (1999) suggested that a value of .08 and less for SRMR indicated a decent fit. Hoelter (1983) argues that a critical N of 200 or better indicates a satisfactory fit.

3. Results

Table 1 and Table 2 show subjects' average scores and standard deviations on the scales of the GKS and GTS. The global knowledge of the junior high school students was not enough, but their global attitudes were positive.

Table 1 Students' scores on global knowledge survey

Dimension	Mean	SD
Global correlation system	4.61	1.70
Politic	1.28	0.98
Economy	1.22	0.63
universal system	2.10	0.87
Global issues	13.02	4.30
Technology	2.14	0.90
Population	1.23	0.73
Ethnicity	0.99	0.70
energy resources	1.57	0.95
Food	1.74	0.87
ecological environment	1.27	0.67
health and hygiene	1.93	0.91
Globalism	2.15	1.22
Cross-cultural understanding	4.14	1.87
culture	1.86	0.98
Religion	2.29	1.22
Global history and geography	5.27	1.92
global history	2.51	1.17
global geography	2.76	1.04
Total	27.04	1.70

Table 2 Students' scores on global attitude scale

Dimension	Mean	SD
Tolerance and appreciation	20.66	2.65
Life and human rights	17.82	2.22
Global dependence	16.42	2.21
Communication and cooperation	17.59	2.36
War and peace	14.09	2.14
Global responsibility	20.53	2.79
Global thinking and local action	20.47	2.68
Total	127.56	12.95

Table 3 shows there were significant difference among information resources in global knowledg.

Table 3 one-way MANOVA of difference among information resources in global knowledg and Scheffé test

Dimension	source	sum of square	df	mean of square	F value	Scheffé
Global correlation system						
	Between groups	25.71	3	8.57	3.05*	3>2
	Within groups	2616.14	931	2.81		
	Sum	2641.85	934			
Global issues						
	Between groups	307.58	3	102.53	5.68**	1>4
	Within groups	16808.64	931	18.05		2>4
	Sum	17116.22	934			3>4
Cross-cultural understanding						
	Between groups	68.48	3	22.83	6.70***	3>2
	Within groups	3173.03	931	3.41		3>4
	Sum	3241.51	934			
Global history and geography						
	Between groups	36.84	3	12.28	3.40**	3>4
	Within groups	3358.91	931	3.61		
	sum	3395.75	934			

note : 1 = television and videos 2 = the Internet 3 = newspaper and magazines

4 = teaches, parents and friends

* $p < .05$. ** $p < .01$. *** $p < .001$.

In order to investigate the conceptual framework, the study utilizing structural equation modeling hypothesized a factorial structure of the global knowledge and global attitude. Analyses were conducted in the structural equation model-fitting program, Analysis of Moment Structure (Amos) software package 7.0, first of all, confirmatory factor analysis was applied to test the validity of each latent factor. The model evaluation criteria used to test the fit of the models are the chi-square statistic (χ^2), GFI, CFI, TLI, RMSEA, SRMR, and critical N. It should be noted that the χ^2 statistic is sensitive to sample size; therefore, alternative goodness-of-fit indices have been used for the present study (Schumacker & Lomax, 2004). Values of .90 and above for GFI, CFI, and TLI indicates a reasonable fit (Byrne, 2001). Values of RMSEA of .05 indicated close fit, and values in the vicinity of .08 indicate fair fit (Browne & Cudeck, 1993). Hu and Bentler (1999) suggested that a value of .08 and less for SRMR indicated a decent fit. Hoelter (1983) argues that a critical N of 200 or better indicates a satisfactory fit. The fit measures for the hypothesized Model 1 are summarized in table 4 and parameter estimates of hypothesized Model 1 are shown in table 5.

Table 4 Fit measures for hypothesized model 1

Fit index	Hypothesized Model 2	Rejected/Accepted
χ^2	156.755(df = 43, p = .000)	Rejected
GFI	.972	Accepted
RMSEA (90% CI)	.051 (.043-.060)	Accepted
SRMR	.034	Accepted
TLI	.971	Accepted
CFI	.977	Accepted
CN	385	Accepted

Table 5 Parameter estimates of hypothesized Model

	Standardized Estimate	Estimate	S.E.
Global knowledge→global correlation system	.64*	1.00 ^a	—
Global knowledge→global issues	.87*	3.40	.16
Global knowledge→cross-cultural understanding	.78*	1.33	.07
Global knowledge→global history and geography	.80*	1.41	.07
Global attitude→tolerance and appreciation	.71*	1.00 ^a	—
Global attitude→life and human rights	.66*	.77	.04
Global attitude→global dependence	.63*	.74	.04
Global attitude→communication and cooperation	.80*	1.00	.04
Global attitude→war and peace	.73*	.83	.04
Global attitude→global responsibility	.76*	1.12	.05
Global attitude→global thinking and local action	.68*	.97	.05
Global knowledge→ Global attitude	.46*	.79	.07

* $p < .05$.

^a indicates parameters fixed for identification purpose, not estimated.

4. Discussion and conclusion

There are many findings in this present study. First, the result indicates the global knowledge of subjects was not enough. This result is consistent with the outcome of previous studies by Barrows (1981) and Schmidt (1975). The result is also similar to the outcome of recent studies arranged in different countries (e.g., National Geographic Education Foundation, 2002; Zhao, Zhou, & Huang, 2005; Zhao, Hoge, Choi, & Lee, 2006). Zhao, Zhou, and Huang's study (2005) investigated over 2,000 middle and high school students in Beijing on their knowledge of world culture and history; world religion and ethnicities; world population, resources, and environment; and peace and development. The research found that Chinese students, in general, lack deep understanding of other nations' culture and history. While the majority of the students have a deep knowledge of the United States, their knowledge of Europe and other nations is poor. Students have some knowledge of world religions, yet this knowledge is incomplete and often biased.

In South Korean, Zhao, Hoge, Choi, and Lee's study (2006) indicated modern and contemporary world history in South Korean addresses more western history than eastern history. This overemphasis on Western history results in ignorance of other cultures that do not belong to western society. As in South Korean, Japanese secondary school students' the knowledge of and attitudes towards the world are being structured in schools are very Western-biased (Parmenter, 1999). Knowledge and culture of Asia and other nations are largely ignored.

In America, a few more recent studies continue to suggest that American students lack basic knowledge of other nations. Osunde's study (1996) reveals that American high school and university students know very little about non-Western nations, especially those of sub-Saharan Africa. Besides, students had developed stereotypes, misconceptions, and negative attitudes about Africa. The other survey (National Geographic Education Foundation, 2002) found that U.S.

students lagged behind their peers in other countries in their knowledge of geography and current affairs. While only 17 percent of young American citizens could find Afghanistan on a world map, about 11 percent could not even locate the U.S. on the map.

In Australia, the Assessment Research Center at the University of Melbourne conducted a survey of Australian students' knowledge and understanding of Asia (Griffin, Woods, Dulhunty & Coates, 2002). Secondary students' knowledge and understanding was described in a profile that consisted of seven levels, including knowledge of historical, cultural and contemporary issues in Asia, understanding of the impact of Asian historical figures on traditional and contemporary practices, basic knowledge of symbols, food, customs, costumes, popular cultural artifacts and people. The research found that students' scores were distributed over the seven knowledge levels, although more secondary than primary students were grouped at higher levels.

Also, the result of the present study also indicates subjects' global attitudes were positive. This result is consistent with the outcome of studies by Barrows(1981) , Schmidt (1975) and Griffin, Woods, Dulhunty and Coates (2002). Griffin, et al explored at secondary levels, Australian girls tended to have more positive attitudes than boys towards Asia. Differences in the year levels are most evident at the extremes. Middle school students tended to have more negative attitudes towards Asia than primary students. It is unclear why there was such a difference of attitudes.

Furthermore, this study was conducted to confirm the reliability and validity of GKS and GAS and examine the relationships between two components of GKS and GAS (i.e., the implicit component and explicit component). Through a series of SEM analyses with Amos, the results showed high validity and reliability of the GKS and GAS instruments for assessing subjects' global knowledge and global attitude. Also, a structural model was developed to represent the causal relationships between the implicit component and the explicit component of GKS and GAS. The fit measures for hypothesized model 1 had a highly accepted fit. This model indicated that subjects' global knowledge can predict global attitudes and explored that both global knowledge's and attitude's implicit components had significant effects on both explicit components. Therefore, global correlation systems, global issues, cross-cultural understanding and global history-geography global knowledge should be viewed as important predictors for global knowledge ; tolerance and appreciation, life and human rights, global dependence, communication and cooperation, war and peace, global responsibility, global thinking and local action should be viewed as important predictors for global attitude. There might lack relevant studies have identified many factors that influence junior high students' global knowledge and global attitude. However, it should be acknowledge that current study, clearly, is an initial attempt to explore the possible variables influencing junior high school students' global knowledge and global attitude, and this part of the findings was obtained throughout a series of SEM analyses with Amos. In addition, as sample in this study came from subjects were 1,017 students in central Taiwan, the degree to which the results can be generalized should be acknowledged. Therefore, there is a call for further research on search habits of students in other areas and countries, and more follow-up studies are needed to further examine these perspectives.

Also, the present study only examined whether students' global knowledge influenced their global attitude. One may be interested in : could their global attitude also, in turn, influence their knowledge? Further studies are required to address this issue. Furthermore, according to Hendrix (1998), the scope of the global education curriculum must be determined by the philosophy of an evolving world, an analysis of the current realities in which students live, an analysis of the requirement of world citizenship in the twenty-first century. Therefore, the educators should consider students' learning approaches of global knowledge and global attitude among different approaches in various educational contexts. This study revealed some educational implications for instructors. With the implementation of global knowledge and global attitude, the significances of global issues, global history-geography, communication and cooperation, global responsibilities should be highlighted. Bennett (1997) recommended that global education should be integrated throughout the curriculum in literature and thematic instruction.

References

- Anderson, L. (1990). A rationale for global education. In K. A. Tye (Ed.), *Global education from thought to action* (pp.13-34). Alexandria, VA: Association for Curriculum and Supervision Development.
- Barrows, T. S.(1981). *College students' knowledge and beliefs : A survey of global understanding* . NY : Change Magazine Press.
- Bennett, W. (1997). *Development of geographic literacy in students with learning disabilities*. ERIC Document Reproduction Service No. ED 418 034.
- Boaz, M. (1985). International education: An imperative need. *Journal of Education for Library and Information Science* , 23, 165-173.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K.A. Bollen & J.S. Long (Eds.), *Testing Structural Equation Models* (pp. 136-162). Newbury Park, CA: Sage.
- Burnouf, L. (2004). Global awareness and perspective in global education, *Canadian Social Studies*, 38(3), 1-15.
- Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Clarke, V. (2004). Students' global awareness and attitudes to internationalism in a world of cultural convergence. *Journal of Research in International Education*, 3(1), 51-70.
- Diaz, C. F., Massialas, B. G., & Xanthopoulos, J. A. (1999). *Global Perspectives For Educators*. Allyn and Bacon.

- Dyer, J. (2004). *Preparing students for a world which is global in its outlook and influences: The rhetoric, reality and response*. Paper presented at the Symposium: "Re-conceptualising Studies of Society and Environment (SOSE): Issues of Policy and Practice in Australian Schools," at the Annual Conference of the Australian Association for Research in Education, Melbourne.
- Griffin, P., Woods, K., Dulhunty, M., & Coates, H. (2002). *Australian students' knowledge and understanding of Asia*. Australian Journal of Education (November 2002). Retrieved on Oct. 20, 2005 from <http://www.curriculum.edu.au/nalsas/pdf/knowledge.pdf>
- Hanvey, R. G. (1982). An attainable global perspective. *Theory into practice*, 21 (3) , 162-167.
- Hendrix, J. C. (1998). Globalizing the curriculum. *The clearing house*, 71(5), 305-308.
- Hicks, D. (2003). Thirty years of global education: A reminder of key principles and precedents. *Education Review*, 55(3), 265-275.
- Hoelter, J. W. (1983). *The analysis of covariance structure: Goodness-of-fit indices*. *Sociological Methods and Research*, 11, 325-344.
- Hu, L.-Z. & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Kirkwood, T. F. (2001). Our global age require global education: Clarifying definitional ambiguities. *Social Studies*, 92(1), 10-15.
- Kniep, W. M. (1989). Social studies within a global education. *Social Education*, 53 (6), 399-385.
- Merryfield, M. M. (1995). *Teacher Education in Global and International Education*. ERIC Digest, Washington, DC: Clearing house on Teaching and Teacher Education.
- Merryfield, M. M., & White, C.(1996). *Teacher decision making and global perspectives in education: A conversation about teachers' goals and world views in the context of classroom instruction*. Paper presented at the Conference of the American forum, Indianapolis.
- National Geographic Education Foundation. (2002). *National geographic –Roper 2002 global geographic literacy survey*. Retrieved on July 2, 2005 from <http://www.nationalgeographic.com/geosurvey/download/RoperSurvey.pdf>
- Osunde, E. (1996). Persisting and common stereotypes in U.S. Students' knowledge of Africa: A study of pre-service social studies teachers. *Social Studies*, 87(3), 119-124.

- Parmenter, L. (1999). Structuring students' knowledge base of the world: the effects of internationalization on the Japanese school curriculum. *Education Journal, 26*(2), 13-36.
- Petrie, J.(1988). *Global Awareness Test*. ERIC Document Reproduction Service No. ED 305277.
- Pike, G., & Selby, D.(1999) . In the global classroom. Toronto: Pippin.
- Pike, L. W., & Barrows, T. S.(1979). *Other nations, other people (ONOP):A survey of student interest, knowledge, attitudes and perspective*. ERIC Document Reproduction Service No. ED 189190.
- Sampson, D. L., & Smith, H. P.(1957). A scale to measure worldminded attitudes. *Journal of Science Psychology, 68*, 243-247.
- Schmidt, N. (1975) . Fourth, fifth and sixth grade students' global orientations: A descriptive study. In J. Torney-Purta(ed.)(1986-87), *Evaluating global education: Sample instruments for assessing programs, materials and learning*. New York, NY: Global Perspectives in Education.
- Schumacker, R. E., & Lomax, R. G. (2004). A beginner's guide to structural equation modeling (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Tye, B., & Tye, K. (1992). *Global education: A study for school change*. Albany, NY: State University of New York.
- Tye, K. A. & Kniep, W. M. (1991). Global education around the world. *Educational Leadership, 48* (7), 47-49.
- Zhao, Y., Zhou, X., & Huang, L. (2005). *American and Chinese youths' Images of America*. Paper presented at the 49th Annual Conference of International and Comparative Education Association, Stanford University, Palo Alto, California.
- Zhao. Y., Hoge, J., Choi, J., & Lee, C. (2006). Comparison of social studies education in U.S., China, and South Korea. *The International Journal of Social Education, 21*(2), 91-122.

Multiple Intelligence Theory and Teacher Professional Development

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Abstract

This study was to examine Gardner's multiple intelligences within a pre-service teacher education program. Questionnaire respondents in this study included 411 pre-service-teachers. 225 participants from the 411 questionnaire respondents were involved in using MI theory to design curriculum. Data were collected from a number of different sources: questionnaires, teaching journals, direct observation notes, and document analysis. The findings indicated : (1)there were significant sex differences in self-estimates of Linguistic, Musical, Math-Logic, Spatial, and Kinesthetic intelligences; (2)there were significant department differences in self-estimates of Linguistic, Math-Logic, Spatial, Kinesthetic, Naturalist intelligences; (3) there was a significant relationship among other aspects of intelligences; (4) most pre-service teachers were able to design multiple teaching activities in the nine-year joint curriculum; (5)there were positive and negative opinions about using MI theory to design junior high school curricula. Suggestions to improve teaching MI theory within pre-service teacher education programs in the future are also included.

Keywords: multiple intelligence theory - curriculum design - pre-service teacher

1. Introduction

According to Gardner (1991), recent cognitive research documents the extent to which students possess different kinds of intelligences and therefore learn, remember, perform, and understand in different ways. These differences challenge an educational system that assumes that everyone can learn the same materials in the same way and that a uniform, universal measure suffices to test student learning. Indeed, as currently constituted, our educational system is heavily biased toward linguistic modes of instruction and assessment and, to a somewhat lesser degree, toward logical-quantitative modes as well. Therefore, many people unjustifiably deemed successful, as well as many needless casualties, emerge from contemporary educational systems. David Lazear (1994) illustrate that not all progress is scientifically quantifiable. Our students almost always know, understand, and have learned much, much more than they can demonstrate on any tests we administer.

In Taiwan, there are similar situations, especially at secondary school level. Most secondary school students have to study hard and take many tests at schools in order to pass the entrance examinations for colleges or high schools. If children

fail to achieve to academically expected norms, they often lose their self-confidence and do not know how to adapt themselves. The stresses of low academic achievement, many tests, and entrance examinations for students create many problems in and out of class. Some students deal with the stresses by adopting negative responses to classroom activities including giving up on learning, rebelling against classroom rules, absenteeism, disrupting or sleeping in class. As a result, some teachers have developed the view that some students are unteachable, and their major focus becomes maintaining discipline.

To solve this problem, we need to encourage teachers to think about how to teach through different entries and how they can evaluate students using multiple approaches to assessment, rather than using only pencil and paper tests. Teachers need to look at such things as students' thinking and learning skills; their intellectual, emotional, and social development; their capacity to transfer and apply classroom learning to life in the real world; and their creative problem-solving abilities in their evaluation of students' achievement (Lazear, 1994). However, Campbell and Campbell (1999) indicate, "During pre-service and in-service education, teachers rarely consider the nature of the human learning potential they are responsible for. This gap in our professional knowledge base is akin to doctors being trained without studying the human body or architects being licensed without understanding the physics that allow structures to remain upright" (p. 2). Therefore, it is of the utmost importance that teachers in Taiwan recognize and nurture all of varied human intelligences, and all of the combinations of intelligences.

Multiple intelligence theory was first proposed by Howard Gardner (1983) in his seminal book, *Frames of Mind: The Theory of Multiple Intelligences*. Since that time, educators have become interested in the theory as a means to improve teaching and learning in a multiplicity of ways. According to Gardner, everyone possesses eight distinct intelligences: verbal-linguistic, mathematical-logical, interpersonal, intrapersonal, visual-spatial, bodily-kinesthetic, musical-rhythmic and naturalistic intelligence. Each of the eight intelligences is present to different degrees in a person, with some intelligences being better developed than others. Although there are eight distinct intelligences, each one has many different attributes, with individuals demonstrating considerable variability. Kagan and Kagan (1998) described MI theory as a powerful "catalyst" in education. "It is revitalizing the search for more authentic, student-centered approaches to curriculum, instruction, and assessment" (p.23). From their perspective, MI theory can be used to meet three visions: "(a) to match teaching to the ways student learn, (b) to encourage students to "stretch" their abilities to develop all their intelligences as fully as possible, and (c) to honor and celebrate diversity" (p.182).

Howard Gardner's theory gives us a starting point for discussion about human intelligence and to talk about why a student does well in one area but not in another. Multiple intelligence approach receives a lot of attention and responses in America. The educators who have been prominent in the field of MI theory (e.g. Campbell & Campbell, 1999; Kornhaber, Fierros, & Veenema, 2004) have focused their applications on elementary education. The few writers who addressed secondary education predominately have focused on either the field of English or the general restructuring of the secondary schools

(Armstrong, 1998 ; Brooks, 1995 ; Evans, 1995 ; Gage, 1995). If Gardner's constructs have been successful with elementary and secondary students, could they be applicable to adults in colleges and universities? Is it possible to instruct pre-service teachers so that they can successfully use MI theory in their own teaching? Which intelligences would enable teachers to be successful in their field of endeavor?

Based on above, this study introduced MI theory by MI methods in a teacher preparation course in Taiwan and attempted to achieve the following objectives: (1) to understand how the eight intelligences are distributed within a population of pre-service teachers; (2) to apply MI theory methods to teach MI unit; (3) to understand how pre-service teachers use MI to design junior high school courses and students' assessments according to their majors; (4) to understand how pre-service teachers criticize using MI methods to design curricula and assessments; and (5) to understand the kinds of challenges and problems pre-service teachers who are volunteers encountered when they put their MI design into an elementary classroom and what they suggest to improve teaching through multiple intelligences and assessments in the future.

2. Method

There have been two main phases of this research. During phase 1, a series of development and validation studies of an assessment for the multiple intelligences was conducted to understand the distribution and difference of the eight intelligences in a population of pre-service teachers. During phase 2, this study tried to understand what kinds of challenges exist when pre-service teachers applied MI theory to design curricula and what opinions pre-service teachers had about using MI theory within the curricula of junior high schools. Data were collected in this phase from a number of different sources: questionnaires, teaching journals, direct observation notes, and document analysis.

2.1. Participants and settings

Participants for this study were pre-service teachers (N=395) at the National Changhua University of Education (NCUE). Participants from each department was as follows: (a) Industrial education, 14.2%; Business Education, 3.8%; Mathematics, 8.9%; Chemistry, 7.1%; Physics, 5.6% ; Biology, 3.5%; Physical Education, 5.3%; Special Education, 6.6%; Guidance and Counseling, 12.9%; English, 8.6% ; Chinese, 9.1%; Art, 6.1%; Geography, 8.4%. Of the total participants, 56.2% were female and 43.8% were male. NCUE is responsible for secondary teacher education as well as in-service training. Most of the NCUE students can take the teacher education program. All of the students indicated an interest in becoming secondary teachers. Student permission to participate was obtained for all participants. Participants took approximately 30 minutes to complete this questionnaire.

2.2. Instrument

Participants were given a questionnaire, How Smart I Am—Knowing Yourself Multiple Intelligences, which, in a brief introduction, explained the idea of a visual analogue scale. The items of the questionnaire consisted of eight aspects of intelligence proposed by Gardner (1983): verbal-linguistic, mathematical-logical, interpersonal, intrapersonal, visual-spatial, bodily-kinesthetic, musical-rhythmic and naturalistic intelligence. The questionnaire items were modified from Shore (2001) questionnaire items and translated into Chinese version. Initially, a large number of items ($n=104$) was generated as self-reported and describes a person's intellectual disposition in eight general areas, e.g., "Are you good at mental arithmetic?", "Are you good at writing?" Each item used 5-point Likert-type scale ranging from 1(Statement does not describe you at all) to 5 (Statement describes you exactly).

411 pre-service-teachers from the National Changhua University of Education(NCUE) in Taiwan were respondents. The full results are reported later in this article. The second phase of this research reported here was a pilot implementation project conducted during one semester in collaboration with 225 participants from the 411 questionnaire respondents involving using MI theory to design curriculum I, being a teacher educator, tried to understand what kinds of challenges pre-service teachers have while applying MI theory to design curriculum and what opinions pre-service teachers had about using MI theory within the curricula of junior high schools.

3. Results of questionnaire survey

Table 1 reports Means, SD and t -test of males' and females' self-estimated intelligence scores.

Table 1 Means, SD and t -test of MI for gender

	Males		Females		t value
	M	S.D.	M	S.D.	
verbal-linguistic	36.72	7.64	39.12	7.68	-3.14**
mathematical-logical	39.65	7.83	32.96	7.72	8.64***
visual-spatial	39.12	6.90	37.61	7.54	2.08*
bodily-kinesthetic	42.51	7.42	39.50	7.79	3.58***
musical-rhythmic	38.90	10.24	41.65	9.69	-2.77**
Interpersonal	44.04	7.00	44.83	7.77	-1.06
Intrapersonal	46.66	8.36	46.66	6.66	.01
Naturalistic	34.15	8.82	32.63	7.15	1.92

* $p<.05$. ** $p<.01$. *** $p<.001$.

Table 2 reports mean percentage scores by high/low pre-service teacher department groups.

Table 2 Mean percentage scores by high/low pre-service teacher department groups

	Groups	
	High M (Department)	Low M (Department)
verbal-linguistic	43.33(Chinese)	32.17(Information management)
mathematical-logical	42.71(Math)	29.08(Chinese)
	42.50(Physics)	
	41.93(Chemistry)	
visual-spatial	46.71(Arts)	34.78(Guidance & Counseling)
		34.50(English)
		34.35(Chinese)
bodily-kinesthetic	47.57(Physical education)	35.11(Chinese)
musical-rhythmic	43.63(Art)	38.11(Math)
Interpersonal	47.29(Physical education)	41.65(English)
Intrapersonal	48.76(Industrial education)	44.42(Geography)
	48.57(Physical education)	
Naturalistic	38.93(Biology)	26.67(Information management)

Table 3 reports means, SD, *F* value and *Scheffé* tests of verbal-linguistic intelligence for different major.

Table 3 Means, SD, *F* value and *Scheffé* tests of verbal-linguistic intelligence for different major

Verbal-linguistic intelligence					
group	Department	M	S. D.	<i>F</i> value	<i>Scheffé</i> test
1	Industrial Education	36.09	6.48	3.04**	
				*	
2	Information Management	32.17	5.53		
3	Business Administration	37.20	5.94		
4	Business Education	36.93	5.90		
5	Mathematics	35.80	8.73		13 > 1, 5, 7
6	Chemistry	39.57	7.08		
7	Physics	33.95	6.53		
8	Biology	38.07	9.72		
9	Physical Education	36.66	7.32		
10	Special Education	38.61	6.63		
11	Guidance and Counseling	38.74	8.68		
12	English	40.50	6.64		
13	Chinese	43.33	8.02		
14	Art	39.29	6.88		
15	Geography	37.78	8.12		

*** $p < .001$.

Table 4 means, SD, *F* value and *Scheffé* tests of mathematical-logical intelligence for different major.

Table 4 Means, SD, *F* value and *Scheffé* tests of mathematical-logical intelligence for different major

Math-logical intelligence					
group	Department	M	S.D.	<i>F</i> value	<i>Scheffé</i> test
1	Industrial Education	40.60	8.34	13.66***	
2	Information Management	39.16	5.56		
3	Business Administration	36.30	8.49		
4	Business Education	39.46	7.18		
5	Mathematics	42.71	6.00		1, 6,
6	Chemistry	41.92	6.80		7 > 9,10,11,12,
7	Physics	42.50	6.06		13
8	Biology	37.57	6.77		
9	Physical Education	31.28	5.63		5 > 9,10,11,12,
10	Special Education	32.11	6.84		13, 14, 15
11	Guidance and Counseling	32.45	8.45		
12	English	31.32	7.20		
13	Chinese	29.08	5.51		
14	Art	32.33	8.06		
15	Geography	33.18	5.46		

*** $p < .001$.

Table 5 reports means, SD, *F* value and *Scheffé* tests of visual-spatial intelligence for different major.

Table 5 Means, SD, *F* value and *Scheffé* tests of visual-spatial intelligence for different major

visual-spatial intelligence					
group	Department	M	S.D.	<i>F</i> value	<i>Scheffé</i> test
1	Industrial Education	40.89	6.39	6.55***	
2	Information Management	39.33	4.92		
3	Business Administration	35.40	7.22		
4	Business Education	39.53	6.13		
5	Mathematics	38.91	6.83		
6	Chemistry	38.96	6.05		
7	Physics	39.81	5.83		14 > 9, 11,12,
8	Biology	38.85	8.59		13
9	Physical Education	36.28	4.85		
10	Special Education	38.30	7.67		
11	Guidance and Counseling	34.78	6.89		
12	English	34.35	6.13		
13	Chinese	34.50	7.45		
14	Art	46.70	4.27		
15	Geography	39.84	8.27		

*** $p < .001$.

Table 6 reports means, SD, *F* value and *Scheffé* tests of bodily-kinesthetic intelligence for different major.

Table 6 Means, SD, *F* value and *Scheffé* tests of bodily-kinesthetic intelligence for different major

Bodily -kinesthetic intelligence					
group	Department	M	S.D.	<i>F</i> value	<i>Scheffé</i> test
1	Industrial Education	42.91	8.42	3.43***	9 > 15
2	Information Management	42.66	5.43		
3	Business Administration	39.60	4.86		
4	Business Education	42.33	7.14		
5	Mathematics	40.94	7.42		
6	Chemistry	41.60	5.80		
7	Physics	40.81	5.81		
8	Biology	41.42	7.94		
9	Physical Education	47.57	5.64		
10	Special Education	39.11	6.88		
11	Guidance and Counseling	39.29	8.51		
12	English	40.32	6.96		
13	Chinese	35.11	7.68		
14	Art	41.25	9.11		
15	Geography	41.03	7.76		

*** $p < .001$.

Table 7 reports means, SD, *F* value and *Scheffé* tests of self-estimated naturalistic intelligence for different major. The Correlations and Descriptive Statistics among participants' different types of self-estimated intelligence is presented in Table 8.

Table 7 Means, SD, *F* value and *Scheffé* tests of self-estimated naturalistic intelligence for different major

naturalistic intelligence					
group	Department	M	S.D.	<i>F</i> value	<i>Scheffé</i> test
1	Industrial Education	33.87	8.67	2.79***	8, 15 > 5
2	Information Management	26.66	7.58		
3	Business Administration	35.50	8.69		
4	Business Education	33.53	7.93		
5	Mathematics	30.45	7.21		
6	Chemistry	35.82	7.98		
7	Physics	34.81	9.43		
8	Biology	38.92	11.02		
9	Physical Education	34.19	7.43		
10	Special Education	30.92	8.21		
11	Guidance and Counseling	31.62	6.79		
12	English	31.76	5.93		
13	Chinese	34.25	6.63		
14	Art	30.79	7.45		
15	Geography	37.25	6.72		

*** $p < .001$.

Table 8 Correlations among different types of self-estimated intelligence

	1	2	3	4	5	6	7	8
Verbal	1							
Math	.09	1						
Visual	.18**	.43**	1					
B/K	.15**	.32**	.47**	1				
Musical	.32**	.13**	.41**	.33**	1			
InterP	.32**	.16**	.27**	.44**	.33**	1		
IntraP	.42**	.24**	.26**	.26**	.22**	.34**	1	
Natura	.17**	.20**	.38**	.27**	.17**	.15**	.24**	1

** p<.01.

4. Discussion of results of questionnaire survey

The present study revealed that males do not generally estimate their intelligence higher as compared to females. Significantly higher self-estimates of male were shown for mathematical, visual-spatial, and bodily-kinesthetic intelligences while females rated their verbal-linguistic and musical-rhythmic intelligences significantly higher. Results are partly consistent with the outcome of studies by Furnham et al. (1999), Rammstedt and Rammsayer (2000), and Ksicinski (2000). Furnham et al. indicated significantly higher self-estimates by males were shown for mathematical intelligence, visual-spatial intelligence, and bodily-kinesthetic intelligence while there was no other type of intelligence that showed significantly higher self-ratings for females than for males. Rammstedt and Rammsayer reported that male sample had significantly higher self-estimates of mathematical, visual-spatial intelligences and reasoning as compared to the female sample while females rated their musical-rhythmic intelligence significantly higher than males. Ksicinski's data was compiled from responses from 81 students in remedial classes at College of the Redwoods in California. Results indicated that women rated themselves higher in seven out of the eight MI domains; men rated themselves higher only in the kinesthetic domain.

However, there was no gender difference in interpersonal and intrapersonal intelligences. It was not consistent with the results of studies by Cranford (2005) and Shi and Wang (2007). Cranford examined the difference in emotional intelligence (EI) between different groups of undergraduates in Singapore. One of the results indicated male undergraduates achieved higher EI scores than female undergraduates. Her finding is consistent with the outcome of the study by Shi and Wang.

Gardner (1993) states that multiple intelligences have a cultural component. Participants of the present study were Taiwanese undergraduate pre-service teachers, while Rammstedt and Rammsayer (2000) tested German undergraduate psychology students, and Furnham et al. tested students from various faculties, more importantly, from different cultures (Britain, Hawaii, and Singapore). From this perspective, various findings of studies may be accounted for by possible cross-cultural differences.

As to the mean scores of pre-service teachers from a variety of academic department areas, respondents from Chinese literature department had significantly higher self-estimates of verbal-linguistic intelligence than respondents from industrial education, math, and physics departments. This finding is consistent with the outcome of a study by Shearer (2004). Shearer selected American high school teachers as participants and found that the high mean score of verbal-linguistic intelligence is the English department. In Taiwan, the Chinese department is regarded as English in the U. S. A. There are significant differences among some various majors in self-estimates of verbal-linguistic intelligence.

Moreover, the high mean scores of mathematical-logical intelligence are math, physics and chemistry departments while the low mean score is the Chinese literature department. This finding is also consistent with the outcome of a study by Shearer (2004). Shearer's study revealed that high mean scores of mathematical-logical were math and science departments while the low mean score is the English literature department. In addition, the present study revealed respondents from math, physics, chemistry, and industrial education departments had significantly higher self-estimates of mathematical-logical intelligence than respondents from the physical education, special education, Guidance and Counseling, English, and Chinese departments. There is a significant difference among some various majors in self-estimates of mathematical-logical intelligence.

Third, the low mean score of visual-spatial intelligence is from the Chinese literature department. This finding is also consistent with the outcome of the study by Shearer (2004). Shearer's study revealed that the low mean score is from the English department. Additionally, the present study revealed respondents from the Arts departments had significantly higher self-estimates of visual-spatial intelligence than respondents from the Physical Education, Guidance and Counseling, English, Chinese departments. There is a significant difference among some various majors in self-estimates of visual-spatial intelligence.

Fourth, the high mean score of bodily-kinesthetic intelligence is from the Physical Education department. This finding is also consistent with the outcome of the study by Shearer (2004). Moreover, the present study revealed respondents from physical education departments had significantly higher self-estimates of bodily-kinesthetic intelligence than respondents from the Chinese department. There is a significant difference among some various majors in self-estimates of bodily-kinesthetic intelligence.

Fifth, the high mean score of naturalistic intelligence is from the Biology department. This finding is partly consistent with the outcome of the study by Shearer (2004). Shearer's study revealed that the high mean score is the Science department. Moreover, the present study revealed respondents from the Biology and geography departments had significantly higher self-estimates of naturalistic intelligence than respondents from the Math department. There is a significant difference among some various majors in self-estimates of naturalistic intelligence.

Highly significant positive correlations ($p < .05$) were found among eight intelligences. This finding is consistent with the outcome of a study by Rammstedt and Rammsayer (2000). In Rammstedt and Rammsayer's study, the inter-relationships among the various self-estimated aspects of intelligence in the male and the female samples indicated there is at least one highly significant positive correlation for each intelligence. For example, there are highly significant positive correlations among math, spatial, reasoning, memory, and perceptual speed intelligences. The present study supports Rammstedt and Rammsayer's (2000) findings that self-reports of intelligence are correlated with at least one correlation for each intelligence.

5. Curriculum development and design

5.1. Participants

The participants for this phase consisted of 225 undergraduates who took the course "Curriculum Development and Design." There were 225 students who came from different departments and took this course divided into five classes. There were 85 sophomores (38%) and 140 juniors (62%). There were 91 males (45%) and 134 females (55%). All of the students indicated an interest in becoming secondary teachers.

5.2. MI Course Design

According to Armstrong (1994), MI theory applied to curriculum design might best be represented by various teaching strategies. On a deeper level, MI theory suggests a set of parameters within which educators can create new curricula. The best way to approach curriculum development using the theory of MI is by thinking about how we can translate the material to be taught from one intelligence to another. This study adopted the steps of curricular design suggested by Armstrong (1994) to create lesson plans or curriculum units using MI theory as an organizing framework : a. focus on a specific objective or topic; b. ask key MI questions; c. consider which of the methods and materials seem most appropriate; d. brainstorming with colleagues may help stimulate your thinking; e. select appropriate activities; f. set up a sequential plan; g. implement the plan.

6. Results and discussions of pre-service teachers using MI theory to design junior high school curriculum

Howard Gardner's multiple-intelligences theory stresses that all humans possess the various intelligences (linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist) to differing degrees, and most people can attain adequate competency levels. In this study, I adopted the framework of MI theory for one unit of the course of curriculum development and design to help pre-service teachers become interested in the theory as a means to improve teaching and learning in a multiplicity of ways.

From their performance of course design, I found pre-service students created more student-centered activities rather than traditional teacher-centered lectures. Various multiple intelligences activities were incorporated: songs of states, dioramas, brochures, murals, poetry, literature, and other hands-on activities.

In their understanding and criticism of MI reports, they chose to replace traditional reports with painting, broadcasting, and role playing to present their conceptions and critiques of MI theory. The content of MI concepts mainly included the origin of the theory of Multiple Intelligences, the standards of MI, the definition and types of MI, the teaching beliefs and strategies of MI. Most pre-service teachers hold a positive feeling about MI, for example, it strengthens the learning motivation, it is of great fun, and it accommodate all students with different learning styles. Most pre-service teachers indicated MI theory can increase student interest and academic achievement.

Of course there are still a few students who question the feasibility of MI teaching activities, such as students having to spend more leisure time preparing for the course. In addition, can learning in a multiple and happy atmosphere really achieve the expected teaching objectives? Can MI theory be used in Taiwanese junior high schools? Their opinions are the followings:

"Generally, there are more than thirty students in each class. How can each subject teacher who teaches many classes recognize and nurture all of varied student intelligences, and all of the combinations of intelligences in his/her teaching?"

"Almost a secondary school students in Taiwan have to study hard and take many tests at schools in order to pass the entrance examinations for colleges or high schools. Whether parents, teachers, or students, all of them pay heavy attention to the contents of math, English, Chinese, and science subjects which are courses for entrance examinations in Taiwan. Who cares about other intelligences? If a teacher put more emphasis on interpersonal and intrapersonal intelligences and students cannot get high test scores in the entrance examine courses, I think their parents might disagree with it"

Some pre-service teachers from various departments also pointed out their difficulties in using various entries to design curriculum, as the followings:

"I found MI teaching strategies are not suitable to every subject. For example, my major is English belonging to verbal-linguistic intelligences. When I design activities, I feel difficulties in using other intelligences, such as higher-order reasoning activities."

"In designing math teaching activities, I feel difficulty in using musical/ rhythmic intelligence strategies, such as linking music and rhythm with concepts."

Some pre-service teachers also mentioned what assessment standards are useful for various intelligences, as the following:

"I found some intelligence assessment standards are indeterminable, abstract, and obscure like interpersonal and intrapersonal intelligences. It is very difficult to decide what extent is good? What extent is bad?"

"I feel confused when I design assessment standards. What should they be based on? Are they based on teaching objectives or various MI standards."

In the above dilemmas, I noticed that the usual disadvantage of the lesson plans is the inappropriate time distribution, uncooperative teaching objectives and activities, and excessive workable teaching activities. While the recognition of different ways of representing and acquiring knowledge complicates matters in certain ways, it is also a hopeful sign. Not only are chances of acquiring understanding enhanced if multiple entry points are recognized and utilized, but in addition, the way in which we conceptualize understanding is broadened. No one person can be expected to have all modes available, but everyone ought to have available at least a few ways of representing the relevant concept or skill (Gardner, 1991).

7. Conclusion and Implication

The aim of the study was to examine gender and major differences in self-estimates of different aspects of Gardner's multiple intelligences within pre-service teachers. The findings indicated that there were significant gender differences in self-estimates of verbal-linguistic, musical, math-logic, visual-spatial, and body-kinesthetic intelligences; and there were significant departmental differences in self-estimates of verbal-linguistic, math-logic, visual-spatial, body-kinesthetic, and naturalistic intelligences. Except for verbal-linguistic and math-logic intelligences, there were significant relationships among other aspects of intelligences.

As literature review mentioned, students possess different kinds of intelligences that warrant attention from teachers, teacher educators, and researchers. In order to let pre-service teachers understood multiple intelligence, this study introduced MI theory by MI methods in a teacher preparation course in Taiwan and understood how the eight intelligences are distributed within samples of pre-service teachers. Traditional teaching methods rely mostly on logical and verbal abilities, but neglect the development of students' potentials. The theory viewpoints of multiple intelligences, on the other hand, remind teachers of valuing students' balanced development in various intelligences, even to assist the development of students' weak intelligences with their strong ones. Undoubtedly, the theory of MI has paved a broad way for the possibilities and thinking that we teach students in accordance with their aptitudes. At the same time, it points out the bias that, from the traditional assessments to the whole culture, logical and verbal education prevails over art education and emotion (personality) education.

References

- Armstrong, T. (1994). *Multiple intelligences in the classroom*. Alexandria, Va.: Association for Supervision and Curriculum Development.
- Brooks, C. K. (1995). Rainbow teachers rainbow students: Learning their way. *English Journal*, 84 (1), 98-99.
- Campbell, L.& Campbell, B.(1999). *Multiple intelligences and student achievement : success stories from six schools*. Alexandria, VA.: Association for Supervision and Curriculum Development.
- Campbell, L., Campbell, B. & Dickinson, D. (1996). *Teaching & learning through multiple intelligences*. Needham Heights, Mass.: Allyn & Bacon.
- Evans, C. (1995). Access, equity, and intelligence: Another look at tracking. *English Journal*, 84 (8), 63-65.
- Furnham, A., & Fong, G., & Martin, F.(1999). Sex and cross-cultural differences in the estimated multifaceted intelligence quotient score for self, parents and siblings. *Personality and individual differences*, 26, 1025-1034.
- Gage, R. (1995). Excuse me, you're cramping my style: Kinesthetics for the classroom. *English Journal*, 84 (8), 52-55.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York, NY.: basic Books.
- Gardner, H. (1991). *The unschooled mind: how children think and how schools should teach*. New York, NY.: basic Books.
- Gardner, H. (1993). *Multiple intelligences: the theory in practice*. New York, NY: Basic Books.
- Gardner, H. (1999). *Intelligence reframed: multiple intelligences for the 21st century*. New York, NY.: basic Books.
- Hansen,S. A. (1998). *Distribution, dispersion, and application of gardner's multiple intelligences theory with preservice teacher education students*. Unpublished Ph.D. Dissertation, University of Idaho, Idaho.
- Kagan, S. & Kagan, M. (1998). *Mutiple intelligences: The complete MI book*. CA.: Kagan Cooperative Learning.
- Klein, F. M. (1991). Curriculum design. In A. Lewy (Ed.). *The international encyclopedia of curriculum* (pp.335-342). New York: Pergamon Press.
- Kornhaber, M., Fierros, E., & Veenema, S. (2004) . *Multiple Intelligences: Best ideas from research and practice*. Needham Heights, Mass.: Allyn & Bacon.

Lazear, D. G. (1994). *Multiple intelligence approaches to assessment: solving the assessment conundrum*. Tuscon, Ariz: Zephyr Press.

Rammstedt, B., & Rammsayer, T. H. (2000). Sex differences in self-estimates of different aspects of intelligence. *Personality and Individual Differences, 29*, 869-880.

Shearer, C. B. (1996). *The MIDAS: A guide to assessment and education for the multiple Intelligences*. Columbus, OH: Greyden Press.

Shearer, C. B. (2004). Using a multiple intelligences assessment to promote teacher development and student achievement. *Teachers College Record, 106* (1), 147-162.

Shore, J. R. (2001). *An investigation of multiple intelligences and self-efficacy in the university English as a secondary language classroom*. Unpublished Ed. D. Dissertation, George Washington University.

People Research in Solving the Economic Problem in Thai Communities

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Abstract

The purpose of this research is to synthesize the process and characteristics of "people research" occurred in many communities around Thailand. The "people research" is the research conducted by people to build up the body of knowledge on the learning process and knowledge management of the people created in their research process to solve their economic problems in the communities.

The research questions are (1) What is the process of people research? (2) How does it lead to learning and knowledge management processes of the community? (3) How do learning and knowledge management processes lead to the solution of economic problem in community?

This study will synthesize the 132 researches conducted by the people for solving economic problems in Thai communities, during the year 1987-2006.

The concepts used are "experiential learning" (Kolb, D. A., 1993; 1984.) and "knowledge management" (Nonaka, I. & Takeuchi, H., 1995; Takeuchi, H. & Nonaka, I., 2004).

Metasynthesis methods from qualitative researches conducted by people in communities were synthesized: using meta-study approach, then meta-data, meta-method, and meta-theory analyses are conducted first, followed by metasynthesis of these findings.

From the study, people researches are conducted in 4 models: (1) the utilization of local wisdom, (2) sustainable agriculture, (3) the community master plan for self-reliance, and (4) local research to empower the people. Many aspects of learning and knowledge management, as well as distinctive methodology of "people research" are found. The integral approach which tries to solve the community problem as a whole systematically is the key to success.

Keywords: people research

1. Introduction

Poverty condition is still an important problem of Thailand although the government has launched the National Economic and Social Development Plans for over 40 years. There are 7.9 million ultra poors, whose poverty transmitted from generation to generation. Particularly, after the economic crisis of 1993, the number of the poor has been increased to 22.3% (Krongkaew, 2003, pp. 5-6). These situations activated government officials, scholars and researchers to research extensively the ways to solve the poverty condition.

The past researches showed the relationship of development condition and poverty problem, which can be divided into 5 approaches as followings. (Bunchai, 1998, p.137-151)

1.1. The studies of income, factors of production and income distribution.

This includes the studies during the National Economic and Social Development Plan 1-4 periods (1961-1981), aiming to define the meaning of poverty and to set up poverty indicators, following the theories of modernization and dependency from the western model. (Charoensin-oran, 2000, pp. 59-60). Defining the poverty from the criteria of income, the solutions for solving poverty by the officials are building up infrastructures, increasing production efficiency, controlling the population, supporting new technology and expanding markets.

1.2. The studies of livelihood, attitudes and satisfaction of the poor for development, or assessment of government's project for solving poverty. This group of researches has close relationship, or overlap, with the first approach. They began after the government's development projects had started in rural areas. These studies are given remarks as being the politics of development; the studies of satisfaction in project assessment are to legitimize the development projects (Bunchai, 1998, p. 140).

1.3. The studies on the context of socio-economic and political structure that shaping up poverty problem. These researches are carried out during the period of the National Economic and Social Development Plan 5-7 (1982-1996). Resulting from the main stream development making people in the Third World poorer and poorer, a new paradigm of development emerged. According to the progressive economists' ideas of Paul Prebisch, Samir Amin and Andre Gunder Frank who developed the theory of dependency. The poverty of the Third World was not due to a historical backwardness that could be eliminated by the simple process of modernizing the economy. Rather, it was the result of a systematic process of exploitation to the countries of the South (developing countries) by those of the North (developed countries), the centers and the peripheries. In addition, the poor in the country are marginalized by elites who represent an economic and political center. The latter are therefore doubly exploited, on an international level and within their own country. Thus, to break away from this dependency, Third World countries must have development on their own needs. This means development based on their self-reliance. (Verhelst, 1990, p. 13)

These researches concerning the context of socio-economic structure that construct poverty, these are the studies of poverty in context of power and culture. The studies point to the cause of poverty, which are economic, social and political structures which the elites used to control and obstructed the farmers from access to resources and other social opportunities.

1.4. The studies reflecting perspectives, ideas, culture and movement of the poor in adapting to, or resisting the government's policy and choosing alternative development by the people themselves. This approach is occurred after the paradigm change of development. It criticizes that, the 30 years of development following the National Economic and Social Development Plans 1-7, was the unsustainable development. Because these developments had ruined environment, natural resources, culture, etc. In

addition, the economic crisis in 1997 facilitated people returning to their roots, the fundamental part of the country, that is "community". Thus, new paradigm of development is based on the assumption that the strength of people and community is the way out to solve poverty, differing from the old paradigm of development stressing on income. Therefore, the National Economic and Social Development Plans 8 (1997-2001) is stressed on sustainable development which turn to focus on agricultural sector as well as industrial sector, giving more opportunities for people to choose alternative ways of agriculture, stressing the old wisdom of people, focusing on human being as the center of development and enhancing their potential, particularly family and community strength. Through these successive ways, government has to decrease its role of development and giving opportunities to communities for their alternative and indigenous development. (Bunnak, 2000, p. 70).

1.5. The studies for determining strategy for empowerment and strengthening communities and civil society. The movement of scholars and community workers after economic crisis and their critiques of the main stream development generate variety proposals for new ways of development. As well as the researches on poverty are developed for the determination of important strategies for community development, such as, strategy for community strengthening with key concepts of "community strength", "local wisdom", and "self-reliance".

People Research: Turning point in the research and development to solve poverty. From past to present, researches on poverty have evolved periodically to determine strategies for community development stressing on community strength, self-reliance and local wisdom. However, all researches mentioned above are investigated by outsiders who are community workers, scholars or government officials that used methodology designed for outsider to study the community. Although, now, there is an advanced methodology called participatory action research that offers participation of people in research works. However, the one who has outstanding role in research process are still the outsiders, not yet people in the community. But, the turning point is happening, there are researches conducting by the people themselves, the owners of the problem research to solve their own problems.

"People research" is an intellectual process which facilitates learning process and knowledge management by the people themselves. Moreover, it is the integration of old wisdom and new technology; as the people in some communities are success in determining their own solutions, leading to real self-reliance.

Saneh Jamarik (2004, p. 57) cited that people research is the process of social transformation as well as the intellectual growth of society as a whole. For Wasi, (2004, p. 97) he assumes that, in the past, we solved poverty without concerning to intellectual dimension and human potential. Particularly, among the poor, there are learning process and knowledge management of the community for solving economic problem by self-reliance, with integral and sustainable way. The learning process will be facilitated by the people themselves who set up the questions, searching for knowledge and the way of development of their own, not by outsider as before. For knowledge management, it is started with the people's concern, awakened by information,

problems and the causes of the problems and decided to solve problems of their own.

At present, the researches for solving poverty, or solving economic problems in community conducted by people themselves still have no systematic study. Thus, the proposed research is to synthesize the status of knowledge of the research conducted by people in community to solve their economic problems.

2. Research objectives

2.1. To synthesize the process and characteristics of the research conducted by people for solving their economic problems in communities.

2.2. To synthesize learning process and knowledge management the people created from their researches.

2.3. To synthesize the methods people used for solving economic problems in communities generated from their learning process and knowledge management.

3. Research methods

Metasynthesis study of the qualitative researches conducted by people in communities are used: using meta-study approach (Finfgeld, 2003), then meta-data, meta-method, and meta-theory analysis are conducted first, followed by Metasynthesis of these findings.

Scope of the study. This study will synthesize the status of knowledge generated from 132 researches conducted by people for solving economic problems in community, in Thailand, during 1987-2006.

Definitions: People research is the research conducted by people, considering from two main issues: the objectives and the role of people in the research as follows:

(1) **Objective of the research.** People research is problem-oriented research, to solve people's problems in community. It is not the research for knowing or enhancing intellectual as other research in general. Although people research may enhance their intellectual, but that is not the main objective. In other words, they research for using their learning or intellectual to solve the problems they confronted with.

(2) **The role of people in the research.** In research by people, people are the one who take the outstanding role in the research process, although the research may be participatory action research or participatory research, which is cooperation between community workers, scholars or government officials and the people in community. In this research, people will be the one who set the research questions, running all research processes, such as, collecting and analyzing data, including summarization and implementation. Following this way, people research will be actually beneficial for the people in community. In people

research, the outsiders will decrease their roles to be research consultants, facilitators, research assistants, etc.

4. Research results

4.1. Four models of people research.

From the study, the author found that people researches are conducted in 4 models as follows:

4.1.1 Thai Baan group based their researches on the utilization of local wisdom.

This model based on local knowledge, initiated from villagers around Pak Mun swamp area in Ubon Ratchathani and Sisaket provinces, who are affected by the government projects of Rasi Salai dam construction. These villagers try to rehabilitate local wisdom and indigenous knowledge, as well as showing the impacts from the development by data collected in their research. In the case of Pak Mun, after people protested against the closure of the sluice gates, the government temporary opens only 8 of the sluice gates. From their research process, they found the diversity of fish species returning to 156 kinds in the period of opening the sluice gates, comparing to 31 kinds of fish species in the closure period. In addition, they found 342 kinds of herbs in the wet land around the area of the dam.

In the Rasi Salai dam case, the research was carried out by Thai Baan researchers from 36 villages affected by the construction of the dam. The research topics were selected from the brain storming sessions among local villagers including:

- (1) The social and culture characteristics of dwellers in Rasi Salai freshwater swamp forests,
- (2) The ecology of the Rasi Salai freshwater swamp forests,
- (3) Local faunas in the Rasi Salai freshwater swamp forests,
- (4) Biodiversity of the fish species in the middle Mun River Basin and the Rasi Salai freshwater swamp forests,
- (5) Fishing gears: local wisdom in the utilization of tools, rights and the way of life in the freshwater swamp forest,
- (6) Rasi Salai freshwater swamp forests: the ancient salt pits,
- (7) Agriculture in Rasi Salai freshwater swamp forests,
- (8) Traditional water management, and
- (9) Cattle raising in Rasi Salai freshwater swamp forests.

From these researches, it is obvious that the freshwater swamp forests are one of the most fundamental resources for villagers from the villages living around the forests. Local communities utilize resources in the forests year round, as a saying of Thai Baan researchers goes "the freshwater swamp forests are like our supermarkets, our food cabinets". They also provide the sources of herbs, raw materials for different uses; salt which is an essential mineral for both human

beings and animals, as well as contribute to security and livelihood of local villages in terms of their food security, health and economic security. (Thai Baan researchers, 2006).

4.1.2 Research by farmers under the support from Sustainable Agriculture Foundation (Thailand) and Alternative Agriculture Network in Thailand (AAN) which conducted research to develop many aspects of knowledge concerning sustainable agriculture.

Sustainable Agriculture is a way of farming system that rehabilitate natural resources and maintain the balance of ecological system to produce good and sufficient food for the better quality of life of the farmers and the consumers. The sustainable agricultural system would support the independent development of farmers and local communities for the happiness and survival of human being as a whole.

4.1.3 People Research and Development (PR&D).

People Research and Development, (PR&D) is the methodology of research and development derived from experiences of rural development in Thailand for more than 20 years of "The Village Foundation". Since 1983 there was paradigm shift of development from developing the people to research and development by the people themselves, through local wisdom, network and community economy and etc. The heart of PR&D is to activate learning process for community, liberating people from thinking of dependency, waiting for help from outsiders, to self-reliance and helping together.

In PR&D, community members will set their master plan together. It is the economic and social development plan of people in the community, which people develop from their learning process (Phongphit, 2003, p. 94). This offers the opportunity for people learning to be researcher, to plan for themselves which based on their need, cultural roots, economic and social capital, their principles of self-reliance to further sustainable development (Raekphinit, 2002, p. 67). Meanwhile the community workers or outsiders will have the new role of "facilitator" who offers convenience, to coordinate or catalyst for new knowledge that comes from learning process of people research and their networks.

Actually, PR&D is the holistic and integral concept and methodology that concerning every dimension of problems in community; which need full participation and social networks of people in community, including from outside the community, for any requirement.

The outstanding by-product of PR&D is SMCE (Small and Micro Community Enterprise), which people generate from the process of learning, when they discover their real "capital". It is the new management to add economic value in their community and it is the beginning stage to self-reliance.

4.1.4 Community based research under the support of Thailand Research Fund (TRF).

The concept of community based research is focused on participation of people in the community in their thinking, questioning, planning and researching for finding out the answer systematically, as well as learning from action research. Community based research did not stress on "output" of the research, or advance knowledge, however, it is stressing on the "research process" as "instrument" to empower people in the community. The objectives of community based research are to empower the people, to develop human resource in developing ideas, concepts and visions and new paradigm for social development based on learning society. The development is viewed from the holistic approach rather than fragmentation, giving priority to information exchange and facts in making decision rather than subjective means, working in team work, including enhancing capability of research process, such as, participatory planning and meetings, recording, analyzing problems, systematization of basic information for local development and connecting to outside resources, such as, government officials, NGOs and etc., for community's support.

4.2 Synthesis of the Characteristics/Methodology of the People Research.

The important characteristics of the people research are:

(1) Research issues and problems relevant to the situation and problem of the people, such as, local resources are destroyed, debt problem, and vocational development problem, are the problems that people in the community must help each other to solve.

(2) The formation of conceptual base or conceptual framework is based principally on the phenomena and experience.

The people research forms the conceptual base or conceptual framework from the foundation of the phenomenon in the local area together with the base of both direct and indirect experiences without the use of conceptual base or theoretical concept following the Western or mainstream scholar concepts. The content of the issues used in the study are determined roughly as a guide from experience or phenomena occurred, such as, the research of resource management developed the conceptual base from the phenomenon of the resources in the community, for example, forest destruction, draught, the lost of fauna from the lost of balance in the ecosystem, and the decrease of the wild water buffaloes in the freshwater swamp forest.

(3) The use of emic qualitative research with various methods, such as:

- The understanding of the present situation of the local area; searching for the information which explain the state of the problems and the environmental conditions of the community and the impacts occurred, usually this is the descriptive research.

- The review of the oral history of the local people which usually has not been recorded down.
- The restoration of the indigenous wisdom; most of the research projects found that the indigenous wisdom must be searched and may integrate modern technology with environmental wisdom.
- The use of action research, experiment, and repeated operation to reach for the conclusion.
- The use of collaborative research and participatory research of the local people.

The research to find out the answer must depend on the participation of concerned people, and also the variety of skills, especially in the process of data collection and operation; so the research turned out to be a co-operation from various hands, for examples, scholars, social workers, village leaders or people from outside organizations.

(4) The people research is integral research which utilizes the relatedness of the problems which impacting each others; as found that though the research issue is started from one issue, for example, the debt problem, but soon found that the problems of the community in the social, cultural, natural resource and environmental, and economic dimensions, often from the causes related to or from the debt problem also, especially the natural resource and environmental problems which relate closely to the way of living of the farmers who are the major people of the country, which depends on the richness of the natural resources. So the restoration of the richness of the natural resources resulted in the resolution of the debt problem of the community. So in such case, the resolution of the debt problem must be done holistically.

4.3 The synthesis of the learning process and the knowledge management from the people research.

The research process builds up many learning processes and knowledge managements; with the practice in the real life situations through various tools and methods to know oneself and the outside world as follows:

4.3.1. **Recording.** The operation of learning of the community starts with the simple activities and related to their needs, such as, money saving, the processing of raw materials, and the natural resource conservation. The operation with the content of these activities will be recorded in both written form and in memory, which will be valuable data to the community later.

The data found in the records usually consist of the details of the activities, such as, the history of the community, the formation of the community, the executive committee, the regulations, the number of the member, income distribution, and others, including the problems and the obstructions occurred in the operation. These recorded data can be utilized in the analysis and synthesis to be knowledge in problem solving and self- and community development.

4.3.2. **Household expense recording.** This record has the purpose for each household to learn its own consumption, which will lead to the reduction of some unnecessary expenses; to produce instead of buying, and the important thing is that this record also strengthens up the relationship within the member of the household.

Mr. Liam Butjantha, a farmer of Ban Na Isan, Chachoengsao province, brought out the household expense recording form which was determined by the community master plan working committee. Every evening, Mr. Liam, his wife and children will sit facing together, everyone promises to speak the truth and start to record the expense of each one on the form. They have done like this for one month and bring it as the basis for annual expense calculation. The data make Mr. Liam stops drinking, smoking and all kinds of gambling, and brings the money for the expense of the kind, 50,000-60,000 baht per year, to pay the debt to the Agricultural and Agricultural Cooperative Bank. Moreover, the family starts to plant everything they eat and eat everything they plant; this reduces much of the household expense, so their living condition improves continually.

4.3.3. **Survey and Questionnaire Form.** This is another tool that the community uses to collect data for self-learning. The tool is one which the villagers and the community are familiar with and have the experience in using it with the government and non-governmental agencies before, the difference is that the community is the one who determines the contents or issues as needed and bring the data to analyze for understanding, correcting, and developing their own community. Comparing with other survey or questionnaire forms that the community had done with outside persons and organizations, it is totally different, because the survey or questionnaire forms used in the community before, the content or issues needed were determined by outside persons or organizations. Moreover such persons or organizations brought the data to analyze outside the community without the opportunity for the community to learn from their own data. They gained nothing from such survey or questionnaire forms.

4.3.4. **Educational visiting.** This is the tool that the community uses to learn the outside world and the neighbors to bring what have learned to apply to suit with oneself. The important thing is that the educational visiting must be the way to prepare the community to have the learning for itself, not to copy. They must analyze and conclude, and to apply in relation to themselves, so the educational visiting will be effective and worthwhile.

4.3.5. **Training.** Training is the tool to learn in-depth data or specific technical aspects both production and raw material processing or even to train the research to the community before starting the research.

4.3.6. **Learning stage.** This is the meeting to share the attitudes and ideas, both formal and informal, which the people in the community use as common learning ground in various matters. Sometimes there are resource persons or outsiders in the meeting. The learning stage is the source for the community to have group learning process and learning from the operation of the community.

These processes are the learning process and the knowledge management of the community which cause self-transforming, aware of their own power and

potential to solve their own problems. This will transform the villagers from “the object of study” or the passive recipients of the instant result of study to be active co-learning who help to give the questions, targets, and the purposes of the learning or the research, relevant to the problems and the needs of the community. The process will increase the skills, the creation and development of the knowledge to the community, and also enhance the strength of the community.

In the dimension of solving the poverty, the people research is the use of the dimension of the intellectual process, the potential of the community, the learning process and knowledge management of the community in managing the economic problem of the community to sustainable self-reliance with the integral characteristics.

5. Conclusion and discussion of the research results

The condition of the people research in Thai society. The people research is more than the intellectual weapon of the people to find the data to solve their own problems, it is used to bargain for power and as political struggle in the public spheres with confidence and dignity. It acts as the representative for the “speaking” or communicating of the people to the society: to hear and to know. It is the speaking of the truth of the people in the name of “research”. In the past, the people spoke but no one listen, no one hear; but the research has information that people in other part of the society, such as, the middle class and scholars, could understand. As has been found that the consumption of research works of the people, actually the major consumers are the outsiders who are scholars or the middle class, so the people research is one of the tools to send the message or the problem or the injustice that the community received and had been done upon. It also the rise of the people to find the way out for the problems that they are facing with, although those problems they may not be the one who cause them, for example, the destruction of the natural resources caused the drought, the announcement of the national park on the working land of the people who live as community for many generations, in some places may be as long as 300-400 years.

The people research is the struggle to seize the space of power in the name of “knowledge” for which formerly only the scholars or the learned people who have the right to use this tool, but now the people research works have proved that the people are able to explain another set of knowledge, another set of truth, of the people. The presentation of the people research shows that the production of knowledge is not the matter of the scholar any more; the people could produce the knowledge. It may be said that it is “alternative knowledge” or alternative ways of knowledge—the same as alternative economics or alternative development, which had always been governed by the scholars, although the people also have the process of learning but was always depressed as subordinate.

So the people research is the construction/the change of the traditional mode of learning to the modern mode of learning to the people and Thai society as a whole; since from the past, Thai society is the society which collects knowledge

through oral mode or story telling. The people research in this manner will cause the collection of knowledge in the new format which is the recording, researching, and incorporating old and new wisdom leading to truly modern society based on the learning and the knowledge management, or the knowledge based society.

References

In Thai

- Bunchai, K. 1998. "Khwam Yakjon nai Chonnabot." (Poverty in Rural Areas). In N. Pechpresert (ed.), *Khonjon Thai nai Phawa Wikrit (Thai Poors in Crisis)*, pp. 137-151. Bangkok: Center for Political Economy Studies, Chulalongkorn University.
- Charoensin-oran, C. 2000. *Wathakam kan Phatthana (Discourse of Development)*. Bangkok: Vipasa Publising.
- Jamarik, S. 2004. "Ngan Wijai phuea Thorngthin kap Krabuankan thang Sangkhom". (Local Development Research and Social Process). In K. Chinawong (ed.), *Riangroy Thoy Khwamkit Ngan Wijay phuea Thongthin nai Phalawat Sangkhom Thai (Organizing Thoughts: Local Development Research in the Dynamic of Thai Society)*, pp. 56-67. Chiang Mai: Thailand research Fund.
- Krongkaew, M. 2003. "Kan Phatthana Chonnabot doi kan Khajat Panha Khwam Yakjon". (Rural Development by Poverty Eradication). In L. Chulasai and M. Santikan (eds.), *Settakit Thai Adit lae Anakhot (Thai Economic : Past and Future)*, pp. 1-13. Bangkok: Chulalongkorn University Press.
- Phongphit, S. 2003. *Withi Khit Withi Tham Phaen Chiwit Setthakit Chumchon. (Method of Thinking and Doing: Master Plan of Community Economy)*. Bangkok: Wisdom Press.
- Phongphit, S. 2002. "Kwa ja Ma Pen Prachaphijai". (On Becoming People Research and Development. In S. Phongphit and W. Nanthasuwan (eds.), *Phaen Maebot Chumchon: Prachaphijai lae Phatthana (Community Master Plan: People Research and Development)*, pp. 1-28. Bangkok: Phum Panya Thai Press.
- Raekphinit, C. 2002. "Sakkayaphap kan Wijai khroong Prachachon". (The Potential of People Research). In S. Phongphit & W. Nanthasuwan (eds.), *Phaen Maebot Chumchon: Prachaphijai lae Phatthana (Community Master Plan: People Research and Development)*, pp. 51-87. Bangkok: Phum Panya Thai Press.
- Thai Baan researchers, 2006. *Rasi Salai: Phumpanya Sitthi lae Withi haeng Pa Tham Maenam Mun. (Rasi Salai: Wisdom, Rights and the Way of Freshwater Swamp Forest on Mun River)*. Chiang Mai: The Southeast Asian River Networks.

Wasi, P. 2004. " Ngan Wijay Thorngthin Pharakit Ku Chat (Local research and the mission of recovering the nation)." In K. Chinawong (ed.), *Riangroy Thoy Khwamkit Ngan Wijay phuea Thongthin nai Phalawat Sangkhom Thai (Organizing Thoughts: Local Development Research in the Dynamic of Thai Society)*, pp. 8-34. Chiang Mai: Thailand Research Fund.

In English

Chambers, R. 1983. *Rural Development: Putting the Last First*. New York: Longman.

Finfgeld, D. L. "Metasynthesis: The State of the Art so Far". *Qualitative Health Research*, Vol. 13 No. 7. September, 2003, 893-904.

Freire, P. 1973. *Pedagogy of the Oppressed*. Middlesex: Penguin Education.

Kolb, D. A. 1984. *Experiential Learning: Experience as the Source of Learning and Development*. New Jersey: Prentice Hall.

Nonaka, I. & Takeuchi, H. 1995. *The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation*. New York: University Press.

Peet, R. & Hartwick, E. 1999. *Theories of Development*. New York: The Guildford Press.

Takeuchi, H. & Nonaka, I. 2004. *Hitotsubashi on Knowledge Management*. Singapore: Wiley.

Verhelst, T. G. 1990. *No Life without Roots: Culture and Development*. London: Zed Book.

Equity Education: A Longitudinal Study Comparing Multicultural Knowledge and Dispositions of Field-Based and Campus-Based Teacher Candidates

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Abstract

Two groups of teacher candidates, enrolled either in a field-based or campus-based program, were measured before and after their first semester of teacher education courses and again at the end of their student teaching semester. The two groups were compared regarding their knowledge of multicultural education issues, dispositions towards diverse populations, and their perception of confidence in teaching in diverse classrooms. MANOVAs indicated that there was a significant increase for both groups in multicultural knowledge after the first semester and that this knowledge was maintained throughout their program. Results also indicated that there was a significant increase in a positive attitude toward multicultural education for both groups after their first semester; however, this positive attitude was not maintained. In terms of perceived confidence in teaching, both groups increased after the first semester, and the field-based group continued to increase until the end of their undergraduate program. The findings suggest that the field-based experience continues to impact students' multicultural knowledge and their perceived self-efficacy.

Keywords: multicultural - disposition – efficacy - field-experience - diversity

1. Introduction

Inequality in educational outcomes for all students has been an issue since the inception of the American educational system. The values, commitments, and professional ethics that influence behaviors toward students, families and communities affect student learning (Weiner & Cohen, 2003). Initiating positive change requires 4 key factors: exposure to different cultures, information, first hand experiences, and guided reflection (Garmon, 2004). Early exposure to real life situations and the ability to observe skilled practitioners often has a positive impact on students. When school site personnel and university faculty collaborate to create an effective learning environment results are often positive. The need is great for those who initially train teachers to collaborate with those who hire and supervise teachers. Collaboration is key. Essential to collaboration is a need to determine the most effective model.

Two groups of teacher candidates, enrolled either in a field-based or campus program, were measured before and after their first semester of teacher education courses and again at the end of their student teaching semester. Two groups were compared regarding their knowledge of multicultural education issues, dispositions towards diverse populations and their perception of

confidence in teaching. MANOVAs indicated that there was a significant increase for both groups in multicultural knowledge after the first semester. In terms of confidence both groups increased after the first semester, and the field-based groups continued to increase until the end of their program. The findings suggest that field-based experience continues to impact teacher candidates multicultural knowledge and self-efficacy. The increasing ethnic diversity of American schools demands that educators possess the ability to communicate and interact effectively with those who are different from themselves. Educators must develop attitudes, skills, and understandings which initiate positive outcomes. According to National Education Association (2003) 90 % of all teachers are European – American and 2/3 females. The Department of Education states that the percentage of students of color has steadily increased such that they now comprise 30% of the total school population. Further, the U. S. Census Bureau (2000) indicate that among children and adolescents enrolled in schools in 2000, 65.1% were White, 15.5% African American, 13.2% were Latino, and 4.6% were Asian American. These data also project that the minority population will outnumber the white majority by 2050. This disparity of ethnicity between teachers and pupils is unlikely to change (Bennett, 1999).

Even with the past efforts of desegregation, the most common type of student body is racially homogenous. Lewis, (1995) indicated "A study of enrollment patterns in Illinois public schools reported that 70% of African American children attended schools that were at least 75% minority students. Sixty percent of Latino students attended schools that were at least 75% minority. Only 8% of African American and 18% of Latino children attended school in districts that were less than 25% minority" (p. 14). Nationally, about one third of African American and Latino students attend schools that are 90% to 100% minority (Orfield & Yun, 1999). "White students are the most racially isolated or most likely to attend schools that are overwhelmingly populated by members of their own racial group" (Sleeter & Grant, 2007)

Because of the diversity within our student population, teachers must be prepared to positively interact with all students. In most cases, the life experiences (influenced by ethnicity, gender and economic status) of teachers and students vary greatly from each other; and, according to Bennett (1999), life experiences are a primary influence on an individual's perceptions, ideals, and world views.

The vast majority of college students (white middle class) who enter teacher education programs are ill-prepared to teach children with backgrounds different from their own; and these students have little knowledge about, and experience with, different ethnic groups (Zimpher & Ashburn, 1992). In classroom interactions, differences in socio-cultural factors between teachers and students often become impenetrable obstacles to effective teaching and learning. When selecting learning examples and illustrations, teachers tend to draw from their own personal experiences and cultural frames of reference. These are more often irrelevant to culturally different students (Rodriguez, 1993). Change efforts must take into account the life experiences of the students. Institutions charged with the responsibility of preparing teachers have a moral and ethical responsibility to prepare teachers to be culturally responsive," that is, to enable teachers to respond to the educational needs of their diverse student populations by planning and developing culturally rich curricula and by using instructional

methodologies that are based upon knowledge of how culture influences cognitive styles” (Smith, 1998).

The traditional teacher education training programs provide limited opportunities to broaden life experiences that extend beyond awareness to application and interaction with school-aged children. These traditional programs require less than one fourth of teacher candidate training to take place in actual classroom teaching or apprenticeship situations (National Center for Research on Teacher Education, 1991). Although NCATE (2002) guidelines encourage the preparation of teachers that demonstrate the ability to effectively address students from diverse backgrounds often programs do not integrate multicultural education in thorough, persistent, and overt ways for adult learners (Jung, 1993).

Information alone does not necessarily alter or change attitudes or actions. To maximize effectiveness, knowledge and contact in a friendly and supportive environment is necessary to accelerate the process of gaining tolerance and reducing negative attitudes (Allport, 1958). Successful endeavors depend greatly upon timely application of theories, types of environments, appropriateness of methodology, and pre- and post-dispositions of candidates. To overcome the rigidity that often characterizes candidates perspectives on issues concerning teaching and diversity, scholars have acknowledged the need for extended field experiences early in teacher education program (e.g. Birrell, 1994). Holt-Reynolds (1992) has pointed out that field experiences enable teachers to link university coursework with classroom instruction in ways that increase the utility of knowledge with classroom instruction gained during pre-service programs. The early, extended field-based experience, peer tutoring, mentorship, collaboration, and on-site classes should be designed to reinforce theory with practice.

In a previous study, Thompson, Bakken, and Mau (1998) conducted a cross-sectional study comparing field-based preservice teachers with campus-based preservice teachers in the areas of multicultural knowledge, attitudes toward multicultural issues, and perceived confidence in teaching in a diverse setting. Results indicated that significant changes occurred for both groups (field-based and campus-based) after their first semester in the teacher education program in which both groups were enrolled in a multicultural education class (but no between-group differences). For those students who were preparing for their student teaching semester (at the end of the teacher preparation program), there were significant differences between the two groups in their knowledge of multicultural education, suggesting that the field-based students maintained their level of multicultural knowledge whereas the campus-based students did not. Although differences in disposition toward diversity issues and confidence in teaching in an ethnically diverse classroom were not significant, the trends were in the same direction.

Therefore, in the present study we decided to follow the same candidates in the two programs from their first experiences through their final student teaching semester. We examined these two different focuses of training teacher candidates in One program was campus-based and concentrated on theory with limited field experiences; the second program was field-based and with an extended field experience component and limited theory. Both groups followed the same sequence of courses.

We asked the following questions: Among teacher candidates

1. In the area of multicultural knowledge:
 - a. Would there be a long-term effect on multicultural knowledge based on prolonged and early field experiences?
 - b. Would the group with prolonged and early field experiences have more multicultural knowledge than a group with limited field experiences?
2. In the area of dispositions toward issues of diversity:
 - a. Would there be a long-term effect on attitudes based on prolonged and early field experiences?
 - b. Would the group with prolonged and early field experiences have a greater change in their attitudes than the group with limited field experiences?
3. In the area of perceived teacher efficacy:
 - a. Would there be a long-term effect on perceived teacher efficacy based on prolonged and early field experiences?
 - b. Would the group with prolonged and early field experiences perceive themselves to have greater teacher efficacy than the group with limited field experiences?

Start typing the body of your paper here. Papers will outline the issue addressed and research questions, the literature and background to the topic, the analytical frame, the methodology and the research results.

2. Methods

The field-based cohort consisted of 22 candidates and 43 candidates in the campus-based cohort. There were 55 females and 10 males comprising both experimental and control groups; over 90% of the candidates were European American. A total of 11 field-based candidates and 24 campus-based candidates completed all follow-up surveys.

Knowledge of multicultural education issues was measured by a modification of the Survey on Multicultural Education (Sparks & Wayman, 1990), Part B. This section of the survey has a 10-item forced-response scale (e.g., "Do you understand that the diverse perspectives of various ethnic groups and their contributions to society?") that requires a "yes," "no," or "not sure" answer from the participant. Statements were scored as follows: no = 0; not sure = 0; yes = 1. Scoring could range from 0 to 10 points. Attitudes toward multicultural education was measured by a modification of the same survey, Part C. This section consisted of 19 items on a 5-point Likert-type scale (e.g., "To what degree do you believe in providing an understanding of the customs and traditions of diverse cultural backgrounds?"). These items were scored from a -2 for "strongly disagree" to a +2 for "strongly agree." Scores could range from -38 to +38. The survey is straight forward in the content of the questions; therefore, only face validity has been established for the instrument. Reliability coefficients estimated for this sample were .63 for part B (Multicultural knowledge) and .93 for Part C (Multicultural attitudes).

To measure perceived confidence for teaching, participants were measured on the Revised Teacher Efficacy Scale (Gibson & Dembo, 1984). The survey consists of 20 items on a 6-point Likert-type scale that ranged from a 1 "strongly agree" to 6 "strongly disagree" (e.g., "When a student does better than usual, many

times it is because I exerted a little extra effort.”). Scores ranged from 20 to 120. Internal consistency using Cronbach alphas yielded a reliability of .74. The Teacher Efficacy Scale has been developed and modified over a period of years. Gibson and Dembo report that, as a result of their work, the scale reports convergent validity significant beyond the .05 level, support for discriminant validity, and beginning evidence of construct validity. The authors also indicate internal consistency of .79 for the scale. (See Gibson & Dembo, 1984, for a more complete discussion of the validity and reliability of the instrument.)

The teacher training program is a Block-structured experience, in which candidates take prescribed courses over a period of 4 semesters. It begins with foundations courses which present issues of diversity (Core 1), and culminates in a semester of student teaching (Core 4). For the campus-based candidates, each semester provides limited field experiences. For the field-based group, classes are held on the site of their field assignment, and they spend considerably more time in the school classroom for the 4 semesters of their teacher training program.

The survey questionnaire were given at the beginning of the Fall semester (in which the candidates began their teacher training, or Core 1) to both groups in the cohort and again at the end of that semester. The two groups were assessed for the final time at the end of the final semester of their teacher training (Core 4).

2.1 Field-based group

The field-based group were those candidates assigned to a public school site. This group was immersed in early and extensive field experiences, concurrent with course work in educational theory and methodology. The block structure remained; however, considerably more time is spent with application in the school classroom. For the first two Cores, candidates spend 15 hours per week on site: 4-5 hours in on-site content coursework and 15-16 hours in the elementary or middle school classrooms. For Core 3, candidates spend 10 hours per week on site (3 hours in content coursework and 7 hours in the classroom). Core 4 candidates spend 35 hours per week on site (one hour of this is in the university classroom), working in the classroom and performing other professional responsibilities. Field-based candidates were assigned to work with an experienced certified classroom teacher (clinical faculty associate). Clinical faculty associates (CFAs) involved the candidates in grade-level planning, applications of theory, and classroom experiences. Classroom experiences included tutoring, small group instruction, instructional design, and action research. These candidates were expected to become participating members of the on-site team; they built long-term relationships with staff, students, parents, and community members.

2.2 Campus-based group

The campus-based group had limited exposure in the public schools until their student teaching semester. They followed the course of study for the Block program, which included field experiences in the schools. The block program is a result of a carefully reviewed and systematically revised program that organizes the content into four sequential blocks of coursework. Weekly field experiences integrate courses within each block with application to the profession. The first set of professional courses (Core1) provides a firm footing in the understanding of human diversity. It blocks together three perspectives of diversity -- culture, development, and ability -- in one semester with a one-hour field experience which integrates knowledge from all three. The second set of professional courses (Core 2) focuses on general issues of curriculum, instruction, and evaluation and also includes a one-hour field experience. The third set of professional courses (Core 3) focuses on content- specific curriculum and methods with a two credit hour pre-student teaching field experience. The fourth and final block of professional courses (Core 4) consists primarily of student teaching. Each Block provides a field experience, in which the candidates spend a portion of their time observing students in the classroom and implementing the strategies and techniques that they learn in their courses. During Cores 1 and 2, they spend 1 hour a week in their field experience, in Core 3 they spend 2 hours a week in the field, and it is not until Core 4 that they spend an extended time in the classroom.

3. Results

Multivariate analyses of variance with repeated measures (MANOVA) were used to examine the within-subject (Time; pretest vs. posttest vs. follow up) and between-subject (Site; Field vs. Campus) differences. Results of MANOVA indicated a significant within-subject difference [$F(6, 28) = 13.43, p < .000$]. There were no significant between-subject difference [$F(3, 31) = .74, p < .54$], neither the interaction effect [$F(6,28) = 1.61, p < .18$]. Consequently, univariate tests indicated a significant within-subject difference in multicultural knowledge [$F(2, 33) = 20.89, p < .000$], multicultural attitude [$F(2, 33) = 6.83, p < .002$], and teaching efficacy [$F(2, 33) = 6.51, p < .003$]. Tests of within-subject contrasts also indicated a quadratic Time*Site interaction [$F(1, 33) = 4.24, p < .047$].

Post hoc follow-up analyses showed that, regardless of site, significant differences were found between follow-up test ($M = 9.28$) and pretest ($M = 7.13$) in multicultural knowledge , between posttest ($M = 32.86$) and follow-up test ($M = 26.90$) in multicultural attitude , and between follow-up test ($M = 85.07$) and pretest ($M = 79.00$) in teaching efficacy. Results of post hoc analyses also indicated a significant difference in teaching efficacy (see Figure 3) between posttest ($M = 86.08$) and follow-up ($M = 79.25$) test for Campus-based students only.

There were several potentially important findings from the current study. First, in the areas of multicultural knowledge and disposition towards diversity, there was a significant change in both the field-based candidates and the campus-based

candidates after their first semester in the teacher preparation program. However, there were no significant differences found between the two groups. In other words, it appears that both approaches were effective in impacting multicultural competencies. Second, there was also a significant change in candidates' perceived efficacy in teaching after their first semester in teacher education regardless of the approach. This suggests that both methods were effective in increasing perceived teacher efficacy. Third, the data indicated that in the area of multicultural knowledge, candidates in both groups retained the gains made during their first semester to the end of the undergraduate program. However, candidates in both groups decreased in their attitudes toward multicultural issues to a level lower than the attitudes they held at the beginning of their program. Results of this study indicate that, unless a guided, specialized, and sequential multicultural curriculum component is included each semester, the positive attitudes gained by early and extended exposure to diverse populations will not be maintained. And fourth, the data suggest that the Field-based candidates continued to increase in their perceptions of teacher efficacy throughout their undergraduate program whereas the Campus-based candidates increased from the beginning to the end of their first semester, but did not continue to increase in their perceptions of teaching effectiveness after that time. This extends the findings from the cross-sectional data (Thompson, Bakken, & Mau 1998) and notes the long-term impact of the field-based program on candidate perception of teacher efficacy.

Tentative conclusions that can be drawn from this research suggest that field-based programs may not be conducive to changing candidate ' knowledge and dispositions toward multicultural issues any more than a campus-based program; the value of field-based programs may come in contributing to candidates ' growing confidence in their capabilities to teach in a pluralistic environment.

There are several limitations inherent in this study. First, the numbers of candidates is not large and, in fact, getting measures for the three data-collecting times resulted in a considerable attrition. The results would have been more significant if all the candidates who started and completed the undergraduate teaching program participated fully in the study. Second, the field-based program assumes that those public school teachers who serve as cooperating teachers for the students are truly "master" teachers. It could very well be possible that the teachers themselves did not provide the kind of modeling necessary for long-term change in candidates' disposition toward students who were different from themselves.

Although these findings point out the need for much more research in determining the relevance of field-based programs, the current study suggests that field-based programs have an impact on candidates' multicultural knowledge. Of even greater importance, field-based programs may be a viable vehicle for building candidate ' confidence in teaching in diverse classrooms. They may provide teacher-education programs with the link needed in preparing teachers to teach a diverse population of students.

No single course or program of study can fill the knowledge and experiential gaps that non-minority candidates have as they prepare to teach. Issues of diversity need to be reviewed, reinforced, and taught throughout the teacher education program in order to impact a more lasting change in candidates' ways

of thinking. As Allport (1958) so eloquently put it: "Information seldom sticks unless mixed with attitudinal glue" (p. 451).

4. References

Allport, G. W. (1958). *The nature of prejudice*. New York: Doubleday Anchor Books.

Bennett, C. I. (1999). *Comprehensive multicultural education: Theory and practice* (3rd ed.). Needham Heights, MA: Allyn & Bacon.

Birrell, J. R. (1994). *The influence of prior experience on beginning preservice education teachers*. Paper presented at the annual conference of the American Education Research Association, New Orleans.

Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, *76*, 569-582.

Sleeter, C.E. & Grant, C.A. (2007). *Making choices for multicultural education: five approaches to race, class, and gender (5th ed.)*. Hoboken, NJ: John Wiley & Sons, Inc.

Holt-Reynolds, D. (1992). Personal history-based beliefs are relevant prior knowledge in course work. *American Educational Journal*, *29*, 325-349.

Jung, B. (1993). Curriculum development: Teacher empowering and professional. In M. J. O'Hair & S. J. Odell (Eds.), *Diversity and teaching: Teacher education yearbook* (pp. 285-299). Fort, TX: Harcourt Brace.

Lewis, J. H. (1995). *Preserving privilege: Inequity of the Illinois educational finance system*. Chicago: Chicago Urban League.

National Council for Accreditation of Teacher Education. (1992). NCATE. Available: <http://www.ncate.org/projects/draftsta.text>

National Center for Research on Teacher Education. (1991). *Findings from the teacher education and learning to teach strategy*. Lansing, MI: College of Education, Michigan State University.

National Education Association. *Status of the American Public School Teacher*. Washington, D.C.:NEA, 2003

- Orfield, G., & Yun, J. T. (1999). *Resegregation in American Schools*. Cambridge, MA: The Civil Rights Project, Harvard University.
- Rodriguez, H. R. (1993). Every child can learn. *Momentum*, 24(2), 51-52.
- Smith, G.P. (1998). *Common sense about uncommon knowledge: the knowledge bases for diversity*. Washington, D.C., AACTE Publications.
- Sparks, W., & Wayman, L. (1990). *Multicultural understanding in physical education*. (Report No. ED 318584). Ypsilanti, MI: College of Education, Eastern Michigan University. (ERIC Document Reproduction Service)
- Thompson, J., Bakken, L., Mau, W. C. (1998). Comparing interactions of field-based and campus-based preservice teachers. *Teaching Education*, 10, 67-75.
- United State Census Bureau. (1998). *Current population survey: School enrollment-social and economic characteristics of students*. Washington, DC: U. S. Department of Commerce.
- U.S. Department of Education (1994). *Mini-Digest of Education Statistics*. National Center for Education Statistics. Washington, DC: Author.
- Zimpher, N., & Ashburn, E. (1992). Countering parochialism among teacher candidates. In D. Wilworth (Ed.), *Diversity in teacher education* (pp. 40-62). San Francisco: Jossey-Bass.

The Quest for Understanding: Student Methods in Poetry Class

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Abstract

This paper examines students' study methods in Introduction to English Poetry class in Thailand in an attempt to improve student performance. Its findings suggest that cultures, local and global, shape students' approach to the texts and affect classroom communication. Students' written descriptions of their learning processes are analyzed with corroboration from observation. Suggestions based on actual adjusted lessons are given for addressing problematic approaches to poetry found such as an almost exclusive focus on words in uncovering meaning which frustrates their attempts to understand the text. When introduced to methods that require active and individual engagement with poems, students show a marked sense of empowerment and range of creativity.

Keywords: poetry – English – Thailand – students – culture.

1. Poetry in the Classroom

"I first read poetry as Christmas carols when I was in primary school, in 4th grade." This response, the first thing students were asked to share at the beginning of the Introduction to the Study of English Poetry course, shows that students bring poetry into the classroom. The list runs from nursery rhymes and songs to Housman and Shakespeare, seen or heard everywhere from on Valentines and exams to in gifts and *Alice in Wonderland*, with several students quoting entire stanzas from memory. No one was encountering a poem in English for the first time.

English may be a foreign language, but poetry was not. Prince Bidyalongkorn argued in 1925 that "there is a natural aptitude for poetry which is general" in Thailand, then called Siam, "not only among the intellectual classes, but among the unlettered peasants themselves" (1). Eighty-two years later a Chulalongkorn student would write: "For me, poetry is a language: it is not Thai, English or any language that is used in poems, but it is language itself." This Thai affinity for poetry was confirmed for about one month into the semester before students began to express frustration about the class.

1.1. Communication in the Poetry Classroom

Teachers know that each person has his or her way and pace of learning, and the last thing we want to do is tell students how to learn. Yet this question of *how* has become a key point that occasioned this study. To simplify a familiar model for the purposes of discussion here, in English poetry class, communication involves at least three groups of speakers with something like the following relationship: text→student, text→teacher, student↔teacher, student↔student. And as mentioned earlier, each interlocutor brings poetry as well as a set of cultures with him or her to the classroom discussion of poems (text) read. When students repeatedly demanded “guidelines” for understanding poetry because this was an “introductory” course even though lessons had been designed to give them just that, the need for investigation arose: *how* were students relating to the text that caused such a diminishing of the positive attitude toward poetry shown at the beginning of the semester?

1.1.1 Students and Text

Describing their studying methods in response to an attempt to find out why student-text communicative relationships were unsatisfactory, students revealed that the text was not saying anything meaningful to them. In other words, they were not getting what they think they should be getting out of the text. Most students are English majors, in their second-year at the Faculty of Arts, Chulalongkorn University. Was the English they were reading not what they were equipped to handle?

The coursebook consists of about forty poems, ranging from 15th-century ballads to contemporary free verse, and includes explanations of literary terms and study questions to help students think about the text. These latter are there because it is anticipated that students will need some help in approaching poetry in forms and styles and from cultures unfamiliar to them. Perhaps this is not the “guidance” students are looking for?

This study focuses on students’ relationship to the text. Information comes from one section of Introduction to the Study of English Poetry class through three consecutive semesters, from May 2006 to February 2008. The course is required for English majors and an elective for others. There are usually 20-25 students per section.

Some recurring themes emerged from the students’ written description of their studying methods in and outside of class. They reveal a pattern of learning that perhaps explains their frustration despite earlier enthusiasm for the subject. In the next section, student feedback on these methods will be discussed more extensively. In the third section several activities are discussed as suggestions in addressing the problems. In the final section, a reassessment is given of the introduced assumptions about culture, the process of learning, and communication in the poetry classroom.

1.1.2 Literature and Background to the Topic

Retalack and Spahr state in their introduction to *Poetry and Pedagogy* that “What poetry has to offer is a compound experience in which the dynamic engagement of self and otherness, of formal discipline and experiment, is played out through the foregrounding of language” (2). This 2006 collection of essays reflects the availability of literature in the field. When poetry and pedagogy are paired, the focus is often on teaching at the primary or secondary level, not tertiary. When it is about college level classes, it is often in an ESL/EFL setting where the attention is on language learning rather than literature.

The Introduction to the Study of Poetry class at Chulalongkorn University is not a grammar through poetry or English through poetry class. Poetry is not a pedagogical strategy to language learning, but the subject of learning itself. But since the students are Thai, whose native language is not English, this literature class does have some EFL concerns, straddling the territories of McGann-Samuels’ and Maxim’s articles. Efforts to evaluate poetry teaching like the UK government’s Ofsted Report similarly “evaluates the strengths and weaknesses of provision for poetry in primary and secondary school” and not in college. And resources and support for poetry teaching such as Poetryclass are geared toward younger students.

Attention to learning in terms of study methods are few in Thailand, especially those that treat English literature classes. To transition students from school to college environments, universities like Manchester provide study guides for its members but not Chula. Other guides regarding literary study method at the college level are either for native speakers or about literary theory.

Learning culture, used here to describe students’ culture of learning in an academic setting, is more often used elsewhere to the culture of the workplace (Conner and Clawson). Perhaps this is because we assume that classrooms already have a learning culture, and even if they do, we do not question what kind of learning culture it is. Literature that refers to learning culture in the classroom usually does not look at the tertiary level (“Learning and Teaching”).

1.2. Methods

After students voiced their difficulty in studying poetry, they were asked to write down their studying methods. Further observation in class and individual (one-on-one) and group meetings with students provided additional information and corroboration of student self-description. Following analysis of these methods, lessons were reviewed and adjusted to respond to the problems. Aside from close reading of poems and discussion in class, students recite poems, write their own, draw, listen to audio and visual clips, give individual presentations on topics relevant to class discussion, and write a final paper in groups of three or four.

2. "Trying to Understand": Student Methods 1

2.1. Focus on the Word for Meaning

2.1.1 Denotation v. Connotation

"Trying to understand the poem" was a phrase that appeared again and again in student written feedback. This was the second most frequently mentioned concern when describing studying methods both inside class and outside of it. The most cited item both as a method of studying and as a method of "trying to understand the poem" was reading (and rereading) and consulting the dictionary. A typical approach is "When I study poetry outside class, first I will read the whole poem once. Then, if there are words I do not know, I will use a dictionary and then I will read the poem again once or twice."

Students' quest to understand is misguided by this perception that the unit of meaning that will unlock the message of the poem is the word. "If I see any unknown words, I look it up in the dictionary." This is true for many. During individual consultation hours, they come to me with a poem completely glossed but completely still obscure to them, at a complete loss as to what to do next.

Focusing mainly or only at the word for meaning is a problem in reading and appreciating poetry (in any language). At the beginning of the course, one student writes "How can one describe or explain one's feeling when words are not enough? One uses poetry." This paradoxical explanation highlights the intriguing quality of poetry, that it is somehow words and more than words. Yet when studying it in earnest, they dismiss the "more than words" aspect of poems.

Connotative abstraction is eschewed for the more solid denotation. Students focus on the word for meaning (a characteristic of low context communication) yet needs to derive meaning from more than words (high context communication). Poetry is composed of words, yet, how much can we say that the "message" meaning comes from those words only? Is how the words are arranged on the page still about words, or within the domain of words? What about font type and size or order?

Poetry creates a situation where all we have are words. Handicapped in terms of context (readers cannot see the speaker's facial expression, observe the gender, age, or surroundings of the speaker) yet highly contextual, poetry demands more from the reader than students are prepared to give. How to perceive tone with only the physical words as your guide? Cummings' play with typography makes use of available physical context while Shakespeare's verse and others' often make use of cultural context (that time and place, that audience). Poems are speaking to students with more than the limited student methods are allowing them to perceive.

2.1.2 Dictionary Use

Stemming from the focus on the word as holder of meaning is this recourse to the dictionary as the explainer of meaning. "I also look up words I don't know." This is both good and bad. It is good that students are looking up unknown words, but words that look familiar may have an unfamiliar meaning or usage. Looking up only words they do not know could prove damaging in a literature class, especially in poetry. Dated terms used by Shakespeare or Milton like "foolish" meaning "innocent" or unfamiliar uses of a term like the intransitive "steal" that does not mean "to rob" but "to move stealthily" will escape students altogether.

The first denotative meaning is the primary information students look at in the dictionary. Pronunciation, part of speech, multiple definitions, usage are of infrequent interest. Etymology is unheard of. This narrow awareness of word information further limits the already inadequate focus in finding meaning.

Problems with dictionary use have to do with not only how it is used, but also what is used. Students' range of dictionaries is limited. A generation of dictionaries are popular in the 21st century that was unseen twenty years before. The tool of preference among students for looking up vocabulary is the electronic dictionary or, colloquially, "talking dict." Overreliance on the talking dict, which famously includes some thirty or forty print dictionaries in one palm-sized machine, spoils learners who feel they do not need to discover other references. Such tendencies foster a learning culture that is not resourceful or inquisitive.

2.2. Self-Blame, Language Barrier

Charles Bernstein, in his parodic "The Difficult Poem," exaggerates the insecure readers' voice: "What am I doing to cause this poem to be so difficult?" (149). The absurdity of the question disturbingly amplifies an intro poetry student's actual statement: "I know I'm not good in English so I have to find the meaning of some difficult words." Students blame their own inadequate English not as the cause for the poem's difficulty as Bernstein comically observes, but as the reason for not understanding the poem, which is close enough. The poem itself is not difficult. We only think it is difficult because our English is so bad. This astonishing self-beating occurs most often in English minors.

Students beat themselves up about their low proficiency in English. More seriously detrimental to learning than not being proficient in language skills, however, is if they are not proficient in learning skills in the first place. It is one thing not to know something, but it is worse not to know how to find out. Good students or good readers of poetry do not have to be all-knowing, but they do have to know how to equip themselves with desired knowledge.

2.3. Rereading

Students read a poem many times to acquire meaning: "I read the poem not only once, but I read it a couple of times. Sometimes I keep reading it until I can't read it anymore." The act of reading is described as if its mere repetition automatically opens doors of understanding, or is a different thinking for each subsequent reading already assumed?

Rereading is a strategy many students, strong or struggling, use to understand poetry: "I read the poem over and over again to get the idea what the poem is about." Repeated readings are fine as long as readers do not assume that it will necessarily result in greater understanding. If not, students end up feeling frustrated and tired after reading the poem over and over many times, especially if they do not see anything new with the new reading.

A number of students come to the class with nebulous ideals about what poetry is ("Everywhere and everything is poetry"), others choose it over fiction or novels because it is shorter and therefore must be easier to study for, requiring less work (physically and mentally). Those expecting an easy ride in this course are invariably disappointed. All of these notions affect how they approach a poem.

2.4. Speaking

Students are not sure how to discuss literature or poetry, what it entails, what roles they should have in it, why it is better than a lecture where they do not have to speak at all. This is related to thinking of understanding as an end not a process. "So, what is the answer?" prompts from students suggest that they want understanding to be a complete and absolute or finite thing, not a dynamic or subjective process. Even when students participate willingly and actively in class discussion, they still wait for the instructor to conclude at the end of the period what the final say is. This is an expectation that, if unfulfilled, results in many unhappy students and low satisfactory marks for that instructor come evaluation time.

With this attitude toward class discussion that sees little connection between it and understanding, speaking in class becomes somewhat of a role play, an act to keep up rather than a valid and useful method of learning. How, then, to reconcile this in-class behaviour with students' own listing of exchange/discussion/asking friends as the top activity engaged in during class? "I also discuss the poems with my friends to broaden my perspective of the poem." "When I study poetry in class, I will read the poem for many times. Then I will ask my friends how do they understand the poem and compare to my understanding."

Can the above thoughts that link speaking and understanding coexist with the following sentiment?: "I read the poem over and over again to get the idea what the poem is about. I try to understand all the words used in the poem. No matter how hard I try, I still hardly get any idea from the poem." This latter view seems to suggest that the speaker feels there is a definite "message" in the poem that

she must grasp. Finding meaning and understanding are inevitably linked, and the goal of reading.

McGann and Samuels, however, mention that “‘meaning’ in imaginative work,” according to Blake, “is a secondary phenomenon, a kind of metadata” and later themselves assert that “‘meaning’ is important not as explanation but as residue” (173). The point of meaning and understanding of a work of poetry, for these readers and writers, is not placed so high nor given such finality.

2.5. Meaning and Influence

Poets draw upon a large and dynamic store of information and experiences in writing their poems. In an interview, Hass mentions Czeslaw Milosz, Tolstoy’s *Anna Karenina*, Ernest Hemingway, Emily Dickinson, Ovid, the Arabic world, and Muir as his prior text. Meaning is understood as a constellation of literary influences that no word adequately embodies and no dictionary can suitably clarify.

In this perspective, the vaster the network of data, the better the communication no matter what facet of the poetry class model you want to improve. Hass explains:

I think art is an echo chamber: you pull from experience and you pull from everything you know about the arts...I think one of the ways influence works, you are kind of working for an area of feeling or thought and then a model flickers through your mind. It’s like the writers whose work you know well help to give you a vocabulary to get what you’re after. Milosz’s technical range is enormous, and his ambition for poetry is enormous. All of that was inspiring.

Lewis Carroll makes fun of this intimidating product of vast information and personal associations of the poet when Alice says, upon reading “Jabberwocky”: “it’s all in some language I don’t know” and “‘It seems very pretty,’ she said when she had finished it, ‘but it’s *rather* hard to understand!’ (You see, she didn’t like to confess, even to herself, that she couldn’t make it out at all.)” (163, 166).

This stigma of incomprehensibility and poetry causes teachers of poetry, regardless of culture, as well to approach the topic with trepidation. The Poetryclass mission statement reads: “taking the fear out of teaching poetry.” In its odd way, Carroll’s Alice seems to be reiterating the sentiment of McGann, Samuels, and Blake earlier: that meaning is secondary to the impression that a poem makes. A few students say they need imagination to understand the poems, and they are right. If nothing else, this strategy liberates the reader to appreciating the poetry first and being afraid of it later, if it continues to be an issue at all.

3. Playing: Student Methods 2

Students' understanding of "introduction" type classes was an unexpected problem in class interaction at first because students' idea of what an "introductory" class is (often indicated by exclamations such as "But this is an intro class!") is at odds with the close reading and detailed textual analysis that teachers view as a foundation of literary study and thus an important objective of intro poetry. "The content should not be too much in depth," says one student. "Details in certain ages of literature should be found later on" in more advanced classes. Of course their view of what is considered "detailed" also differs from that of instructors.

Experiments with ways to introduce students to other engagement with the text besides looking up vocabulary in it include the following. When students are asked to draw an illustration of Donald Finkel's "They," they produced pictures that exposed the poems irony, something Thai students usually have a hard time recognizing in English poems. Jagged lines were used in contrast to an illustration of a scene from Keats' "To Autumn" where the lines were curved and colors melding rather than clear-cut. Many drew women which showed their understanding of the personification of autumn in the poem, also usually not easily notices when they are reading the poem normally. This paraphrasing in a different medium or, as McGann and Samuels calls it, "deformance" seemed a useful exercise in close-reading and close-listening.

Reading with a difference exercises attempt to remedy the unproductive rereading phenomenon. Students were receptive when introduced to varied reading: an exercise with Robert Frost's "Road Not Taken" which requires them to go over the text six times but each with a new emphasis. Another suggestion for repeated readings that go nowhere is to slow the speed of reading rather than increasing the number of times to read. This option of reading more slowly fewer times rather than reading at the same pace many times may help frustrated students gain new insight into the text.

Poetry recitals also helped students to hear the poem and pay attention to its sounds, pace, and rhythm in their effort to convey it effectively to listeners. In the first semester students each memorized a poem by selected poets to perform at the end of the course. In the second semester they memorized and recited their own written pieces. The third semester we posted student poems online.

After adjusting pedagogy and discussion to provide more comfortable occasions where students can be in control of their language turns the table from them trying to understand to trying to express. They seem more confident when working on their final paper. The findings include the impression that students do have an affinity for poetry after all. "I enjoy it," they say, and ask to hand in poems they have written even though they were not for grade and completely voluntary work. The poems are not bad and shows the effort put into them. Even students from other fields such as science willingly participate. Students also memorize poems to share at the end of class and generally enjoy the activity.

An inadvertent finding is an elaboration of the Markus-Kitayama study of self construals, where it is argued that Asians tend to have interdependent sense of self while Westerners such as Americans tend to be more individualistic. It must be emphasized that the two types are not mutually exclusive since student performance in these three classes show that they are eager to share their own work, not shy and speak confidently in front of class. They even joke and entertain. They are willing to experiment, dare to explore, and use language to express. Their written work (even on four individual critical assignments where they tend to conform the most) shows that they are not afraid to be different. There is no particular striving to conform for the sake of conformity or harmony, and they do value uniqueness and originality, even proud of being different.

4. Understanding Students' Learning Culture

Thais are not unique in their belief of poetic innateness. Vietnamese are said to be born composing poetry. Indians also consider themselves very poetic, as do Italians. Yet despite such affinity for poetry, its study is more often than not seen as a chore and met with little enthusiasm.

Teachers of poetry can make use of students' background; whether they realize it or not, students come in with some previous exposure to poetry in English, be it through nursery rhymes, songs, films, or entrance exams. This latter is one reason why, as Maxim points out, many students have not had positive prior experiences with poetry in English (258).

Yet, activities that introduce them to a greater range of approaches to the poetical text seem to empower the students. "When we learnt the poem 'They,' the instructor gave us paper to draw our picture when we read this poem. It's very fun." In the two semesters that I have included poetry writing, there has been positive feedback: "I like it," "I enjoy it the most." While they may balk at the difficulty of poems being studied, they take the writing of their own English poems in stride. The success of the Srinakharinwirot class of poetry writing in English open to the public also supports this. Students renew their sense of excitement toward poetry and feel more engaged.

The communication model given in section one should then be revisualized to illustrate the cultural dynamism that takes place in the classroom. Discussion among students and teacher about the text results in increased intersection of the contextual set speakers bring with them to the table. The poem text itself may not change, but certainly readers' perception of it may, and readers' cultural spheres as well, merging in parts gained through shared experience and exposure to each other's input.

Informed by this shifting interplay throughout the semester, students are required to negotiate and absorb a multitude of cultures: national (Thai, American/Western), historical, generational, digital, academic (how to study ex. read, write, listen, speak, conduct oneself at the college level; what office hours are for; how to use faculty members), popular, ethnic, high-low context, individualistic-collectivistic. The list goes on. Perhaps it is not surprising, then, that students become overwhelmed and feel at a loss, especially when class

takes into account, or recognizes, only a fraction of the demands being made on the student. And this is only in terms of culture.

In the quest for understanding, new technologies may increase the speed and the amount of information one can access to aid us. But the understanding itself is a cognitive process that does not follow technological rules and cannot be upgraded so easily with a few keystrokes. Its time maybe a split second or several hours, days, or years. For these students, having grown up in the age of MTV and global realtime chat, the barrier to learning and understanding is not so much language as the learning process itself. Their culture of learning, more highly computer-assisted and shaped by multiple-choice exams and test prep courses, is an education with global and local aspects that the business of teaching has perhaps not yet adequately studied. The findings of this study suggest that in this matrix of poetry, communication, culture, and student methods, culture is a trickster. It keeps those attempting to catch it constantly on their mental toes. As long as it is alive, like language and the imagination, it gives poets never-ending fodder and has poetry classrooms around the world growing in unexpected spurts.

References

- Bernstein, Charles. "The Difficult Poem." *Poetry and Pedagogy: The Challenge of the Contemporary*. Eds. Joan Retallack and Juliana Spahr. New York: Palgrave, 2006. 148–50.
- Bidyalongkorn, H. H. Prince, and M. C. Chand Chirayu Rajani. *Essays on Thai Poetry*. Bangkok: National Culture Commission, 1981.
- Bidyalongkorn, H. H. Prince. "The Pastime of Rhyme Making and Singing in Rural Siam." *Essays on Thai Poetry*. Bangkok: National Culture Commission, 1981. 1–34.
- Conner, Marcia L., and James G. Clawson. "Creating a Learning Culture." *Transforming Culture: An Executive Briefing on the Power of Learning*. The Batten Institute. Darden Graduate School of Business Administration. 2002. 30 April 2008 <http://agelesslearner.com/articles/lc_connerclawson_tc600.html>.
- Conner, Marcia L., and James G. Clawson. "Creating a Learning Culture." *Transforming Culture: An Executive Briefing on the Power of Learning*. The Batten Institute. Darden Graduate School of Business Administration. 2002. 30 April 2008 <<http://darden.edu/batten/clc/Articles/clc.pdf>>.
- Carroll, Lewis. *Alice in Wonderland and Through the Looking Glass*. New York: Grosset and Dunlap, 1974.
- "Excellence and Enjoyment: Learning and Teaching in the Primary Years." Primary National Strategy. Department for Children, Schools and Families. United Kingdom. 2004. 30 April 2008

<http://www.standards.dfes.gov.uk/primary/consultants/trainingpacks/miscellaneous/953833/pns_landt052204learnculture.pdf>.

Freeman, John. "From Poetry Front Man to Award Winner." Interview. Robert Hass. *Online Journal*. Poetry Foundation. 8 April 2008 <<http://poetryfoundation.org/journal/feature.html?id=180531>>.

Markus, H., and Kitayama, S. "Culture and the Self: Implications for Cognition, Emotion, and Motivation." *Psychological Review* 98 (1991): 224-253.

McGann, Jerome, and Lisa Samuels. "Deformance and Interpretation." *Poetry and Pedagogy: The Challenge of the Contemporary*. Eds. Joan Retallack and Juliana Spahr. New York: Palgrave, 2006. 151-80.

Retallack, Joan, and Juliana Spahr, eds. *Poetry and Pedagogy: The Challenge of the Contemporary*. New York: Palgrave, 2006.

"Study Methods at University." University of Manchester. 30 April 2008 <<http://www.manchester.ac.uk/undergraduate/academiclife/teaching/>>.

Breaking Down Barriers – Building On Potential: Developing Soft Skills Through Collateral Learning

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Abstract

While we struggle in the UK with deeply unsatisfactory literacy and numeracy rates, it is soft skills - the traits and abilities of attitude and behaviour rather than of knowledge or technical aptitude - that employers in all sectors are crying out for, finding them lacking at every level, including graduates at entry level. Despite their importance, these skills continue to be sidelined, primarily because their characteristics are too slippery to be captured by any remodelled version of currently accepted assessment mechanisms. I created Barrier Breakers Methodology (BBM) in response to this problem; over a 5-year period of research, development and piloting, extensive data has been gathered evidencing its capability, value and accessibility as a mechanism for soft skills development and evaluation; in 2007 it won a national prize in recognition of its innovative approach. This paper outlines BBM's content, purpose and position, shares findings from recent case studies, and examines how BBM can benefit students, educators and employers.

Keywords: soft skills – development – evaluation – personal competencies

1. Introduction

Soft skills are 'the traits and abilities of attitude and behaviour, rather than of knowledge or technical aptitude'; these skills are acknowledged by many to be critical determinants of survival in the face of current challenges - the skills that individuals and organisations need if they are to adapt successfully to a globalised, rapidly changing, unpredictable environment.

"Soft skills give us the tools with which to take stock of our situation, take control of our development, and take responsibility for our future"
(Tobin 2006)

This is an entirely different set of competencies to that needed just a few years ago, and soft skills' elusive characteristics refuse to be captured by any remodelled version of the currently known and accepted mechanisms; when this has been tried it has largely met with the success one might expect when attempting to weigh imagination on a set of scales.

Soft skills...

- Are being called the “21st century skills”
- Are the skills that employers want
- Strengthen organisations
- Empower individuals
- Encourage lifelong learning
- Help ‘level the playing field’ of educational and economic disadvantage
- Are essential for genuine equality
- Contribute to reduction of offending behaviour
- Decrease stress & make life more enjoyable...

But here is the paradox: while soft skills are increasingly recognised as the “21st century skills”, all sectors report low levels; yet all sectors – including education and training – sideline them and treat them as non-essential add-ons.

I believe this is primarily because soft skills have yet to be managed successfully, and without an effective mechanism with which to do this, it is easier to relegate them to a low priority, or to avoid them altogether.

2. Barrier Breakers Methodology

Barrier Breakers Methodology (BBM) was created in response to this challenge, aiming to provide a credible mechanism through which activities and environments can be optimised for soft skills development, and progress evaluated and evidenced.

BBM can be applied in a variety of contexts; within an educational context it:

- Identifies the collateral soft skills learning capacity of any learning activity
- Provides method and materials through which to develop this
- Produces robust quantitative and qualitative evidence of progress

BBM is a non-deficit model, based on the premise that soft skills are inherent human capabilities; they are competencies that exist within everyone to some level, and can be used to this existent extent without requiring special knowledge, aptitude, talent or intelligence. Therefore, if a skill is not being used it is not because it does not exist and needs to be ‘input’ by an external source, but because it is blocked and needs to be ‘accessed’. BBM aims to facilitate access to the soft skill by removing the resistance, or barrier, so that it can be used at its existent level, and also to establish a foundation from which it can be further developed. This is a holistic approach to competencies (Gonczi 1994), taking as the starting point a generic approach that concentrates on the underlying attributes, and subsequently combining it with a more behaviourist approach that connects the competence to tasks. Hager (1994) describes an integrated approach to competency-based training and assessment as, *“knowledge, abilities, skills and attitudes displayed in the context of a carefully chosen set of realistic professional tasks (intentional actions) which are an appropriate level of generality”*.

BBM is based on five Barrier Profiles, the 'lenses' through which the entire range of soft skills can be viewed. This framework allows for a narrow field of attention to be focused on five areas rather than on a multitude of individual skills; consequently skills do not need to be defined in anything other than the broadest terms, eliminating the necessity for them to be reductively classified.

Attempts to capture and measure soft skills have so far produced no satisfactory system (Dewson 2000), and definitions that exist are generally cumbersome, and can cause resistance (Irving 2001), hostility or confusion (DfES 2000). BBM allows the phenomenological aspect of soft skills to stay intact – definitions can remain fluid enough to respond to the various concepts that will be attached to a skill according to context, the individual's experience of it, or interpretations of the word itself. Consequently, BBM does not force any skill into one discrete area or attempt to impose artificial limits. Definitions of soft skills can be interpreted quite differently according to context; a study by Strebler (1997) shows that competencies in soft skills areas are difficult to assess because of the way they are defined, overlap with each other, and are relative to particular situations. Although BBM places soft skills within a particular Barrier Profile, this does not define the skill but provides an example of skills affected by that Barrier, for purposes of clarity and evaluation, and on the understanding that, in reality, a skill may straddle different Barriers.

3. Philosophical and Pedagogical Positioning

Even within an organisational context, the experience of soft skills development is essentially one of personal development and as such involves risk for the individual arising from personal disclosure, vulnerability, privacy issues and so on. Respect for the individual within an ethically sound environment is philosophically and pedagogically central to BBM's approach.

Far from effecting positive results, change and development programmes can have a detrimental effect if not handled with awareness. Carl Rogers' work has shown (Thorne 1992) that "humans become increasingly trusting once they feel that their subjective experience is both respected and progressively understood". If a situation makes an individual uncomfortable, not only is it an inhospitable environment for change, but the individual will seek to avoid it, either through direct or indirect means (Deci 1985).

Kiegelmann (1996) argues that the literature on how to handle ethics in qualitative research is inadequate, and stresses that foremost consideration should be given to the dignity of research participants; just as researchers need to question their ethics from these perspectives it is imperative that educationalists and employers are certain that any requests they make for personal disclosures from students or employees, for reasons of qualitative assessment, are not merely legitimate but justified.

Some providers feel that unanticipated learning outcomes are confidential to the student in many instances, and should not be recorded by teachers (LSDA 2004); BBM concurs with this viewpoint. It is intentionally non-intrusive and does

not require personal disclosure, on the premise that authentic change is more achievable if motivation is internally generated rather than being provoked by an external source demanding evidence or introducing a competitive element; this approach is even less desirable when the soft skills learning is being delivered collaterally. Therefore, while BBM provides the opportunity for participants to self-assess their soft skills development, as a means by which to recognise their own progress and achievement, this part of the process is always optional.

BBM is non-intrusive in several respects:

1) The emphasis is on the Barrier Profile, not the individual:

Attention being placed onto the impersonal Barrier Profile makes it possible to undertake an exploration of soft skills issues without any necessity for personal disclosure. Although this may appear to endorse external attribution, it actually provides an environment where change is encouraged but not demanded and monitored, and where attribution can be internal without risking reprisal. If a learning environment is experienced as hostile it will provoke a defensive response, and resistance to change will occur, even when change is in the self-interest (O'Toole 1996).

Attribution theory shows that the key for change is internal attribution (Heider 1958), and change experts agree that people do not resist their own ideas (Boyett 1998). With the Barrier as subject of analysis, the individual is free to draw their own conclusions regarding their own behaviour, to take responsibility through internal attribution, and to discover the advantages in change; under these conditions there is greater likelihood of authentic change occurring, rather than apparent change, when evidence of change is manufactured to satisfy an external arbiter.

2) Definitions are made of a Barrier Profile, not an individual:

BBM avoids defining individuals' personalities or abilities. This contrasts with tests where individuals are labelled as a specific type, which instigates boundaries that can limit potential, and rarely reflects the complexity of any personality (Coffield 2004).

3) External judgements and comparisons are minimal:

Because BBM is neither intrusive nor judgemental of the individual, defensiveness and resistance are reduced. Motivation is internally generated by discovering value in change, rather than being generated by an external source demanding evidence or introducing a competitive element; the motivation to develop a skill is intrinsic, because there are no external consequences attached to proving its development (Chance 1992).

If this is combined with a learning environment that encourages internal attribution, the individual will be more likely to make changes according to their own nature and abilities, plus self-efficacy and performance will improve (Schunk 1983). This approach also encourages meta-learning, the awareness of and ability to direct one's own learning that is necessary for engagement in lifelong learning.

4. Assessment Context

No previous attempts to co-exist qualitative, open ended soft skills with a system of teaching and assessment that holds a diametrically opposite position have produced satisfactory solutions, for various reasons: teachers within mainstream education receive scant support through either training or policy directives to prioritise these skills, and they fear that an emphasis on them might bring an unwanted additional workload (Newstead 2003); teachers in informal educational settings may be aware of the soft skills elements of the work they do, but many of the more qualitative approaches to soft skills assessment are unsuccessful because they produce vague results not grounded in any clear, overall theory. The wide range of assessment tools vary greatly in standard, resulting in an over-complicated, unstructured system, with methods that *"tend to be specific to the individual project and can be subjective"* (Dewson 2000); learners who are expected to engage in a programme specifically intended for soft skills development often find it intrusive, feel uncomfortable about it, think it irrelevant (NIACE 2004), or will fabricate 'correct' responses (Beattie 1999); assessors tend to work within a quantitative framework that demands numerical evidence, forcing the production of statistics even if the figures bear little authentic relationship to the circumstance.

"What we are now doing is creating an industrial culture in our schools, one whose values are brittle and whose conception of what's important narrow...we exacerbate the importance of extrinsic rewards by creating policies that encourage children to become point collectors" (Eisner 2002)

5. Case Study: Barrier Breakers@City Lit 2006

BBM was first published in the report researched and written for the RSA, 'How to Access and Manage Creativity in Organisations' (Tobin 2002), was expanded to apply to all soft skills during the 2003-4 pan-European project 'Creative Renewal', has since undergone an extensive period of research, development and piloting to ensure its validity, and is now being applied to an ever increasing variety of situations: evaluations of environments and processes; management, personal and organisational development projects; education and training programmes in private, public and third sector organisations.

In 2006 a case study was undertaken with adult students at City Lit, London's largest provider of part-time adult education. As BBM is intended to be fit for each individual's purpose and to be relevant to all groups of learners, the broad spectrum of learners and diverse needs of teachers found in the part-time adult education setting of this small-scale case study provided an apposite sample with which to test this thesis, and through which to determine BBM's capability, value, and accessibility:

- 1) Capability: its success in identifying a programme's capacity for soft skills delivery, and the extent to which it can assist the realisation of this; the credibility of the data it generates; the adequacy of its process and materials
- 2) Value: its impact on students, facilitators, the programme, and the curriculum; its sustainability
- 3) Accessibility: its practicability, flexibility, inclusivity and clarity

The case study was undertaken from November 2005 to September 2006, in the context of three programmes that ran from between 10 to 15 weeks, in the department of Performing Arts, Health & Movement Studies. The study (technical, participatory action research) was undertaken through a mixed model - questionnaires, interviews, observation, and assessment - producing quantitative and qualitative data.

6. Research Methodology

The process comprised three stages:

6.1. Assess

Each programme was assessed for its soft skills content, through discussion with the tutor and examination of materials, and consequently ascribed an overall BBM Profile (comprising one or more of the five Barrier Profiles), determining which area the learning and assessment would be focused on. A Provisional Assessment Kit was produced, detailing the BBM Profile, offering suggestions for expansion, and providing assessment materials.

6.2. Evaluate

Each of the five Profiles includes 8 representative soft skills, around which student development is evaluated through scaled questionnaires (rating 0 – 10). An initial assessment was made near the beginning of the programme, once there had been adequate opportunity to gauge levels. During the programme the normal formative assessment that takes place was informed by the BBM approach; final levels were recorded at the end of the programme, when data was enriched with tutor's qualitative evidence.

BBM was developed to provide the means through which authentic development of soft skills can be encouraged and evidenced, and credible, reliable data produced without compromising the quality of learners' experience. Therefore assessment is ipsative, according to the teachers' evaluation of the student's current level of performance related to their potential, and the context. Assessment is not made through comparison with other learners or situations, and rather than a judgement on the individual, it can be seen as a developmental tool for the learner, educator and programme.

Whatever style is used to teach a programme's core subject, BBM identifies and optimises the soft skills element which is delivered in an experiential way, in an environment where there is a reduced risk to self, and where evaluation by others is of secondary importance, which allows for self-discovery and draws on humans' natural potentiality for creativity and learning.

During this stage the researcher undertook an on-site observation of programmes in action to confirm the BBM Profile.

6.3. Optimise

Feedback was gathered from tutors and the Head of Programmes through interviews and questionnaires, to determine their experience of the process; this information was subsequently combined with data gathered by tutors and the researcher to produce a final report. Quantitative evidence produced an overall development level for each programme, derived from progress made by each student and raised levels of each of the representative skills, and calculated as a percentage improvement. This provided benchmarks for future delivery of the programme.

7. Results

The study produced quantitative and qualitative data of soft skills development, which tutors believe captured their programme's soft skills delivery, and was an accurate and useful account of the development that occurred.

While one tutor observed that it may be difficult to explain the approach to an inspector, total confidence in BBM's ability to complement and feed into existing assessment procedures was expressed by the others, and by the department's Head of Programmes.

BBM was found to be time-friendly, even by the tutor whose programme had been allocated the most extensive BBM Profile. As this was the tutors' first encounter with the process it was a positive indication that once staff become familiarised with BBM it would not prove to be burdensome, for either full- or part-time staff.

Tutors found it benefited their practice, allowing them to deepen their consideration of soft skills, and to formalise the formative evaluation of students' behaviours that they routinely undertake. This draws on an underused and undervalued area of teacher's strengths, and an area that for most teachers is not only fundamental to their practice but also to their reasons for being educators, and their enjoyment of the profession.

The materials and process were found to be clear and easy-to use, and the approach was deemed accessible and inclusive; BBM worked equally well with the variety of subjects and student abilities and no tutor reported any problems adapting BBM to suit their subject, cohort, or teaching style.

8. Conclusion

The study evidenced the capability of BBM as a mechanism through which to manage soft skills effectively while still retaining their essential characteristics. It suggests that where other more manageable skills have failed, soft skills promise to inspire energy and create solutions and, with the support of innovative approaches such as Barrier Breakers Methodology, those who determine education and skills policy would be wise to take these complex, powerful, life-changing skills off the sidelines and place them at the heart of the education and skills agenda.

9. References

- Beattie R et al (1999). *Implementing inclusiveness realising potential. Scottish Executive*
- Boyett J & Boyett J (1998). *The guru guide: the best ideas of the top management thinkers. New York: John Wiley & Sons*
- Chance P (1992). *The rewards of learning. Phi Delta Kappan, 73, 200-207*
- Coffield F et al (2004). *Learning styles and pedagogy in post-16 learning: a systematic and critical review. Learning and skills research centre*
- Deci E. L. & Ryan R. M. (1985). *Intrinsic motivation and self-determination in human behavior. New York: Plenum Press*
- Dewson S, Eccles J, Tackey ND, Jackson A (2000). *Measuring soft outcomes and distance travelled: a review of current practice. DfEE Research Report RR219*
- DfES (2000). *Key Skills in Higher Education. Department for Education and Skills*
- Eisner, E (2002). *What can education learn from the arts about the practice of education?* The encyclopaedia of informal education, www.infed.org/biblio/eisner_arts_and_the_practice_or_education.htm
- Goncz A (1994). *Developing a Competent Workforce. Adelaide: National Centre for Vocational Education Research*
- Hager P (1994). *Is there a cogent philosophical argument against competency standards?* Australian Journal of Education, 38, pp. 3-18
- Heider F (1958). *The Psychology of Interpersonal. Relations. New York: Wiley*
- Irving P and Slater A (2001). *The evaluation of soft skills pilots. Employment Service*
- Kiegelmann M (1996) *The Subject Writes Back. Reflections on Ethics in Qualitative Research.*

Leitch (2006) *Review of Skills. Prosperity for All in the Global Economy – World Class Skills*. HMSO: <http://www.hm-treasury.gov.uk/leitch>

LSDA (2004). *Recognising and Recording Progress and Achievement in Non-accredited Learning: Summary of the Evaluation Report on the Pilot Project. April 2003 to March 2004. #36*. Learning and Skills Development Agency / National Institute for Adult Continuing Education

Newstead, S.E. (2003). *The purposes of assessment*. Presentation at one day seminar on Assessment in Psychology degrees, St Barts Hospital, London, 21 March, 2003

NIACE (2004) *Recognising and Recording Progress and Achievement in Non-Accredited Learning: evaluation report on the pilot projects April 2003 – March 2004*. NIACE

O'Toole J (1996). *Leading Change: The argument for values-based leadership*. New York: Ballantine Books

Schunk D. H. (1983). *Ability versus effort attributional feedback: Differential effects on self-efficacy and achievement*. Journal of Educational Psychology, 75, 848-856.

Strebler M et al (1997). *Getting the best out of your competencies: IES Report 334*, Brighton, Institute of Employment Studies

Thorne B (1992). *Carl Rogers*. London: Sage

Tobin P & Shrubshall C (2002). *How to access and manage creativity in organisation: a collection of perspectives*. RSA

Tobin P (2006). *Managing Ourselves – Leading Others*. ICEL 2006 Inspiring Leadership: Experiential Learning and Leadership Development. Journal 12, 36-42. Brathay, Ambleside

Choosing To Lead: The Affects of Culture, History, and Politics on the Motivations of the First Generation of Trained School Administrators in the Bahamas

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Abstract

This effort examined the intersections of motivation, culture, career paths, and educational histories of teachers in The Bahamas. The **central research question** was, "What motivated teachers to enroll in the first training program in educational administration in the history of The Bahamas despite the national lack of financial and cultural, incentives for such an endeavor?" **Methodology** was grounded theory: Individual, open ended interviews were conducted with all 18 students enrolled in this Master's degree program offered at The College of The Bahamas. A constant comparative analysis of the interview transcripts revealed: A) A gender based double standard, B) A fraternal network of policy politicians; C) Enrollment motivations ranged from intrinsic desire to a desire to use the degree in an entrepreneurial plan. Implications center on addressing a) the gender based double standard b) issues of school leadership capacity, and c) the low cultural value of education in The Bahamas.

Keywords: Building leadership capacity - The Bahamas

1. Introduction

The nation of The Bahamas consists of a series of islands stretched for almost six hundred miles in an archipelago that has a history of resisting political, economic, and cultural unity. The fractious nature of this young country's society is due to its geography, history, and the cultural revolution that has grown with this nation's recent independence.

According to Urwick(2002), there is no comprehensive text on the history of education in The Bahamas in existence. And while there is very little ephemeral literature that describes the history of the education of Bahamians (Reid, 1979), it is believed that after 1800, Methodist missionaries had attempted to create a system of general education, but were largely unsuccessful as education in The Bahamas as a British Colony was primarily the province of the privileged class. What raises the significance of the paradigm that colonial education belongs to those of privilege is it's proximity to the present day because The Bahamas became an independent nation in 1973. Reid (1979) makes the powerful and unavoidable conclusion by stating "...that the educational history of The Bahamas

is shameful, is implicit in the fact that writers of Bahamian history frequently make no mention of education." The failure to address education as a national concern formerly ended when during the same year of Bahamian independence from English rule (1973), The White Paper on Education of 1973 was released by the Bahamian Ministry of Education and Culture. This heralded institutional changes at the secondary as well as tertiary level. A new policy from The White Paper that strongly reflected a North American influence was the call to make all government (i.e., public) secondary schools as comprehensive as possible in curriculum and intake, with a strong infusion of vocational studies.

In the fall of 2002, The College of The Bahamas and Kent State University began a partnership to provide a Master's degree in Educational Administration to the first cohort in Bahamian history of current and aspiring school administrators. Of the eighteen graduate students, sixteen were Bahamian. Seventeen of the eighteen graduate students were female. Classes for the majority of the required coursework were held at the College of The Bahamas campus in Nassau, New Providence. Also, students spent one summer semester enrolled in classes offered on the Kent State University main campus in Kent, Ohio. The teaching load was shared between faculty members from both universities; sometimes in a team teaching model.

2. Purpose

The purpose of this study was to examine the unique perspectives of a cohort of educators who are truly pioneers in Bahamian history. The overarching goal for this study was to learn what has inspired this group of graduate students to accept the challenge of leading the charge of school reform in its most exciting stage: infancy. More specific research questions that drove this study are: 1) What are the backgrounds of the students enrolled in this program? 2) What motivated these students to enroll in this program? 3) What goals do these students have in terms of their contributions after completion of the program?

3. Method of Inquiry

This study is a qualitative investigation of the perceptions of eighteen Bahamian graduate students who are the first professionals ever to be formally trained in school administration at a Bahamian institution. Qualitative research is accepted as a viable way to explore and understand social science phenomenon. It is rooted in anthropology and sociology. Various texts have been written on this subject for application in educational environments (Lincoln & Guba, 1988).

Because the intent of this research was to describe and examine, an open ended field study approach was used. The purpose of the investigation determined the framework for the research methodology because the research strategy was derived from the problem, the researcher, and the models (Reinharz, 1979). The technique for gathering data employed in this investigation was the process of in-depth interviewing. Interviews were audio tape recorded and transcribed verbatim with dialog attributed to each speaker. Subjects in this study participated in semi-structured informal interviews about their career

experiences and aspirations as well as their journey in the Master's in Educational Administration program. General questions also were addressed concerning the evolution of both the Bahamian educational leadership, and educational system. The constant comparative method was used to determine major themes, patterns, and categories. These themes were then used as the frame work for discussion. Limitations of this approach center on the fact that interviewees may have been unwilling or uncomfortable sharing all that the interviewer had hoped to explore, or they may have been unaware of recurring patterns in their lives (Marshall and Grossman, 1994). Additionally, because of various differences (cultural or otherwise) between the subjects and the author, responses to questions may not have been properly comprehended by the author. At the time of this study, no such research as been published in this area.

4. Description of Data Source

A total of eighteen people were accepted and enrolled in the Master's in Educational Administration program offered by The College of The Bahamas and Kent State University. All eighteen subjects (100%) agreed to be interviewed for this study. The subjects ranged in age from 24 years old to over 55 years of age. Seventeen of the subjects were female and one was male. For purposes of analysis, participants' interview transcripts were assigned a number (one through nine) and grouped into two general categories: Those who were over forty years of age (OF) and those who were under forty years of age (UF). Throughout the rest of this article, an identifying convention will be used as follows: OF(over forty years of age) and the number corresponding to the transcription of an interview with that subject, or UF(under forty years of age) and a number corresponding to a transcription of an interview with that subject. For example, OF2 refers to a quotation from the Number Two transcription from the group of participants who were over forty years old.

5. Findings

The interviews revealed information that could be categorized into the following themes that form the basis of the reported results and discussion: 1) Educational histories of participants. 2) Professional histories of participants. 3) Participants' motivation for enrolling in the program their career goals. 4) Views related to the relationship between men and the education system.

5.1. Educational histories of participants

When considering the educational histories of the subjects, there was no pattern found linking location of schooling with age. In terms of primary and secondary school experiences, no correlations were found between subjects' enrollment in a public or private schools and their selection of a public or private university. An obvious pattern emerged concerning the subjects' educational histories. It centers on their understanding of the political and cultural networks related to a public high school in Nassau called The Government High School. Of the thirteen

subjects who spent their childhood living in Nassau, five went to The Government High School and seven went to different private high schools in Nassau. The Government High School is a public institution that was built before Bahamian Independence in 1973. During the British Colonial period, this high school served mostly black Bahamians. Its original purpose, determined long before the Bahamian independence of 1973, was to serve the sons and daughters of Bahamian civil servants and ultimately groom them to become cultural envoys between the different communities of people living in The Bahamas. The prestige enjoyed by those involved at The Government High School was based on the understanding that the student population was considered to be the best and brightest in The Bahamas. The best representation of participants views came from Subject OF1 who said:

“Yes it was a big deal to go to that school. it is because you see it was the first government high school after we gained independence in 1973. And I was in the class of 1973, so we were the important ones. We have quite a few people from that class doing extremely well. We have surgeons and magistrates, lawyers, and accountants... We all know each other from the neighborhood. The Minister of Education is a friend of mine from that time. I hadn't seen him for years and he came to my school on business and I extended my hand and he just knocked it out of the way to give me a big hug instead. And the school director just looked at me like “How do you know him?” When the Minister left, my boss said to me that I was not supposed to hug the Minister and I told her that I did not hug the Minister; the Minister hugged *me*. I saw the minister later that month in a parking lot and he was not in his official car, so I told him about what my boss said. He said, ‘Now let me tell you something, you go tell her when we were playing marbles and shooting marbles and things, they ain't been nowhere near there.’ So it does mean something to go back. The old days mean something. He has lots of stories, he is a wonderful man.”

The Government High School may represent for many a benchmark in the country's history when the shift in the political framework, as well as the purpose of educational delivery system, moved to a paradigm based on equality. While it is not the only source point of networks among professional Bahamians, The Government High School also appears to be the progenitor of networks for Bahamians involved in the island's politics after the islands independence.

5.2. Professional histories

The professional histories of the eighteen subjects clearly correlated to the two different age groups of the subjects interviewed. Seven of the nine members of the OF (over forty years of age) are practicing administrators. The majority of the administrators (five of the seven) are principals of public schools. The most obvious pattern between both the OF and UF group is that those people who graduated from public schools are serving as teachers or administrators in public schools. All five of the public school administrators are graduates of a public school in The Bahamas with the majority being alumni of The Government High School.

None of the members of the UF group (under forty years of age) are school principals, although two serve in quasi-leadership positions such as head of

department. Five members of the UF group are employed in public schools and four are employed in private schools. All three of the UF members that are public school alumni teach in public schools. The remaining six subjects are graduates of private schools; some teach in public schools and some teach in private schools. There is no specific grade level (Primary, Junior High, or High School) in which a majority of subjects in both the OF and UF group work. There are administrators (all in the OF group) and teachers (most in the UF group) represented at all levels in relative equity.

5.3. Motivation for entering the program and Career Goals

It is noteworthy that both the Bahamian Education Act of 1996 and The Act to Consolidate and Amend the Law Related to Education Within the Bahama Islands of 1962, do not require that school administrators have a particular license or set of educational requirements to manage a school. When asked about qualifications for administrative positions, subject OF1 shared:

“All you need is your bachelor’s degree and your ten years experience and you’re eligible for the interview. Now that does not mean you will pass the interview and get the job... But you are eligible. The Ministry of Education does not do the hiring. We have another ministry that is responsible for hiring and training all civil servants. So the team of people doing the interview may not all be educators. But the Ministry of Education has a representative at the interview.”

The motivation behind enrollment in the Educational Administration program becomes an obvious consideration when examining the professional histories of the OF group. The average years of administrative service in the OF group is seven years. The average number of years as a classroom teacher in the OF group is twenty-nine. Furthermore, school administrators are not required to have any formal training in educational administration. And there is no salary scale in place that allows incentives for those educators who choose to earn a Master’s degree in Educational Administration. Thus, the combination of the factors above begs the question as to why members of the OF group embark on such an extensive journey of professional development at such a late point in their careers with so little obvious reward. The reasons behind enrollment with the OF group centered on intrinsic motivators ranging from a sense of increased self esteem to validation of the choices they were making while serving in the administrative role. Other reasons stated were for an increased sense of self (OF4) and simply because they had always wanted a Master’s degree and abandoned the challenge in order to fulfill spousal duties such as traveling with their husband or raising children (OF5 and OF14).

In terms of career goals, five of the nine members of the OF group stated that they were exactly where they wanted to be in life and did not aspire to move to any other positions or start a new project. These same five also spoke of the intrinsic motivators related to self esteem and mentioned above. The remaining four members of the OF group mentioned various reasons for enrollment in the program that centered on validating their current practices. However, this group of four mentioned ultimate career goals that ranged from running a school on a Family Island to becoming a government official. The career goals were squarely

centered on efforts to serve their country in terms of filling a void they identified within the educational system. In the words of OF15, "I am doing this because my country needs me... Eventually, I think it would be nice to run a school on a Family Island." Another subject, OF17, was more specific:

"I don't have any desire to be a lecturer at the college. And I do not want to work in The Ministry. I would like to be a trainer, or a trainer of trainers and work with these principals in the field, through our principals' association. I think I have something to share about how to get the job done.

Members of the UF group had a different set of motivators as well as goals. Unlike their counterparts in the OF group who have a majority that serve in public schools as administrators, only two of the nine UF members aspire to be an administrator in a public school. In total, only four members of the UF group mentioned a desire to become principals of schools in the public or private sector. Three of the remaining five members of the UF group see themselves as entrepreneurs and want to start, own, and manage learning centers.

Subject UF2 best represents this view:

"I didn't really want to be school administrator but what I wanted to do is own my own technology school on one of the Family Islands...maybe Exuma...I got the idea from my Mom. She asked me to teach her how to use the computer. And I was like, you know, if I can teach my Mom this, I can teach anyone. Even though technology is changing every day, it is my pride and joy and I would like to go back to my home on Exuma and share what I know. I was able to make my proposal in one of my classes. So when I graduate I can submit it to The Ministry of Education and see if I can get funding. I have the plan, and I am ready to go. Right now I am just waiting to graduate. I think I can help and I intend to do this on my little island. That is where I want to help the most."

Three subjects in the UF group see the principalship as their career goal. One was a product of a private education and two were products of public education. None of the subjects stated a preference for working in a public or a private school. However, statements were made that illustrated the commitment to being an educator. When reflecting on the relationship between how one was educated and what one's career goals are, Subject UF18 said this:

"I went to a lot of different schools, you know. One of my classmates in this program was even my teacher when I was younger! I tell you though, I want to stay and do this because I want to give back. I feel like the support I got... the help I got. That made a big difference for me. And I want to give it back. Now I do it through my teaching and my coaching which is wonderful, but eventually, I could be a principal. Not right now, I am in no hurry. I am enjoying my coaching too much, but eventually I'll get there."

The remaining three members of the UF group viewed the graduate program and the principalship as a requirement to achieve a different goal. Two of these subjects aspire to work at The College of The Bahamas. Also, two members of the cohort, one from the OF group and one from the UF group expressed a strong desire to become involved in the arena of Bahamian politics. Both were

motivated to enroll in this program to in order to earn credentials that would help them move up and into political circles.

5.4. Men and the educational system

The most palpable demographic of this study centered squarely on gender. Of the eighteen members of the cohort, one was a male under the age of forty. The unbalanced ratio of men to women in the cohort mirrors the unbalanced representation of gender in the Bahamian educational delivery system. When asked about the disproportionately small number of men that are educators, all eighteen mentioned salary as the primary factor. The only male member of the cohort said this:

I think it is because men think a lot about families and providing for them. I have to think about that to. When you compare education to other trades like tourism, or accounting, the salaries go farther in the other places. For me, when I decided to go into this I knew what I was getting into. I knew I would not be making as much as my other friends. But I really wanted to do this. You know I am here because of the profound affect my coach had on me. He really made a difference in my life. And I want to do the same for our young men.

Several subjects inferred that the salary, or lack thereof, contributes to the lack of status of the education profession when compared to higher salaried careers in tourism, banking or government jobs. Also, the majority of the subjects interviewed agreed that there is a cultural belief that men are stronger principals simply because they are rarely members of the teaching profession. Additionally, boys are taught culturally that they don't need school. Subject OF17 illustrates this phenomenon by saying:

It is not that there is a view that we don't like women. It is that men are seen as more desirable because they are stronger. I think it is a funny view, but that is how people feel. A lot of the reason why we have so few men I think is the fact that a lot of them tend to always think about 'I don't need an education... I can do well because I wear the pants'. School is for women. You know I don't need to go to school, I am macho. And because the men have been doing certain jobs for so long, they don't need to go into this training or that graduate program. They are going to get there anyway. And We need males in our schools because sometimes our boys need to speak to men about issues. They need to see how men handle things. I think it is a myth that males do a better job of discipline in school.

All subjects agreed that there is a need for more males in the education system, particularly as role models, and that the reason for so few males is that salaries in educational positions are lower than in other career tracks such as the tourism industry. The majority (16) of the eighteen interviewed noted a gender bias related to mobility in Bahamian schools that may be due to the fact that man are valued in Bahamian culture for their influence on boys or because there an existing belief that their gender makes them better disciplinarians and therefore more effective leaders.

6. Discussion

What has been learned from this study is that there were common patterns of participant responses that could be separated into two categories that were related to age. The author explored participants' views on career trajectory and motivations for enrollment as they related to the age of the interviewees. The majority of cohort members who were over forty years old were female practicing administrators. They enrolled in this program for the satisfaction of validating what they were doing and viewed the process as something that would lead to the ultimate personal satisfaction of obtaining a Master's degree. The majority (five of the nine) see themselves at the peak of their careers, while the remaining four wish to embark on projects that fill a void in the Bahamian education system. These projects range from opening a vocational school in conjunction with a church to advocating for special needs students through a political office.

Those under forty years old (all but one was female) were aspiring school leaders who saw this program as a necessary requirement to help them achieve their career goals which was related to meeting a need that the cohort member had identified. It is interesting to note that these goals did not necessarily rest on the principalship in a public or private school. One third (three of nine) voiced a desire to open their own learning centers. One third (three of nine) aspire to be school principals. Of the final three, two aspire to be faculty members of The College of The Bahamas, and one seeks political office.

Participants mutually identified one of the source points of post colonial networks in and among Bahamian politicians and professionals as The Government High School, an institution built long before Bahamian independence that continues to serve families today. Perhaps the most interesting perspectives to come out of this study center on the relationship between Bahamian men and the education system of this young nation. Because salaries in education are low when compared to other professional career paths, men tend to choose careers in that are not in education. Those who do enter education find themselves with an advantage in terms of upward mobility because they are a rare commodity and there is an unspoken belief that males are stronger (and therefore better) principals. The resulting high demand for males coupled with the nonexistent requirements for formal training in educational administration, appears to perpetuate a system in which it is understood that men will rise to the top of a profession regardless of their training. Lastly, it is interesting to note that of the eighteen members of the cohort; only four mentioned that they were interested in administrating schools already in existence.

7. Implications

This study adds to the negligible literature on education in The Bahamas by looking at perspectives of the first educators trained in educational administration at The College of the Bahamas. It is important to mention that the overwhelming majority (seventeen out of eighteen) of cohort members spoke passionately of their preference, and commitment to remain in and work in The Bahamas; some on Family Islands and some on New Providence. The sense of Bahamian pride and nationalism was evident regardless of age, career aspiration, or professional position. At the heart

of this sentiment was a shared understanding among cohort members that they had an opportunity and responsibility to contribute some kind of personal legacy that would become part of their nation's history and ultimately improve the lives of others. This strong sense of commitment fits well within the stated goal of "building capacity" that was articulated by The College of The Bahamas administration (Kent State, 2002)

However, there are deeper levels of consideration surrounding the voiced concept of "building capacity". For example, a majority of the younger generation of cohort members did not voice a desire to serve as leaders in the existing public or private schools. These students instead preferred the idea of creating their own school or becoming faculty at The College of The Bahamas. This phenomenon begs for Bahamians to consider the definition of "building capacity". If "building capacity" means to improve existing public and private schools through formally trained leaders, then the cohort program should be contoured to fit such goals.

There is a recognized need for men to serve as role models in Bahamian schools because education is not seen as a necessity for men to gain employment or promotion in many levels of Bahamian society. Men tend to take positions in career tracks in fields other than Education because the salary is higher and they often earn the primary income in their families. Cohort members expressed their understanding of a subtle societal view that men are stronger disciplinarians and therefore more effective school leaders simply by virtue of their gender. All of these factors contribute to a cultural paradigm that enables the few men in the Bahamian educational system to move quickly into positions of leadership. Questions of equity around this issue could be addressed through multiple avenues including efforts towards salary parity between the field of education and other industries such as tourism and banking.

Because there is currently no monetary reward for those educators who have advanced degrees in educational administration, serious consideration should be given to "building capacity" through the benefits of salary incentives and preference for those people applying for administration positions who have formal training in educational leadership. Recognition and even steps toward requiring training for school leaders should be considered by those involved in the Bahamian education system.

There is a need for a gender balanced recruitment and promotion of teachers and administrators in Bahamian schools. A long term and global investment should be made towards school and community based efforts to help Bahamian families see the value of education for both boys and girls. While there is clearly a passion voiced for improving the educational system in the Bahamas, the views and goals of the first generation of trained administrators demonstrate that there is a need to consider what "building capacity" means within the context of the historic vision created by the White Paper as well as for the future of Bahamian schools.

References

Bahamian Act to Consolidate and amend the Law relating to education within the Bahama Islands (1962).

Amendment to The Bahamian Education Act (1996).

Bowe, E.J. (1968). *Education in the Bahamas: From a socioeconomic viewpoint*. Unpublished manuscript, University of London.

Craton, M. (1968). *A history of the Bahamas*. London: Collins.

Daresh, J. and Playko, M. (1995) Mentoring in educational leadership development: What are the responsibilities of the protégé? Paper presented at the annual meeting of the American Education Research Association, San Francisco, CA.

Hamilton, A & Horton-Wallace, A. (2000). Teacher perception of young black male student performance: Implications for administrators and educational leaders. Paper presented at the annual meeting of the Caribbean Planning Assessment Conference.

Kahn, B. and Cannell, A (1957). *The dynamics of interviewing*. New York: John Wiley Press.

Kent state University (2002). A Proposal for a Master's Degree Program in Educational Administration for Primary and Secondary Settings

Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.

Nassau Ministry of Education and Culture, (1973). *Focus on the Future: White paper on Education*.

Ortiz, F. (1982). *Career patterns in education: Women, men and minorities in public school administration*. New York: Praeger Publications.

Patterson, A. (1983). *Management in training for school leaders: The academy concept*. Bloomington, IN: Phi Delta Kappa.

Peskin, A. (1985) Virtuous Subjectivity: In the participant's observer's I's. In D.Berg and K.K. Smith(EDs.), *Leaders for America's Schools* (pp.360-366). Berkeley:CA: McCutchan Publishing Corporation.

Reid, J. (1979). Higher Education in an emerging nation: The College of the Bahamas as a case study. Paper presented at the Issues in Caribbean Studies Conference, Miami, Florida. (ERIC Document Reproduction Service NO. ED 180 301)

Reinharz, S. (1979). *On becoming a social scientist*. San Francisco: Jossey – Bass.

Shakeshaft, C.(1987). Dissertation research on women in educational administration; A synthesis of findings and paradigms for future research. Unpublished doctoral dissertation, Texas A&M University, College Station, Texas.

Turoczy, A. (1996). The road to school administration: Experiences of a hopefuls in a preparation program. Unpublished doctoral dissertation, Arizona State University, Tempe, AZ.

Urwick, J. (2002). The Bahamian Educational System: A case study in Americanization. *The Comparative Education Review*, 6 (2), 157-181.

Williams, E. (1970). From Columbus to Castro: The history of the Caribbean 1492- 1969. London: Andre-Deutsch.

The Role of Local History in Primary and Secondary Schools today

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Abstract

According to European theories of local history (Stradling, Fowler, Maréchal, Fortin-Debart, Weber) the students, in primary and secondary schools have to become used to inquiring into their own environment to achieve better understanding of the events and life in their own town, their country and Europe. The main research question is to what extent the local history is included in the current curricula of humanistic subjects in Slovene schools and which are the ways of researching local history. The theoretical method – analysis of 30 primary and secondary curricula for obligatory and optional subjects – has been used to find out which are aims, content and teaching methods related to local history. Analysis shows that the contents of local history are more often included in primary schools and less in secondary schools. For this purpose, we suggest different ways of investigation into local history, because the home town can present a 'rich classroom' for studying the past and present of each country.

Key words: Schools – Curricula – History – Investigation – Town.

1. Introduction

"If we do not want our students to just have to 'believe' what their teacher says, only on the basis of his authority, and if we want to avoid the history lessons to leave only a vague memory of textbook explanations of historical events; if we would like the students to be able to imagine the past, the events to seem real and the history lessons to be an integral part of reality, then we have to bring factual evidence and material sources that testify about the past into the classroom ... in this way, teacher's activity makes the students able to observe what the past has left behind and connect the 'small' local history with the 'great' history of the world" (Maréchal, 1956 In: Zgonik, 1974, p. 330).

There are remains of past human activities to be found in every urban or rural environment. Every chosen environment can be analysed as a source. There are traces everywhere. The purpose is not only to observe the historical environment, but to discover and research the environment with the aim of understanding the way of life in the past, planning the changes and developments in the future, as well as learning about the reasons for and consequences of the human impact on the environment.

Local, familiar environment represents relations (protection, resumption), a source (natural heritage), nature (admiration, life), globalisation (the world, the Earth as a planet), everyday life (in which we live, work and have fun),

community (society, living in a society, solidarity, democracy), emotional life (attachment) etc. (Guide pratique d'éducation à l'environnement, 2001, p. 15–16).

Local environment allows discovering, feeling, listening, watching, tasting and acting (Eduquer à l'environnement en collèges et lycées, 2000, p. 26–27). If we want to explore the environment, however, the first step has to be done by leaving the building and setting off. A map will be needed, preferably an old one, which we can compare to the present state and find out the changes. We should also take a camera, a notebook and a pen (Fowler, 2001, p. 9).

According to Stradling, including local history in the History syllabus has several advantages since its directness arouses students' interest in places, people and events they know. It is also important because it adds a new dimension to the research of national, regional and international history (Stradling, 2001, p. 160).

In elementary, as well as upper secondary schools, the local history should be a part of History syllabi. Besides, more attention should be focused on including topics related to domestic environment in all curricula, especially within the syllabi of social science subjects. However, the difference between scientific research and research carried out in schools should be kept in mind (Theses on the Teaching and Learning of Local Histories, 2003). In this way, the students would study the past or present of their home town, have access to different sources and participate in different school projects or individual school research (Guide de l'histoire locale, 1990). Researching the local history, the students will develop the attitude to their surroundings, acquire the knowledge of local environment, become more sensitive to social changes and find it easier to empathize and participate in the social environment (Fortin-Debart, 2004, p. 85).

Research into local history also has a European dimension. "The first point to stress is that the locality can indeed be studied for its own sake but it can also be studied as a case study of changes and developments which have taken place across Europe, or across regions within Europe, albeit at different rates" (Stradling, 2001, p. 158).

It is easier to first choose and carefully study a narrow, local case of the historical event that we want to present, and only then generalise it and set it into broader space and time (Weber, 1981, p. 15). Understanding the local also means understanding the regional, national, European and global environment. Teaching history in democratic Europe is supposed to: "offer all European citizens the possibility to strengthen their individual as well as group identity, by knowing about their common historical heritage in its local, regional, national European and global dimensions" (Council of Europe, 2001).

The purpose of the research was to determine the role of local history in elementary and upper secondary schools in the Republic of Slovenia and show how important it is for one to know and understand as well as appreciate the local history if one wants to understand the developments and life in the home town, Slovenia, Europe and, finally, also in the world.

Therefore, the main question set in the research is to what extent do elementary and upper secondary schools syllabi for obligatory and optional social science

subjects include local history or history of a town, and, moreover, what are the possible ways of researching local history at this level of education.

On the basis of the main research question, the following three specific aims or research questions were drawn up, which we have tried to answer in the research:

1. What elementary and upper secondary school subjects cover topics related to home town and which are those topics?
2. What teaching goals in elementary and upper secondary schools syllabi are connected to home town?
3. What teaching approaches (methods, interaction patterns) are suggested by syllabi in elementary and upper secondary schools?

Theoretical part of the research is based on descriptive and explicative methods of pedagogical research and on content analysis. Several syllabi for social science subjects and optional social science subjects that are used in elementary and upper secondary schools in the Republic of Slovenia have been chosen for the theoretical part of research. We have analysed 7 elementary school syllabi (science and social studies, social studies, geography, history, civic education, the Slovenian language, music), 9 upper secondary school syllabi (the Slovenian language, geography, fine arts, history, social sciences, music, sociology, psychology and philosophy), 11 syllabi for optional elementary school subjects (religions and ethics, art history, tourism education, exploration of the home town and protection of its environment, civic culture, ethnology, environmental education, discovering the past of the home town, information technology, dancing activities, philosophy for children) and syllabi for 3 optional upper secondary school subjects (art history, art, environmental studies). Altogether we have analysed 30 syllabi, which are available at the Ministry of Education and Sport web-site (<http://www.mszs.si> or <http://www.mss.gov.si/>).

General objectives as well as specific aims, topics and teaching approaches suggested in the instructions of every syllabus were analysed and any possible links with local history were searched for.

2. Presentation of results

2.1. Topics related to home town

In elementary school, the syllabi for the following obligatory subjects include topics related to local history or the history of the home town: science and social studies, social studies, civic education, history, geography and music.

Home town history is included in the syllabi for the following optional subjects: discovering the past of the home town, geography, ethnology, environmental education, tourism education, art history, dancing activities and information technology.

The home town topics are most often related to natural and geographical features (science and social studies, social studies, geography, ethnology, art

history, tourism education, environmental education, exploration of the home town and protection of its environment), to cultural heritage (science and social studies, social studies, geography, history, the Slovenian language, music, art history, tourism education, ethnology, exploration of the home town and protection of its environment), to care for pupil's home town (science and social studies, social studies, geography, civic education, tourism education, exploration of the home town and protection of its environment, ethnology and environmental education) and to family (science and social studies, social studies, history, civic education, civic culture, ethnology, religions and ethics).

There is one subject that should be pointed out in particular, because it is the only subject, the name of which involves local history. That is discovering the past of the home town. It consists of four themes (Medieval Stories, How did we travel?, The Slovenians as Soldiers and Migrations Throughout History), which, however, pertain more to the Slovenian national history. The only exception is the theme Migrations throughout History, which involves two topics that are directly connected with the home town: Migrations in Our Home Town and Children in Migrations. With the remaining three themes, it is only the specific aims that draw connections to the home town.

Analysis of the upper secondary school syllabi (for general, technical and vocational education) has shown that the topics of local history, especially home town, are included in the syllabi for: a case study as a part of geography exam, art history, history within the social sciences, sociology. Among the optional subjects, local history topics are found with art history, art and environmental studies.

However, the most 'genuine' local history can be found in vocational school syllabi for social sciences, especially when it comes to history and historical topics. 16 lessons are planned for the presentation of local history. Topic called 'The town and region in historical time and space' is included, which focuses on the following contents: cultural sights, famous personalities and their creativity, protection of cultural heritage (a visit to a local museum or some outdoor monuments), the position and role of the town in a broader space; the old town centre, the church and graveyard; people's lifestyles.

The home town topics are most often related to natural and geographical features (geography, social sciences, fine arts, music, art history, environmental studies), to cultural heritage (history, geography, fine arts, social sciences, music, art history, environmental studies and the Slovenian language), to care for the preservation of the environment (geography, fine arts, social studies, sociology, environmental studies) and to family (sociology, social studies, fine arts and psychology).

Comparing the elementary school and upper secondary school syllabi, we can ascertain that the upper secondary school syllabi for obligatory subjects, with the exception of social sciences, include less local history topics. Similarly, less home town topics were found in the upper secondary school syllabi for optional subjects, also due to the fact that there are less optional subjects in upper secondary than in elementary schools. The elementary school subject discovering the past of the home town also tends to focus more on the general Slovenian national history rather than on topics directly connected with the home town.

2.2. Teaching aims related to home town

In elementary school syllabi, the local history topics are included in general as well as specific aims of individual subjects. At science and social studies classes pupils get to know the local past, they discover and learn about the specific features of domestic region and about lives of people who have lived there. Besides, their awareness of how the environment is being changed due to human influence, as well as their positive attitude to the surrounding landscape, are developed. At social studies classes a bit older pupils learn about life in the past (especially in their region) and compare it to modern life by describing the form and geographical position of the settlement. They find out about the most important branches of economic activities and non-economic activities of social interest. They get acquainted with the importance of systems, such as: water supply, sewage system, refuse collection etc., and become aware of how important it is for each individual to invest effort into keeping the town tidy. Pupils evaluate how tidy and well regulated the town is and analyse the consequences of people's intervention in the environment. Cultural and historical monuments help the pupils to research into the development of their home town, the development and changes of its role through the history as well as the natural sources and conditions that contributed to the establishment and influenced the development of the town. They study the life of the settlers and inhabitants in the past and today and the history of their own school (its establishment, development, teaching approaches). They use their findings and order them on a timeline. The pupils also predict what natural and social factors will influence the future development of their town and school. Advantages and disadvantages of life in the past and today are compared, as well as the roles of urban and rural settlements in the past. Among optional subjects, tourism education should be mentioned, because it offers the possibility for the pupils to learn about their home town, discover and evaluate the components of life in their home town and region that can enrich the visiting tourists as well as themselves.

There is only one general teaching aim related to local history to be found in primary school history syllabus. Namely, the pupils become aware of the importance of maintaining the Slovenian cultural tradition by studying cases from local history. On the other hand, there are some specific teaching aims in elementary school history syllabus. Studying the cases connected with the history of the home region, pupils learn that one of the important sources for oral history is 'oral tradition' connected with history, which is passed on from one generation to another. The pupils become aware of how important it is to maintain and protect the sources and practise how to trace the sources for research into local history by themselves. They analyse the differences between the rural, urban and religious art (on the basis of the examples of local architecture). Working with pictorial sources, doing fieldwork and attending the days of culture and science activities, the pupils become aware of how important it is to preserve the architecture of the regional landscape; moreover, they get to know the arts and crafts, typical cuisine, customs and habits of their home town.

Similarly, there is only one general teaching aim relating to the local history in the syllabus for an optional subject discovering the past of the home town. On

the basis of local history case studies, the pupils estimate the importance of the preservation of the cultural heritage. The specific aims, however, are considerably more numerous because there is at least one aim connected with the home town in each theme. Consequently, the tasks that the pupils carry out also relate to the home town. For example, the pupils study the oldest toys and the toys, life and work in one of the famous feudal families. They research the traffic infrastructure, the importance of local inns for the traffic, popular expressions and tradition connected with water traffic, people's opinions on the introduction of the railway traffic in their home town and analyse the role of inns, hotels, motels and hostels. The pupils study the remnants from the First World War and monuments dedicated to it. They describe the most important battles that were fought in the vicinity of their home town, they distinguish between different military formations that operated in the area and can explain their aims and actions during the Second World War. The pupils are able to explain the role of civilians in the Independence War of Slovenia and write a chronological overview of the important events that happened in their home town back then.

In upper secondary school syllabi, the general aims relating to the home town are very rare. At geography, for example, the students are supposed to be trained in studying, exploring and researching the home region. During art history classes they focus on the cultural heritage (art) in their home town, region and the entire Slovenian territory.

The only exception is the social sciences syllabus, especially when it comes to history or historical topics. It includes some specific aims connected with the local history. For example, the pictorial materials are used for the students to learn about social and economical as well as cultural developments in the town. The students are expected to be able to arrange all the important events or turning points from the history of their home town in a timeline. They discover and learn about the main cultural and historical monuments and learn about who protects them. They discover the characteristics of the old town centre, search for the information on the establishment of the town (the first settlement) and arrange them in the form of a timeline. The students visit the town graveyard, churches and discover the important historic personalities. They try to date the time when the church began to be built, define the architectural style and do a research on the artists who painted the frescoes and paintings. The findings are presented in students' reports, on posters (photographs, information bulletin). The students collect and present the information about everyday life, typical food, costumes and fashion, habits and customs, while they are trying to estimate to what extent the traditions still continue.

An optional subject named art history offers the possibility for the students to focus on the artistic heritage in their home town, region and the entire Slovenian territory. Environmental studies is another optional subject, in which the students discuss their family habits that help to prevent the pollution and destruction of the environment, they make a plan for their household to save on water. The students learn about the physical factors in the environment that can be harmful for one's health. At art as an optional subject, the students make models of the urban or rural architectural structures or buildings.

Comparison of general and specific teaching aims in elementary and upper secondary school syllabi has shown that there are considerably less teaching

aims pertaining to the home town at the upper secondary school level. The only exception is social studies (the part devoted to history). However, some similarities can be found. Namely, the general teaching aims often mention a positive attitude to the immediate environment and to the heritage, which shows how important it is for the learners to know their local environment also when it comes to civic education and culture. The largest amount of specific teaching aims was found in the syllabus for an optional elementary school subject discovering the past of the home town. It includes various aims relating to the local history in every theme and topic, especially within two topics: Migrations in Our Home Town and Children in Migrations. The specific aims suggest various concrete tasks for the learners to perform. Developing a positive attitude to the environment and heritage and educating the students to care for their home town are the most common teaching aims in upper secondary school as well as in elementary school syllabi.

2.3. Teaching approaches suggested by the elementary and upper secondary school syllabi

The elementary school syllabi mostly emphasize learner's independence, research, group work, fieldwork and project work. Among the interaction patterns, group work and individual work prevail. Working with written sources, discussion, problem solving, role play and working with pictorial sources are most commonly suggested teaching methods. All are in accordance with the European recommendations, which state that the learners should be encouraged to carry out an individual research adjusted to the level and other circumstances, which would develop their curiosity and initiative in collecting and synthesizing information. The learners should also be encouraged to participate in research projects or in a process of active learning and in tolerant communication, especially when it comes to interdisciplinary approach (Council of Europe, 2001).

The elementary school syllabi also focus attention on social and communicational skills, especially with the following obligatory and optional subjects: science and social studies, social studies, geography, history, civic education, the Slovenian language, religions and ethics, ethnology, tourism education, civic culture, environmental education, discovering the past of the home town. During civic education classes, for example, the pupils are supposed to develop the ability to grow into their families, local, national and citizen communities. They learn to establish concrete interpersonal and social relationships and are trained in social and communicative skills. At history, they study historical cases, which help them develop certain sensibility for the values that are important for autonomous group work and life in a plural and democratic society (becoming tolerant, outgoing and peaceful, being able to listen to people with different opinions with tolerance and at the same time being able to support their own opinion with arguments, working in mutual cooperation, respecting basic human rights and dignity). At social studies they learn about and understand the significance of the basic human and children's rights and responsibilities. They get to see how important it is for people to cooperate and find out about different modes and forms of cooperation, competition, contradiction, conflicts and solutions. An optional subject religions and ethics develops pupils' ability to understand people around them, cooperate with them, to be compassionate and ready to solve the conflicts with dialogue and compromise. Ethnology offers the possibility for the

pupils to strengthen better relationships at the level of school, family, village or town, country and build better international relationships. At civic culture they develop the willingness to act responsibly in a democratic society, in school and local communities. At an optional subject discovering the past of the home town, the pupils become open for the values which are important for people to live in a modern, tolerant, democratic society: acting tolerantly when it comes to interpersonal contacts and relationships, respecting differences and diversity, being open for mutual cooperation, respecting human rights and dignity and considering multiperspectiveness.

The upper secondary school syllabi most often suggest independent student's work, working with written sources, research, project work and excursions.

At the upper secondary level, the social and communicational skills are importantly developed at the Slovene language, geography, social sciences, sociology, psychology and history. During psychology classes the students acquire psychological knowledge, which enables them to develop a better understanding of themselves, other people, the society and the world; the personal identity and development; interpersonal relationships and cooperation; competition, conflicts and solutions. At social sciences the students are trained in constructive approach to solving problems in society. They develop skills that are important for acting in a democratic society (the ability to independently and critically consider and decide on the basic issues arising in the society and state, as well as the ability to present their own views, to listen to different arguments and participate in a dialogue). The students also become sensitive to social problems. They are trained to be able to use the acquired knowledge in everyday life and when it comes to making important decisions in general. During sociology classes the students become more sensitive to the social problems, the sociological analysis of which encourages the students to take an active part in the society.

Analysis of the teaching approaches in elementary as well as upper secondary schools has shown a great importance of learner's independent work, research and project work and especially the method of working with written sources. All these approaches are suitable for studying the local history because different teaching approaches can help the students to learn "how to take into consideration the current political, spiritual, religious, moral, social and cultural questions, problems and events by analysing the sources and the data found in them. The learners are also taught how to support their personal opinion on these questions, problems and events, with arguments presented orally or in a written form. Besides, they learn to express their opinion, engaging in group or research class discussions; to take part in public debates; to negotiate, make decisions and cooperate responsibly" (Ginnis, 2004, p. 54).

3. Conclusions and suggestions

On the basis of the analysis of different elementary and upper secondary school syllabi, it has been found out that the local history is poorly represented. There are, however, some topics relating to the home town or topics pertaining to local environment. More possibilities to present the local history are offered by

optional subjects in elementary and upper secondary schools, which include several topics connected with the home town or local history.

A teacher could try to include the themes of local history in learners' home work or in additional assignments given during the lessons, in extracurricular activities, optional subjects, optional compulsory activities, school projects, out-of-school activities and school camps, etc. The learners could collect information from the local libraries, museums, archives, parishes, registry offices, schools, factories, associations, the Internet, etc. They would use newspapers, photographs, maps, oral sources (elderly inhabitants), phone-books, population registers, school chronicles, etc. Topics relating to local history and home town, offer the possibility for a teacher to design various authentic tasks that the pupils or students carry out, such as: writing articles and editing a local newspaper; preparing a radio or TV programme; predicting regulations at school, in the environment and home town in accordance with different needs, visions and wishes; considering and suggesting the changes in spatial planning within their home town; preparing various exhibitions of photographs, objects and other local sources; trying to assume the roles of an archaeologist, museum curator, explorer, mayor, tourist guide, reporter; preparing a pocket guide to unknown objects, monuments or buildings in their home town, etc. The use of such tasks in the classroom would also bring about considerable changes in the role of local history at Slovene schools, making it more significant.

Social science activities and topics, especially different school or out-of-school activities, that involve studying the home town, prepare the learners to assume an active role and act independently and responsibly in the society. Acquiring knowledge by learning, discovering, researching and exploring the home town, region and country, with the main focus on social topics, presents the basis of the citizenship in the 21st century. Such teaching approach tries to prepare the learners, so that later they will: be able to act independently and responsibly in the society; be aware of immediate environment and developments around them; be actively involved in the social life of their home town; contribute to its development and to try to understand the past from the perspective of the people who actually lived in it.

We are completely surrounded by the historical environment. There is only a considerable difference between the extent to which it appears in the modern environment and the extent to which we can recognise it. In every environment some evidence of the past human activities can be traced, but it is up to us what and how much is noticed. Therefore, the pupils have to be trained to observe their environment carefully, as soon as in elementary school, so that they will not notice or remember only some buildings, monuments and interventions that have been made in the environment. On the contrary, they will be able to observe and notice as much as possible, especially when it comes to local environment.

"If he looked around, to see the colourful fields covering the valley and white houses blinking from the slopes, he would see nothing but wealth everywhere – not only the wealth of the landscape, which keeps changing its appearance, but also the plenitude and excellence, which were brought about by the centuries and which prove that our people did not settle this land only yesterday" (Zadnikar, 1964, p. 25).

References

Council of Europe – Svet Evrope (2001). Priporočilo Rec(2001)15 o poučevanju zgodovine v Evropi enaindvajsetega stoletja. Retrieved February 11, 2008 from http://www.mss.gov.si/fileadmin/mss.gov.si/pageuploads/podrocje/mednarodno/solstvo/doc/Priporocilo_poucevanje_zgodovine_2001.doc

Eduquer à l'environnement en collèges et lycées. Enseignement général et agricole (2000). Ecologistes de l'Euzière: Agence Méditerranéenne de l'Environnement.

Elementary school syllabi: Art history, Civic education, Environmental education, Exploration of the home town and protection of its environment, Geography, History, Religions and ethics, Science and social studies, Social studies, The Slovene language. Retrieved August 14, 2004 from http://www.mszs.si/slo/solstvo/os/ucni_nacrti/os/default.asp

Elementary school syllabi: Civic culture, Dancing activities, Discovering the past of the home town, Ethnology, Information technology, Music, Philosophy for children, Tourism education. Retrieved March 3, 2008 from http://www.mss.gov.si/si/delovna_podrocja/osnovnosolsko_izobrazevanje/program_devetletne_osnovne_sole/abecedni_seznam_izbirnih_predmetov_v_devetletni_osnovni_soli/

Fortin–Debart, C. (2004). Le partenariat école–musée pour une éducation à l'environnement. Paris: L'Harmattan.

Fowler, S. (2001). Starting out in local history. Newbury, Berkshire: Countryside books.

Ginnis, P. (2004). Ucitelj – sam svoj mojster: kako vsakega ucenca pripeljemo do uspeha. Ljubljana: Rokus.

Guide de l'histoire locale. Faisons notre histoire! (1990). Paris: Éditions du Seuil. Guide pratique d'éducation à l'environnement. Monter son projet. (2001). Lyon: Chronique Sociale.

Maréchal, P. (1956). Comment enseigner l'histoire locale et régionale. Paris: Bibliothèque. In Zgonik, M. (1974). Zgodovina v sodobni soli. Ljubljana: DZS. Stradling, R. (2001). Teaching 20th century European history. Strasbourg: Council of Europe Publishing.

Upper secondary school syllabi: Art, Art history, Environmental studies, Fine arts, Geography, History, Music, Philosophy, Psychology, Social studies, Sociology, The Slovene language. Retrieved August 23, 2004 from <http://www.mszs.si/slo/solstvo/ss/programi%202003/slo/solstvo/ss/programi/default.htm>

Theses on the Teaching and Learning of Local Histories by Clio '92 (2003). Association of Teachers and Researchers in History Teaching and Learning, Italy. Retrieved August 14, 2004 from <http://www.eurocliohistory.org/>

Weber, T. (1981). Teorija in praksa pouka zgodovine v osnovni soli. Ljubljana: DZS.

Zadnikar, M. (1964). Znamenja na Slovenskem. Ljubljana: Slovenska matica Ljubljana.

Influence d'une discussion préalable sur la participation des élèves dans un laboratoire de physique du secondaire

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Résumé

Le but de cette recherche est d'explorer comment favoriser la participation des élèves au laboratoire de sciences. Selon notre hypothèse, une discussion conduite par l'enseignant avant le laboratoire permettrait aux élèves de mieux comprendre les différents aspects de celui-ci et de participer plus activement à sa réalisation. L'expérimentation a eu lieu avec quatre groupes d'élèves du secondaire selon un devis à mesures répétées où les élèves étaient soumis à tous les traitements. La participation des élèves au laboratoire, suivant une préparation par la discussion, fut comparée à la participation aux autres laboratoires où les élèves n'ont pas bénéficié d'une telle préparation. Les résultats ont mis en évidence un lien entre la discussion préalable, le type de tâche exigée au laboratoire et la participation des élèves. De plus, les garçons et les filles participent différemment au laboratoire. Les résultats scolaires n'ont aucune influence sur la participation des élèves.

Mots-clés : participation – discussion – laboratoire - enseignement des sciences

1. Introduction

Au secondaire, le laboratoire de sciences n'a pas le caractère rigoureux, systématique des ordres d'enseignement plus élevés. Nous devrions plutôt parler d'activités de laboratoire. D'une durée variable, ces activités se réalisent en classe ou dans des locaux prévus à cette fin. Elles sont axées sur l'apprentissage de certaines notions ou de certains concepts du curriculum des sciences du secondaire. L'élève manipule des objets, utilise des instruments, observe des phénomènes en suivant une démarche scientifique (Hofstein et Lunetta, 2004). Le laboratoire de sciences a toujours été considéré comme une partie essentielle de l'enseignement des sciences au secondaire. Le laboratoire permet à l'élève de s'engager dans une démarche scientifique. L'élève peut réfléchir par lui-même, explorer des idées nouvelles, tracer ses propres conclusions (Collette et Chiappetta, 1989). L'élève y acquiert des habiletés manuelles et intellectuelles qui lui serviront à résoudre les problèmes de la vie moderne (Perkins-Gough, 2007).

Tout en soulignant le caractère distinctif du laboratoire dans l'enseignement des sciences, Hofstein et Lunetta (2004) notent que la recherche n'a pas encore identifié les situations pédagogiques dans lesquelles le laboratoire serait le plus efficace au regard des apprentissages. La participation y est passive et d'un niveau cognitif faible (Tobin et Gallagher, 1987b). Ainsi, lorsqu'on observe le déroulement des activités au laboratoire, on découvre que les étudiants participent peu à la planification de celui-ci. En général, les objectifs et les méthodes du laboratoire sont choisis par l'enseignant (Godin, 1994). La participation des élèves concerne surtout les procédures: ils suivent à la lettre les directives de l'enseignant et la démarche indiquée dans les cahiers de laboratoire (Godin, 1994; Tobin, 1986). Il n'est donc pas surprenant de constater que les habiletés de planification et de conduite des expériences font défaut aux élèves (Hoffstein et Lunetta, 2004).

Suite à ces constats, notre recherche tente de répondre à la question suivante : « Comment peut-on modifier la participation des élèves au laboratoire, pour que ceux-ci soient actifs et engagés dans une investigation scientifique véritable? »

2. État de la recherche sur la participation au laboratoire de sciences au secondaire et les facteurs qui l'influencent

2.1 Définition de la participation dans la classe de sciences

La participation n'est pas aisée à définir. À certains moments, elle met en jeu des comportements visibles de l'élève comme écrire, discuter, manipuler. La participation sera dite ouverte ou extérieure. À d'autres moments, pour réaliser la tâche assignée, l'élève fait appel à certains processus mentaux qui ne sont pas observables comme être attentif ou comprendre. On parlera de participation fermée ou intérieure (Tobin, 1986). Lors de ses études sur la participation des élèves dans les cours de sciences, Tobin (1986) chercha à définir d'une façon opérationnelle la participation, c'est-à-dire à lui associer des comportements observables afin de pouvoir la mesurer. Dans notre recherche, la participation est définie comme le temps consacré par l'élève à la réalisation de tâches au laboratoire de sciences (Capie et Tobin, 1981 ; Karweit, 1982).

2.2 Les facteurs qui influencent la participation des élèves

Plusieurs facteurs influencent la participation des élèves au laboratoire. Nous traiterons en premier les facteurs reliés à l'enseignement tels le groupement des élèves et les techniques d'enseignement ainsi que ceux reliés à l'enseignant tels que ses croyances, ses perceptions et ses attitudes. En second lieu, les facteurs associés aux caractéristiques de l'élève seront décrits.

2.2.1 Facteurs reliés à l'enseignant et à son enseignement

Les activités de laboratoire se font surtout en petits groupes. Or, si on se réfère aux recherches sur la participation des élèves, ce type de groupement serait préjudiciable à la participation car, la plupart du temps, les élèves ne sont pas supervisés par un adulte (Rosenshine et Berliner, 1978). Ce point de vue est corroboré par Tobin et Gallagher (1987b). D'après ces derniers, des règles de comportement moins rigides prévalent au laboratoire et le rythme, déterminé par les élèves, est plus lent.

Le degré de préparation des élèves au laboratoire influencera la façon dont les élèves participent au laboratoire. En effet, les étudiants rédigeant des résumés ou des schémas du protocole expérimental comprennent les procédures et les concepts pertinents au laboratoire (Rollnick, Zwane, Staskkun, Lotz et Green, 2001 ; Davidowitz, Rollnick, et Fakudze, 2005). À cet égard, les laboratoires sont rarement précédés d'une discussion qui permettrait de les situer dans le contexte du cours. Une discussion qui tient compte des conceptions de l'élève et amenant ce dernier à construire ses connaissances à partir de ses conceptions est susceptible de modifier la façon dont celui-ci s'engage dans les activités, c'est-à-dire sa participation (Gunstone et Champagne, 1990). En effet, si l'élève comprend mieux le rôle de chaque élément du montage, les liens entre les concepts, il est à même de mieux formuler ses idées sous forme d'hypothèses, de concevoir des tests spécifiques pour les vérifier. De même la capacité de distinguer entre les différents concepts et à discerner le rôle des différents éléments du montage lui permettra de concevoir des tests permettant d'en vérifier le bien-fondé (Rollnick et coll., 2001). Inversement, s'il entretient certaines conceptions erronées sur les phénomènes étudiés, n'identifie pas les différents éléments du montage et leur rôle, il aura de la difficulté à proposer des hypothèses sous forme de règles reliant des différents concepts.

Selon le type de laboratoire, les tâches exigées des élèves seront différentes. Par exemple, le laboratoire technique amènera l'élève à utiliser davantage les instruments alors que le laboratoire d'exploration permettra à l'élève de choisir l'objet de sa recherche, de planifier son expérimentation et d'écrire ses propres conclusions. Le temps consacré par l'élève aux différentes tâches, c'est-à-dire sa participation, pourrait donc varier selon le type de laboratoire (Collette et Chiappetta, 1989 ; McComas, 2005).

Les croyances, les perceptions et les attentes des enseignants influencent le déroulement du laboratoire et la participation des élèves (King et Wallace, 2005). Les enseignants attachent une grande importance à la couverture de la matière. Selon le rendement qu'ils attendent de leurs élèves, les enseignants augmentent ou réduisent le niveau cognitif des activités pour l'adapter au niveau de leurs élèves (Tobin et Gallagher, 1987a). En outre, les enseignants perçoivent les laboratoires comme une autre activité à compléter. Ils mettent l'accent sur les procédures, les montages à réaliser, les données à obtenir, les cases à compléter dans le cahier. Après celui-ci, les enseignants fournissent aux élèves des conclusions toutes faites à inscrire dans leur cahier (Tobin et Gallagher, 1987b). Tobin et Gallagher (1987b) estiment que ces comportements de l'enseignant réduisent le niveau cognitif des apprentissages au laboratoire.

2.2.2 Facteurs reliés aux élèves

La découverte d'un lien entre la participation et la réussite scolaire de l'élève orienta les recherches en vue d'identifier les facteurs pouvant influencer sa participation (Smyth, 1980). Ce lien est toutefois contesté par certains chercheurs. Après avoir analysé plusieurs recherches sur la participation, Karweit (1982) conclut que le lien entre la participation et les résultats scolaires, s'il existe, doit être faible. En ce qui concerne le genre, les garçons en général participent plus que les filles. Non seulement monopolisent-ils les équipements, mais ils empêchent les autres de s'en servir en les détériorant (Tobin, 1990). Quand les garçons et les filles travaillent en équipe au laboratoire, la tâche des filles consiste le plus souvent à observer et à enregistrer les données alors que les garçons ont tendance à manipuler les instruments et à effectuer l'expérience (She, 1999 ; Tobin et Gallagher, 1987b).

2.2.3 Objectifs de recherche

1. Vérifiez l'influence d'une discussion préalable au laboratoire sur la participation des élèves au laboratoire.
2. Vérifiez l'influence du sexe et des résultats scolaires sur la participation des élèves au laboratoire.

3. Description de la discussion préalable et des stratégies usuelles de l'enseignant pour introduire les divers laboratoires

Pour élaborer la discussion préalable, l'enseignant doit d'abord concevoir le scénario, c'est-à-dire prévoir le déroulement des activités (Legendre, 2005 ; Collins et Stevens, 1982). Dans notre expérimentation, le scénario consiste en un guide de l'enseignant. Ce scénario présente l'ensemble des cheminements possibles en fonction des réactions prévues de l'élève (ce qui implique que l'enseignant devra faire preuve de flexibilité si les réactions des élèves diffèrent de celles prévues). Lors d'une rencontre avec les deux enseignants impliqués, nous avons choisi la notion d'équilibre de forces en Physique 534 (physique de cinquième secondaire) comme thème de la discussion préalable avant le laboratoire qui en traite (le laboratoire no 8 du manuel).

Dans la salle de classe, l'enseignant présente aux élèves un problème ou une situation physique sous une forme qualitative. Un montage, comprenant des poulies, des cordes et des poids, placé en avant de la classe est utilisé pour représenter la situation ou le problème physique de façon concrète. En présentant différents cas aux élèves, il cherche à favoriser l'expression de leurs conceptions. Pour engager les élèves dans la discussion, l'enseignant demande aux élèves de prévoir le résultat de l'expérimentation. La discussion entre l'enseignant et les élèves et les échanges entre les élèves forcent ceux-ci à mieux articuler leur position afin de défendre leurs conceptions. À un certain stade de la discussion, lorsque les élèves ont exprimé suffisamment leurs idées, l'enseignant demande de passer au vote et d'inscrire leur choix sur leur feuille de route. La discussion peut alors repartir de plus belle lorsque chaque élève doit défendre une position qu'il vient d'exprimer de façon claire. Puis, l'enseignant

passé à l'expérimentation du cas soumis à l'élève. L'élève peut ainsi vérifier sa prédiction.

L'enseignant agit dans la discussion en médiateur. Il ne formule pas d'opinion et se met à la disposition des élèves si ceux-ci veulent changer des éléments du montage pour en évaluer l'effet. Il favorise au maximum la participation des élèves en distribuant ses questions à une majorité d'élèves, en favorisant les échanges entre les élèves et en adoptant une attitude neutre envers les interventions des élèves, ce qui n'exclut pas l'humour. La discussion décrite dans cette section constitue le prélaboratoire au laboratoire 8. Elle permet à l'élève de se familiariser avec les facteurs pertinents à l'équilibre et crée chez lui une insatisfaction envers les conceptions qu'il utilise pour comprendre les phénomènes d'équilibre. Le laboratoire proprement dit vise à amener l'élève à découvrir la règle d'équilibre des corps et utilise la démarche décrite dans le cahier de laboratoire de l'élève.

Quant aux autres laboratoires, ils ont été introduits par les enseignants en utilisant leurs stratégies usuelles. Le chercheur n'a fait aucune suggestion aux enseignants. De plus, la pratique des stratégies de questionnement (incluses dans la discussion préalable) a eu lieu immédiatement avant leur expérimentation. Il est donc probable que cette pratique n'a pas eu d'influence sur les stratégies utilisées par l'enseignant dans ses cours, sauf pour le laboratoire 8 qui suivait la discussion.

4. Méthodologie

4.1 Description de l'échantillon

La recherche s'est déroulée dans une école secondaire de la commission scolaire des Mille-Îles. L'échantillon fut tiré d'une population d'élèves du secondaire suivant le cours de physique 534. L'échantillon de départ contenait cent vingt-trois élèves, cinquante garçons et soixante-treize filles. Tous les élèves de chaque classe furent observés. Toutefois, la méthode d'analyse des données choisie, l'analyse de la variance de mesures répétées, requiert que l'élève soit présent à tous les traitements. Les élèves absents d'un cours étaient éliminés de l'échantillon de départ. L'échantillon analysé comprend donc cent deux élèves, soixante filles et quarante-deux garçons. Ces élèves sont répartis en quatre groupes. La proportion de garçons et de filles est sensiblement la même dans l'échantillon de départ et l'échantillon analysé.

4.2 Déroulement de la recherche

Le déroulement de la recherche s'est fait en plusieurs étapes:

1. Pour mesurer la participation, nous avons utilisé la grille d'observation de la participation de Tobin (1986). Cette grille a été utilisée à maintes reprises par Tobin et ses associés pour mesurer la participation lors d'activités scientifiques. Nous avons traduit cette grille en respectant le cadre behavioriste, c'est-à-dire que chaque comportement devait être décrit de façon à pouvoir être observé

(Thorndike et Hagen, 1969).

2. Le chercheur avait prévu d'observer, pour chacun des groupes, la participation des élèves dans cinq laboratoires, soit dans trois laboratoires avant l'intervention projetée, dans le laboratoire où une discussion préalable a eu lieu et dans un laboratoire après cette intervention. Plusieurs événements ont modifié ce plan (journée de carnaval pour les étudiants, examen d'étapes, etc.). Pour chacun des deux groupes de l'un des enseignants, quatre laboratoires furent observés, soient les laboratoires 3, 5, 8 et 10 successivement (le laboratoire où fut expérimentée la discussion préalable au laboratoire était le no 8). Pour chacun des deux groupes de l'autre enseignant, trois laboratoires furent observés, y compris celui précédé de la discussion, les laboratoires observés du premier groupe de cet enseignant étant le 5, 8 et 7 et les laboratoires observés du deuxième groupe étant le 8,7 et 9.

3. Une rencontre entre le chercheur et les deux enseignants quelques jours avant l'expérimentation a permis à l'un des enseignants de pratiquer les stratégies de questionnement utilisées dans la discussion préalable. Le chercheur donnait la réplique à cet enseignant comme s'il était un élève. L'autre enseignant a observé la pratique (voir en bas de la présente page).

4. Étant donné que chaque enseignant expérimentait avec deux groupes chacun, nous avons effectué, avec chaque enseignant, un retour sur les stratégies après l'expérimentation avec son premier groupe et avant l'expérimentation avec son second groupe.

Nous devons nous assurer que les stratégies de discussion soient maîtrisées par les enseignants. Les stratégies furent donc pratiquées, sans les élèves, par l'un des enseignants avant l'expérimentation. L'autre enseignant observa la pratique. Le chercheur donnait la réplique comme s'il était un élève. Ces répliques étaient tirées de la liste des représentations initiales de la force que Piaget (1973) a observées chez des élèves.

Après la pratique, nous avons décidé d'enlever certains cas du scénario de la discussion. Nous pouvions réaliser ce changement sans altérer de façon trop marquée le déroulement de la discussion puisque les cas enlevés étaient analogues à d'autres cas que nous avons conservés. Ces changements nous permettaient de limiter la discussion à trente minutes, le reste de la période étant consacré au laboratoire (la durée totale du cours était de soixante-quinze minutes).

4.3 Mesure de la participation

4.3.1 Méthode de mesure

Une mesure de la participation de chaque élève au laboratoire fut prise à toutes les cinq secondes. Tous les élèves furent observés successivement, une rangée à la fois. Dans chaque rangée, les élèves étaient observés de gauche à droite, selon un observateur faisant dos à l'avant de la classe. Chaque rangée était numérotée, en ordre croissant à partir de l'avant de la classe. Un cycle correspondait à une observation de tous les élèves de la classe. Au début de chaque nouveau cycle, le numéro de la première rangée observée était déterminé à l'aide d'une table de nombres aléatoires (Gilles, 1994). Cette

procédure permettait de minimiser les déplacements de l'observateur et les erreurs de codage. A cette fin, une grille d'observation de la participation a été réalisée pour chaque groupe d'élèves et chaque cours. Cette grille comporte horizontalement une liste des noms d'élèves dans l'ordre qu'ils sont placés au laboratoire et verticalement le numéro de l'observation. La dernière ligne donne la liste des nombres aléatoires permettant de déterminer le numéro de la rangée observée au début de chaque cycle.

Le comportement que l'élève adoptait le plus longtemps pendant ces cinq secondes était associé à une des catégories définies par la grille d'observation de la participation (Tobin, 1986). On veilla, pendant l'observation, à éviter les interprétations (Thorndike et Hagen, 1969): ne pas supposer que l'élève planifie son laboratoire en le voyant écrire. L'observateur devait associer le comportement vu avec un comportement équivalent dans la grille. Si le comportement n'était pas dans la grille, l'observateur devait lui donner un code temporaire, encercler ce code et réviser le codage après le cours.

Pour s'assurer de la validité interne des observations, un second codeur fut présent lors de neuf cours observés. Le nombre total de cours observés fut de vingt-cinq. Ce codeur est un conseiller pédagogique en sciences de la commission scolaire choisie. Il était au courant des grandes lignes du projet. Il ignorait les détails de l'expérimentation, tels la stratégie utilisée ou le jour du traitement expérimental. De plus, lors des jours d'observation, il attendait au laboratoire. Il ne pouvait donc pas être au courant de la stratégie utilisée par l'enseignant pour introduire le laboratoire, les cours théoriques et les laboratoires ayant lieu dans des pièces différentes.

Lors de l'observation des classes, les deux codeurs observaient le même élève en même temps. L'accord entre les codeurs a été évalué grâce au coefficient de corrélation (symbole r) pour chacun des neuf cours observés par les deux observateurs en même temps (Siegel et Castellan, 1988). Les neuf cours observés étaient répartis au début, au milieu et à la fin de la recherche. Un enseignant a été observé six fois par deux observateurs et l'autre trois fois. L'horaire était déterminé par les disponibilités du second observateur. Le coefficient de corrélation de Pearson indique une corrélation forte et significative de 0,875 entre les deux codeurs (valeur moyenne pour les neuf cours observés par deux codeurs). Le carré de cette mesure, r^2 , nous donne le pourcentage de variation expliquée par la relation entre les mesures effectuées par les deux observateurs (Gilles, 1994). Le résultat qui est 0,766 nous donne le degré d'accord entre les deux observateurs.

4.3.2 L'instrument de mesure de la participation et sa validation

Pour mesurer la participation, nous avons utilisé la définition opérationnelle de la participation de Tobin (1986) dont le *generalizability coefficient* varie de 0,30 à 0,92. Par conséquent, la définition opérationnelle de la participation possède donc une bonne validité externe (Ray, 1993 ; Legendre, 1993). Les différentes catégories de participation selon cette définition sont (Tobin, 1986) : 1) l'attention, 2) le rappel de faits, 3) la collecte de données, 4) la compréhension, 5) la quantification, 6) la planification, 7) la généralisation, 8) le non-cognitif, 9) le hors-tâche. Pour valider l'adaptation de la grille, nous avons demandé au

conseiller pédagogique qui agissait en tant qu'observateur ce qu'il pensait de la grille d'observation après l'avoir utilisée. Ce conseiller a une longue expérience comme enseignant en sciences et comme conseiller. Selon lui, le processus de mesure découpe des tranches dans le déroulement dynamique de l'activité de l'élève. Pour cette raison, il est difficile de choisir le comportement le plus important adopté par l'élève dans chaque intervalle de cinq secondes. Néanmoins, ces différences de perception s'annulent lorsqu'on enregistre un grand nombre d'observations.

En général, les observateurs n'ont pas dérangé le travail des élèves. Lorsqu'un élève est dérangé, il change son comportement de façon abrupte: il s'arrête de travailler, il fait le bouffon, il pose des questions à l'observateur. Nous n'avons que très peu observé ce type de comportement. La brièveté des observations (au plus cinq secondes) et l'ordre aléatoire des observations expliquent le peu d'interférence que l'observation a pu provoquer dans les activités des élèves.

4.3.3 Définition et mesure des variables de regroupement

Les variables de regroupement sont des variables qui permettent de regrouper les élèves selon certaines caractéristiques. Dans notre recherche, les variables de regroupement sont le sexe de l'élève et ses résultats scolaires. Les résultats scolaires cumulatifs et le sexe des élèves furent fournis par l'école au cours de l'expérimentation sous forme de listes informatisées et codifiées. Les résultats scolaires cumulatifs consistent en la note moyenne de chaque élève avant l'expérimentation, ce qui nous permis de les regrouper selon leur résultat scolaire: supérieur, moyen ou inférieur.

4.4 Techniques d'analyse des résultats

L'analyse multivariée de la variance nous permettra de vérifier les relations qui existent entre les différentes variables identifiées, soit le sexe de l'élève, ses résultats scolaires, les stratégies d'introduction aux différents laboratoires (i.e. la discussion et les stratégies d'introduction utilisées habituellement par les enseignants impliqués) et la participation. La participation perd, dans l'analyse multivariée de la variance, son statut de variable dépendante et devient une variable comme les autres.

5. Présentation, analyse et interprétation des résultats

Selon certains auteurs (Karweit, 1982), la participation varie considérablement d'un individu à l'autre. Une comparaison entre un groupe expérimental et un groupe témoin risquerait de ne pas mettre en évidence l'effet du traitement, celui-ci étant masqué par les variations individuelles. À cet égard, le devis à mesures répétées permet de comparer la réaction d'un sujet au traitement expérimental à la moyenne de ses réactions aux autres traitements. Ce devis a l'avantage de permettre un "contrôle sur la différence entre les sujets et ainsi augmenter la précision de l'expérience en éliminant la différence entre les sujets comme source d'erreur." (Bhushan, 1985, p. 38)

5.1 Résultats de la mesure de la participation

Les résultats de la mesure de la participation sont présentés dans le tableau 1. Notez que la durée des laboratoires s'échelonnait de quinze à quarante minutes environ. La moyenne de la durée d'un laboratoire était de vingt-cinq minutes environ. Pour pouvoir comparer entre les laboratoires, la participation dans chaque catégorie fut évaluée relativement à une durée moyenne de vingt-cinq minutes. Les valeurs moyennes des différentes catégories de participation dans les différents laboratoires sont ordonnées selon les colonnes.

Tableau 1
Participation moyenne des élèves des quatre groupes dans les différents laboratoires

Group e	Laboratoire	Catégories de participation					
		1	3	4	5	8	9
1	Labo 3	1,81	3,78	2,17	11,54	0,57	5,13
	Labo 5	3,67	1,35	3,59	10,79	3,83	1,66
	Labo 8	6,25	4,77	0,37	2,08	10,51	0,79
	Labo 10	5,37	9,97	1,64	2,76	3,09	2,18
2	Labo 3	2,91	4,01	1,52	13,42	0,34	2,81
	Labo 5	5,66	1,71	3,08	9,15	3,33	0,41
	Labo 8	5,42	13,87	0,56	2,47	1,42	0,76
	Labo 10	5,18	9,09	1,49	5,23	2,94	0,9
3	Labo 5	5,57	9,17	4,06	0,26	1,72	3,8
	Labo 8	3,49	5,83	2,01	6,46	0,68	6,53
	Labo 7	1,39	15,9	0,69	2,95	3,21	0,87
4	Labo 8	5,4	6,51	0,99	1,87	3,25	6,79
	Labo 7	4,29	9,82	0,24	5,83	0,77	3,1
	Labo 9	2,72	14,1	0,2	3,46	2,3	2,24

En regardant le tableau 1 ci-dessus, on constate que les catégories 2, 6 et 7 ne sont pas représentées. La participation dans ces catégories était tellement faible qu'il était superflu de les montrer. Les catégories 2, 6 et 7 réfèrent respectivement au rappel de faits, à la planification et à la généralisation. Ni la discussion préalable, ni les stratégies d'introduction au laboratoire utilisées habituellement par l'enseignant n'ont pu augmenter la participation des élèves dans ces catégories. Les élèves ne planifient pas leur laboratoire et on ne leur demande pas de le faire. En effet, le cahier de laboratoire ne contient aucune indication à l'effet que l'élève devrait planifier son laboratoire. En ce qui concerne la généralisation à d'autres situations, une seule question dans le cahier de laboratoire y réfère: "Si tu avais placé le référentiel à un autre endroit, le graphique $y = f(x)$ aurait-il été modifié?". Finalement, le rappel des faits, quoique d'un niveau cognitif inférieur à la planification et à la généralisation, est pourtant nécessaire à ces deux catégories. En effet, pour planifier ou généraliser, l'élève doit se rappeler les principaux faits concernant la matière à l'étude.

5.2 Analyse statistique des résultats

Dans l'analyse multivariée de la variance, la participation est une variable indépendante dont les différents niveaux sont représentés par les catégories. La variable dépendante est le temps passé par l'élève. Lorsqu'on dit que la participation est significative, cela veut dire que le temps passé par l'élève diffère d'une catégorie à l'autre. Les résultats de l'analyse multivariée de la variance des quatre groupes sont présentés dans le tableau 2.

5.3 Interprétation et discussion

Selon les résultats de l'analyse multivariée de la variance, la stratégie d'introduction au laboratoire a une influence significative sur le temps passé par l'élève dans les diverses catégories de participation dans le premier et le quatrième groupe d'élèves. Il y a donc au moins un laboratoire qui diffère de façon significative des autres laboratoires dans une ou plusieurs catégories de la participation. Cette différence pourrait être également attribuée à un type différent de tâche à effectuer au laboratoire. En outre, cette différence, dans le premier groupe, pourrait provenir de ce que les élèves du premier enseignant effectuaient l'analyse et la discussion de leurs résultats en classe. Par contre, la différence de participation entre les laboratoires, dans le quatrième groupe, des élèves du deuxième enseignant est également significative, alors que ses élèves effectuaient l'analyse et la discussion de leurs résultats au laboratoire.

Dans tous les groupes, la participation influence de façon significative le temps consacré par l'élève. Une des catégories de participation est donc significativement différente des autres catégories. Ceci veut dire que l'élève ne consacre pas le même temps à chaque catégorie. Cette constatation peut sembler évidente. Elle nous incite à chercher les causes de cette répartition du temps de l'élève entre les différentes catégories de participation lors d'un laboratoire. Ces différences pourraient être dues à la façon dont les élèves perçoivent la tâche à accomplir et répartissent leur temps en conséquence.

Tableau 2
 Résultats de l'analyse multivariée de Wilks des facteurs pouvant influencer la participation dans les quatre groupes

Source de variation	Groupe 1	Groupe 2	Groupe 3	Groupe 4
	p	p	p	p
Stratégie	0,000*	0,794		0,024*
Résultat scolaire X Stratégie	0,635	0,885		0,093
Sexe X Stratégie	0,584	0,807		0,024*
Sexe X Résultat scolaire X Stratégie	0,480	0,886		0,093
Participation	0,000*	0,000*	0,000*	0,000*
Résultat scolaire X Participation	0,945	0,439	0,099	0,816
Sexe X Participation	0,193	0,892	0,02*	0,357
Sexe X Résultat scolaire X Participation	0,810	0,444	0,310	0,846
Stratégie X Participation	0,000*	0,000*	0,001*	0,002*
Résultat scolaire X Stratégie X Participation	0,768	0,733	0,382	0,105
Sexe X Stratégie X Participation	0,034*	0,210	0,085	0,076
Sexe X Résultat scolaire X Stratégie X Participation	0,711	0,751	0,548	0,628

Légende :

p : probabilité associée aux différents résultats

* : placé à droite d'un nombre, il signifie que le résultat est significatif au seuil $\alpha=0,05$

Dans tous les groupes, il y a une interaction significative entre les stratégies d'introduction au laboratoire utilisées (ou le type de tâche) et la participation. La stratégie d'introduction au laboratoire utilisée (ou le type de tâche) va modifier la répartition du temps de l'élève entre les catégories. Ce résultat nous permet d'espérer modifier la participation de l'élève au laboratoire en utilisant une stratégie d'introduction appropriée ou en choisissant un type de tâche différent.

Dans le troisième groupe, il y a une interaction significative entre le sexe et la participation. Donc, dans le troisième groupe, la participation diffère selon le sexe de l'élève. Dans le quatrième groupe, il y a une interaction significative entre le sexe, les stratégies d'introduction au laboratoire (ou le type de tâche au laboratoire) et la participation. Il est raisonnable de penser que l'influence de la

stratégie d'introduction au laboratoire (ou du type de tâche au laboratoire) sur la participation de l'élève au laboratoire diffère selon son sexe. Ces résultats rejoignent ceux de Tobin (1990) et de Tobin et Gallagher (1987b). Il est donc important de tenir compte du sexe de l'élève dans le choix des stratégies d'introduction au laboratoire ou du type de tâche à effectuer au laboratoire si l'on désire influencer sa participation au laboratoire.

Les résultats scolaires n'influencent pas de façon significative la participation. Les résultats scolaires n'influencent pas non plus la participation de façon indirecte, en interaction avec d'autres facteurs. Ce résultat plutôt surprenant pourrait s'expliquer par le fait que les laboratoires contiennent des activités manuelles susceptibles de plaire à des élèves possédant des résultats scolaires variés. On pourrait également avancer que les laboratoires sont axés principalement sur la collecte des données et stimulent la participation de tous les élèves de façon équivalente. En effet, si les laboratoires avaient contenu des tâches reliées à la planification ou à la généralisation, il est possible que la participation des élèves ayant des résultats scolaires élevés aurait été différente de la participation des élèves ayant des résultats scolaires faibles.

6. Conclusion

Nous avons trouvé que la participation de l'élève varie d'un laboratoire à l'autre. Cette variation peut s'expliquer par des stratégies d'introduction au laboratoire différentes, un type de tâche au laboratoire différent, ou une combinaison des deux premiers. Les filles participent différemment des garçons au laboratoire. Les résultats scolaires n'ont aucun effet sur la participation des élèves au laboratoire. L'identification des différents facteurs et de leurs relations devrait nous permettre de mieux comprendre comment les élèves participent au laboratoire et d'élaborer, si nécessaire, des interventions destinées à l'améliorer.

En ce qui concerne les limites de notre recherche, l'ordre des traitements assignés aux différents groupes d'élèves ne s'étant pas faite de façon aléatoire, nous ne pouvons d'emblée éliminer l'interaction entre les traitements et la maturation des sujets comme source possible des effets mesurés. De plus, le choix d'un échantillon de convenance ne nous permet pas de généraliser les résultats obtenus à la population des élèves de cinquième secondaire suivant un cours de physique. A cet égard, des efforts devront être faits afin de s'assurer que l'ordre des traitements assignés aux différents groupes d'élèves soit déterminé de façon aléatoire et, dans la mesure du possible, d'assurer par différents moyens, une certaine représentativité de l'échantillon choisi. Ceci nous permettrait de satisfaire aux conditions de symétrie et par conséquent d'utiliser l'analyse univariée pour étudier les relations entre les différents facteurs. Ceci nous permettrait d'accroître la précision de nos résultats et la richesse de nos interprétations.

Dans cette recherche, nous n'avons pas réussi à accroître la participation de l'élève dans les catégories de la planification et de la généralisation au laboratoire. Il est donc important d'expérimenter avec plusieurs stratégies d'introduction au laboratoire afin de pouvoir identifier celles qui permettraient de stimuler la

participation des élèves au laboratoire dans les catégories d'un niveau cognitif plus élevé. Par exemple, la traduction des consignes par les élèves sous forme de schémas ou d'une esquisse permettrait à l'élève de mieux comprendre les concepts et la démarche expérimentale proposée (Rollnick et coll., 2001).

Il est important également de pouvoir mettre en évidence la relation entre les stratégies d'introduction au laboratoire utilisées et le type de tâche assignée au laboratoire. Ceci nous permettrait de déterminer pour quel type de tâche une stratégie d'introduction est la plus efficace pour stimuler la participation des élèves au laboratoire. Cela se traduirait, dans le devis à mesures répétées, à mesurer, pour chaque stratégie d'introduction utilisée, la participation des élèves à plusieurs laboratoires qui différeraient selon le type de tâche exigée. Une telle classification des laboratoires existe déjà: le laboratoire de vérification, le laboratoire inductif, le laboratoire technique, le laboratoire d'investigation scientifique et le laboratoire d'exploration (Collette et Chiappetta, 1989).

Finalement, la démarche entreprise dans cette recherche nous a permis de définir une première problématique de la participation de l'élève au laboratoire de sciences. Nous avons cherché à identifier les principaux facteurs susceptibles d'influencer la participation au laboratoire. Des études ultérieures sont nécessaires afin de déterminer quelles sont les conditions qui incitent l'élève à s'engager dans une démarche scientifique véritable et ainsi acquérir les habiletés scientifiques visées par l'enseignement des sciences au secondaire.

Références

- Bhushan, Vidya. 1985. *Inférence statistique*. Québec: Presses de l'Université Laval, 232 p.
- Capie, William et Kenneth G. Tobin. 1981. Pupil engagement in learning tanks: a fertile ares for research in science teaching. *Journal of Research in Science Teaching*, vol. 18, no 5, p. 409-417.
- Collette, Alfred T. et Eugène L. Chiappetta. 1989. *Science instruction in the middle and secondary schools*, 2^e édition, Toronto: Merrill Publishing Company, 471 p.
- Collins, Allan et Albert L. Stevens. 1982. Goals and strategies of inquiry teachers. In T. 2 de *Advances in instructional psychology*, sous la direction de Robert Glaser, p. 65-119. Hillsdale (New Jersey) : Lawrence Erlbaum Associates, 357 p.
- Davidowitz, Bette, Marissa Rollnick, et Cynthia Fakudze. 2005. Development and application of a rubric for analysis of novice students' laboratory flow diagrams. *International Journal of Science Education*, vol. 27, no 1, p. 43-59.
- Gilles, Alain. .1994. *Éléments de méthodologie et d'analyse statistique pour les sciences sociales*. Saint-Laurent (Québec): McGraw-Hill, 571 p.

- Godin, Benoît. 1994. *Le rôle de l'école dans la culture scientifique et technologique*. Sainte-Foy (Québec) : Conseil de la science et de la technologie, 57 p.
- Gunstone, Richard F., et Audrey B. Champagne. 1990. Promoting conceptual change in the laboratory. In *The student laboratory and the science curriculum*, sous la direction de Elizabeth Hegarty-Hazel, p. 159-182. New York: Routledge.
- Hersen, Michel et David H. Barlow: 1977. *Single-case experimental designs: strategies for studying behavior change*. Toronto: Pergamon Press, 374 p.
- Hoffstein, Avi, et Vincent N. Lunetta. 2004. The laboratory in science education: Foundations for the twenty-first century
- Kang, Nam-Hwa, et Carolyn S. Wallace. 2005. Secondary science teachers' use of laboratory activities: Linking epistemological beliefs, goals and practices. *Science Education*, vol. 40, p. 140-165
- Karweit, Nancy. 1982. Time on task: a research review (report no 332). In *Baltimore: Center for social organization of schools*, 71 pages. The John Hopkins University, dans base de données ERIC no 228236.
- Legendre, Renald. 1993. *Dictionnaire actuel de l'éducation*, 2e éd. Montréal: Guérin, 1500 p.
- Legendre, Renald. 2005. *Dictionnaire actuel de l'éducation*. Montréal: Guérin.
- McComas, Willam. 2005. Laboratory instruction in the service of science teaching. *The Science Teacher*, vol. 72, no 7, p.24-29.
- Perkins-Gough, Deborah. 2007. The status of the science lab. *Educational Leadership*, vol. 64, no 4, p. 93-
- Ray, William J. 1993. *Methods toward a science of behavior and experience*. Pacific Grove (Californie): Brooks/Cole Publishing Company, 471 p.
- Rollnick, Marissa, Stella Zwane, Mina Staskun, Sandra Lotz, et Gail Green. 2001. Improving pre-laboratory preparation of first year university chemistry students. *International Journal of Science Education*, vol. 23, no 10, p. 1053-1071
- Rosenshine, Barak V. et David C. Berliner. 1978. Academic engaged time. *British Journal of Teacher Education*, vol. 4, no 1, p. 3-16.
- She, Hsia-Ching. 1999. Students' knowledge construction in small groups in the seventh grade biology laboratory: Verbal communication and physical engagement. *International Journal of Science Education*, vol. 21, no 10, p. 1051-1066.
- Siegel, Sidney et N. John Castellan, Jr. 1988. *Nonparametric statistics for the behavioral sciences*, 2^e éd. Montréal: McGraw-Hill, 399 p.

Smyth, John W. 1980. Pupil engaged learning time: concepts, findings and implications. *The Australian Journal of Education*, vol. 24, no 3 (octobre), p. 225-245.

Thorndike, Robert L. et Elizabeth Hagen. 1969. *Measurement and evaluation in psychology and education*, 3^e éd. Toronto: John Wiley & Sons, 705 p.

Tobin, Kenneth. 1986. Student task involvement and achievement in process-oriented science activities. *Science Éducation*, vol. 70, no 1, p. 61-72.

Tobin, Kenneth. 1990. Research on science laboratory activities: In pursuit of better questions and answers to improve learning. *School Science and Mathematics*, vol. 90, no 5 (mai/juin), p. 403-418.

Tobin, Kenneth et James J. Gallagher. 1987a. What happens in high school science classrooms? *Journal of Curriculum Studies*, vol. 19, no 6, p. 549-560.

Tobin, Kenneth et James J. Gallagher. 1987b. Teacher management and student engagement in high school science. *Science Éducation*, vol. 71, no 4, p. 535-555.

Research on the Students' Competences Concerning the Teaching of Macroeconomics at University Using New Technologies in Relation to the Teaching of Microeconomics

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Abstract

The basic hypothesis to be inquired is the use of computers and the internet in the teaching of economic modules does not affect student learning and retention. The research restrictions were that research was carried out at a Department of the University of Piraeus during the 2006-2007 spring semester. 55 students took part in the research in total. The module was taught at the computer lab – there were 25 computers for the 23 students who participated in the computer-based lesson therefore each one worked individually. The remaining 32 students were taught in a lecture hall and there was no use of technology involved. Before the start of the lessons students took a pre-test comprised of five true-false questions and five multiple-choice questions. During the final lesson students took a post-test, after the completion of the lessons students filled in a questionnaire and expressed their views on computers and the teaching that took place both at the computer lab and the lecture hall.

Keywords: Macroeconomics – Money – Banks – Education – Technologies – Computer.

1. Introduction

The research carried out for this paper was based on the mentioned literature. The basic hypothesis to be inquired is the first hypothesis posed by Agarwal and Day^{lxix} in their research. That is, the use of computers and the internet in the teaching of economic modules does not affect student learning and retention. Their other two hypotheses will not be inquired.

The module of Macroeconomic Theory was selected because it is an introductory and obligatory module for the study of economics. 55 students took part in the research in total. The module was taught at the computer lab – there were 25 computers for the 23 students who participated in the computer-based lesson therefore each one worked individually. The remaining 32 students were taught in a lecture hall and there was no use of technology involved. Six two-hour

^{lxix} Agarwal, R. & Day, A. E., (1998). "The impact of the internet on economic education". *Journal of Economic Education*, Spring 1998, 29 (2), 99-110.

lessons were delivered and the material covered was the 7th chapter "Finance-credit Market, Money and Rates" from the Macroeconomics book.

Before the start of the lessons students took a test comprised of five true-false questions and five multiple-choice questions based on the 3rd chapter of the Andrew Abel & Ben Bernanke book "Macroeconomics", Volume A, with the title "Productivity, output and employment".

In order to conduct the research the programme "Macroeconomics" by the Keystone company was used with which three lessons were created based on the 7th chapter of the Andrew Abel & Ben Bernanke book "Macroeconomics" entitled "Money – Banks".

Each of the computer-based lessons contained in different format the material covered, a glossary with the new terms for students, exercises and a knowledge test. How the lessons appeared on the computer screen and the units that were used can be found below.

The participating students did not change during the course of the research and each one could access the programme both from the computer lab and their home computer as they were given a copy of the programme. Therefore, students could revise, work more carefully on particular difficulties and practise on the chapter's questions and exercises. There is a part of the lesson's content that was not included in the programme but it was taught through a Power Point presentation.

Some other students also attended the lessons but they did not take part in the experiment since they were not always present. The 55 students who participated were present in all three classes.

Students logged on the programme with the help of the tutor if necessary and then they were taught the predefined material with the programme's guidance. During the final lesson students took a test of five true-false questions and five multiple-choice questions based on the taught material and they also answered a questionnaire with general and more specific questions on their views of the computer-based lesson. This particular number and type of questions was selected so that the second test would have the same format as the first and it could be easily corrected and graded.

The test was completed by all 55 students that took part in both classes. The study and comparison as well as the statistical analysis of the tests are presented in detail in the following chapter.

Moreover, after the completion of the lessons students filled in a questionnaire and expressed their views on computers and the teaching that took place both at the computer lab and the lecture hall.

During the winter semester of 2006-2007, the same students were all taught Microeconomics in the lecture hall. Research compared the knowledge on Macroeconomics acquired with the use of computer and without using one and also the knowledge acquired when they were taught Microeconomics.

2. Research Restrictions

The research restrictions were that research was carried out at a Department of the University of Piraeus during the 2006-2007 spring semester. A considerable number of students were rounded up and they contributed to the research with their views and knowledge so that relevant conclusions could be drawn.

3. Problems

It is natural that some small problems did come up during the research. Initially it should be mentioned that it was difficult to find the appropriate bibliographic sources and mainly similar studies that provide theoretical background. As mentioned by Simkins^{lxx} and Sosin^{lxxi} most of the available data has not been published and there are very few empirical studies that focus on the teaching of economics at university level.

Moreover, the lab was equipped with slow access computers therefore there were often delays during the computer-based sessions although the problem was not so serious to cause the lesson to stop completely. The third problem was that some of the students visited irrelevant web-pages and surfed the internet during the lesson and at times there was a slight disruption in the computer lab.

Additionally, another problem that could not be avoided was that some students skipped classes and in average there were usually two absentees during each lesson.

What is more, we should mention that some students lacked basic computer knowledge and although their number was small slight delays were caused because of them.

As mentioned in the questionnaire analysis none of the students used the programme on the personal computers and this can be attributed to the following factors: 1) students were not used to such a method of teaching, 2) there were exercises that students had to check and solve at home and 3) not all students owned a computer or could work on the programme using another computer. Thus, the lesson could not be based exclusively on the electronic format and this was intensified by the following problem.

Computer labs at the University of Piraeus are most of the time busy with other lessons taking place so it is not possible for students to enter freely whenever they do not have other classes. If this was possible they would be able to use Word, Excel, PowerPoint or other programmes for their assignments, surf the net and look up information or visit useful webpages.

^{lxx} Simkins, S. P. (1999). "Promoting active – student learning using the World Wide Web in economics courses". *Journal of Economic Education*, vol. 30, summer, pp 278-286.

^{lxxi} Sosin K., (1997). "Impact of the Web on economics pedagogy".

Last but not least there was a difference in the level of difficulty between the two chapters, since chapter 7 used for the experimental computer-based lesson is more difficult than chapter 3 that was taught in a lecture hall. Chapter 3 on the other hand is longer than chapter 7.

4. The programme

The programme used for the design of the computer-based lesson was 'Macroeconomics' by Keystone company.

The 'Macroeconomics' CD-ROM is from the key-book⁺ series which consists of basic knowledge and reference CD-ROMs addressed to students, pupils, teacher and the wider public that wish to become acquainted with the particular subject-matter with the use of computer.

In addition, offered features such as electronic bookmarks, notes and printing are additional tools for conquering knowledge. Its philosophy is simplicity, practicality, speed and user-friendliness and it is characterized by substantiality and usefulness. /it is rather substantial and utilitarian.

The electronic study aid 'Macroeconomics' CD-ROM of the key-book⁺ series was designed bearing in mind that in order to substantially comprehend the laws and operational mechanisms of the economic system critical ability, creative, rational and methodical thinking, and continuous linking of theory and practice are essential.

The Macroeconomic material contained in the CD-ROM is presented in two ways: thematically (Concepts – Definitions) and alphabetically (Index) so that they can be best comprehended and consolidated. It is divided in 9 units each of which comprises of five sections:

1. Concepts – Definitions, where the material is systematically presented and divided in self-contained parts. The texts are accompanied by photographs and commentary, whereas a great number of concepts are presented with the aid of animation.
2. Comprehension Keys that help for the further knowledge consolidation and systematization as depending on the nature of the section they can contain: in-depth presentation of concepts important for understanding the unit, summary of the basic points, comparative and compositive presentation of the unit's concept groups, methodology presentation and examples of how to solve the exercises for the units that contain exercises.
3. Questions (open type) that test theory comprehension.
4. Exercises that test content comprehension at practical and computational level.
5. Objective type exercises that cover two different categories the answers of which are graded and clocked by the programme:
 - Multiple choice exercises where students have to choose one out of five possible answers
 - Gap and table filling exercises where students are given either a text with omitted words or a table with omitted numbers and they have to fill in the gaps.

5. Total score comparisons

Table 1 presents the descriptive means of position and dispersion for the grades in the subjects of Microeconomics and Macroeconomics, for the Pre-test and Post-test grades and also for the grade difference among these.

Group		N	Mean	Std. Deviation	Std. Error Mean
Microeconomic Grade	Control	27	4.07	2.827	.544
	Intervention	17	5.29	2.568	.623
Macroeconomic Grade	Control	30	5.97	2.092	.382
	Intervention	23	6.65	1.434	.299
Pre-Test Grade	Control	29	3.3190	1.22273	.22706
	Intervention	21	3.9762	1.24475	.27163
Post-Test Grade	Control	31	3.5081	1.26076	.22644
	Intervention	23	3.6413	1.28547	.26804
Grade Difference Between the Post-Test and the Pre-Test	Control	29	.1466	1.92321	.35713
	Intervention	21	-.2857	1.66073	.36240

Table 1

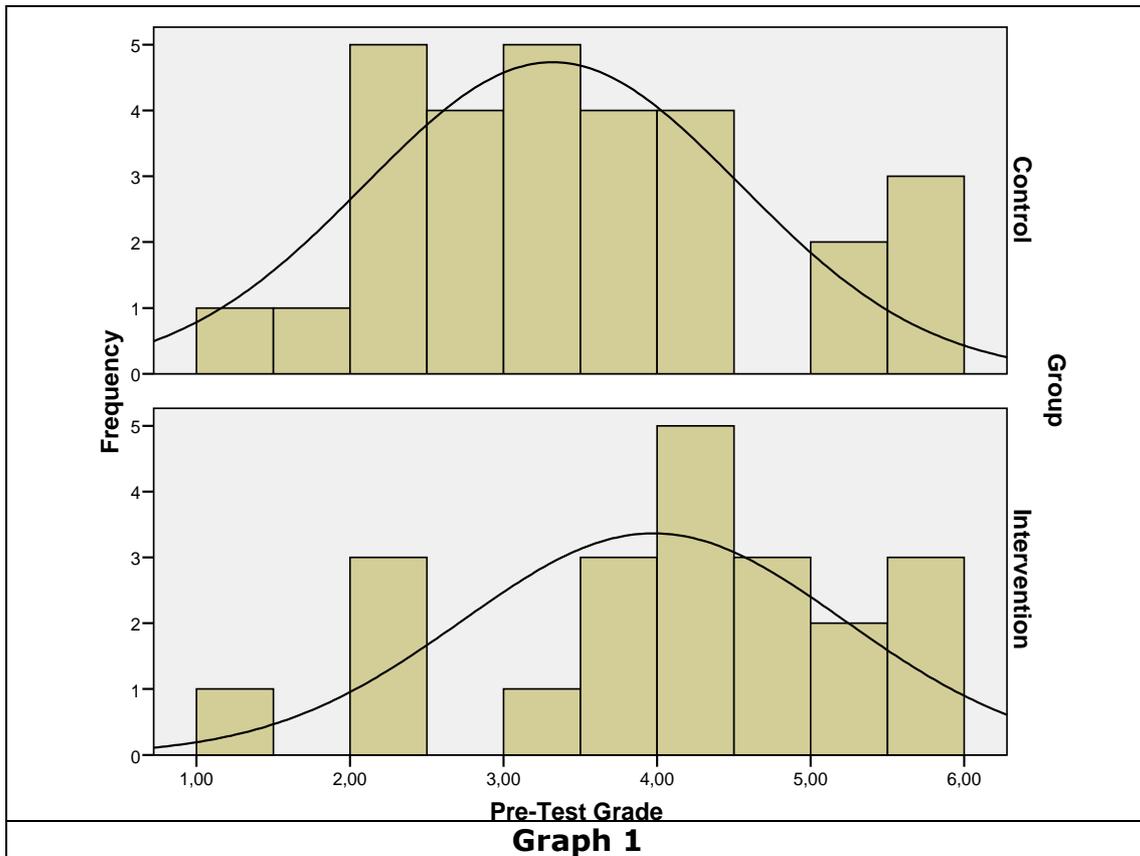
Table 2 presents the Test for the Equality of Variances (Levene's Test) and the Test for the Equality of Means (t-test) for the grades in the subjects of Microeconomics and Macroeconomics, the Pre-test and Post-test grades and also the grade difference among these. From the 2nd column of Table 1 we can see that we reject the equality of the dispersions, at a level of 5%, and only for the case of the "Macroeconomics Grade" variance as the observed level of statistical importance is $p_v=0,33 < 0,05$.

The test for the Equality of the Means deduces that the average of each variance for the two control groups are not statistically different at a level of statistical importance of 5%. Thus we observe that there is a statistically important differentiation between the average Pre-test and Post-test grades.

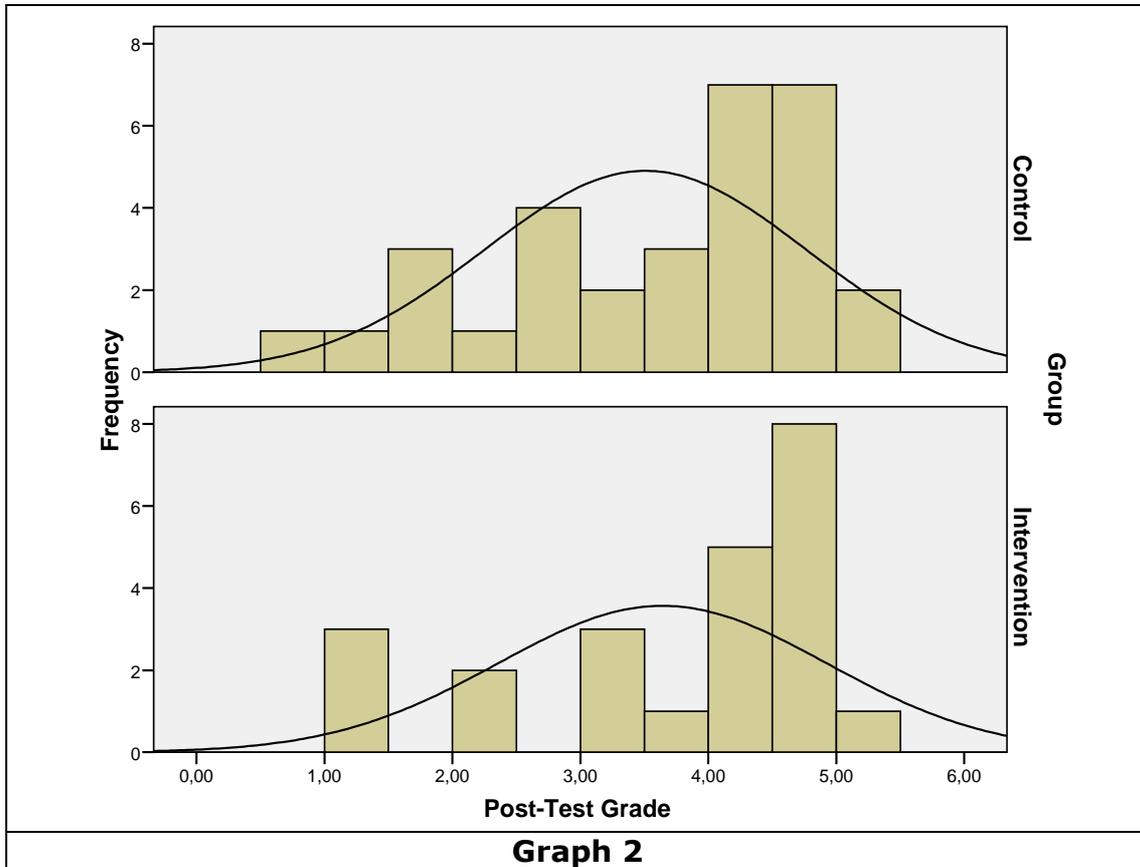
Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Microeconomic Grade	Equal variances assumed	.518	.476	-1.443	42	.157	-1.220	.846	-2.927	.487
	Equal variances not assumed			-1.475	36.616	.149	-1.220	.827	-2.896	.456
Macroeconomic Grade	Equal variances assumed	4.786	.033	-1.346	51	.184	-.686	.509	-1.708	.337
	Equal variances not assumed			-1.413	50.452	.164	-.686	.485	-1.660	.289
Pre-Test Grade	Equal variances assumed	.005	.945	-1.862	48	.069	-.65722	.35300	-1.36697	.05252
	Equal variances not assumed			-1.856	42.791	.070	-.65722	.35403	-1.37129	.05684
Post-Test Grade	Equal variances assumed	.001	.978	-.381	52	.705	-.13324	.34986	-.83528	.56880
	Equal variances not assumed			-.380	47.038	.706	-.13324	.35088	-.83911	.57263
Grade Difference Between the Post-Test and the Pre-Test	Equal variances assumed	.481	.491	.830	48	.411	.43227	.52105	-.61537	1.47991
	Equal variances not assumed			.850	46.430	.400	.43227	.50880	-.59164	1.45617

Table 2

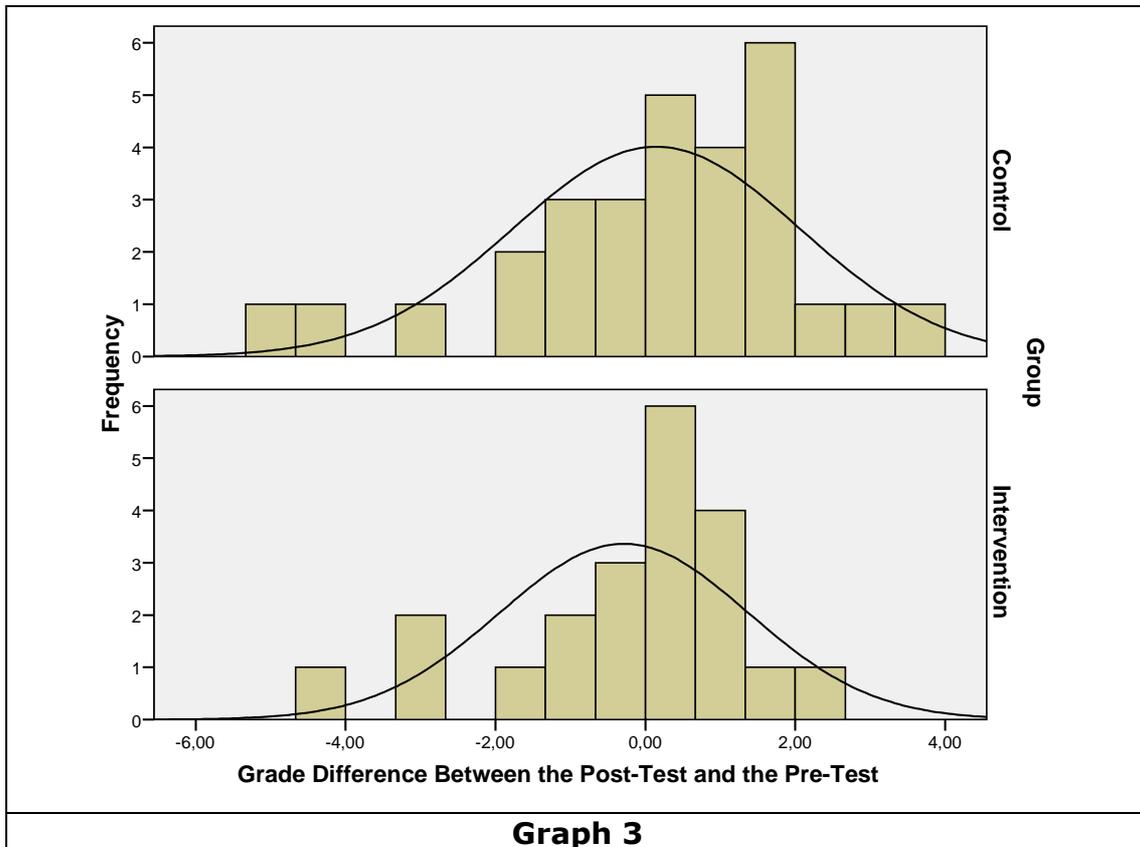
Graph 1 illustrates the histograms of the Pre-test grades for each group separately.



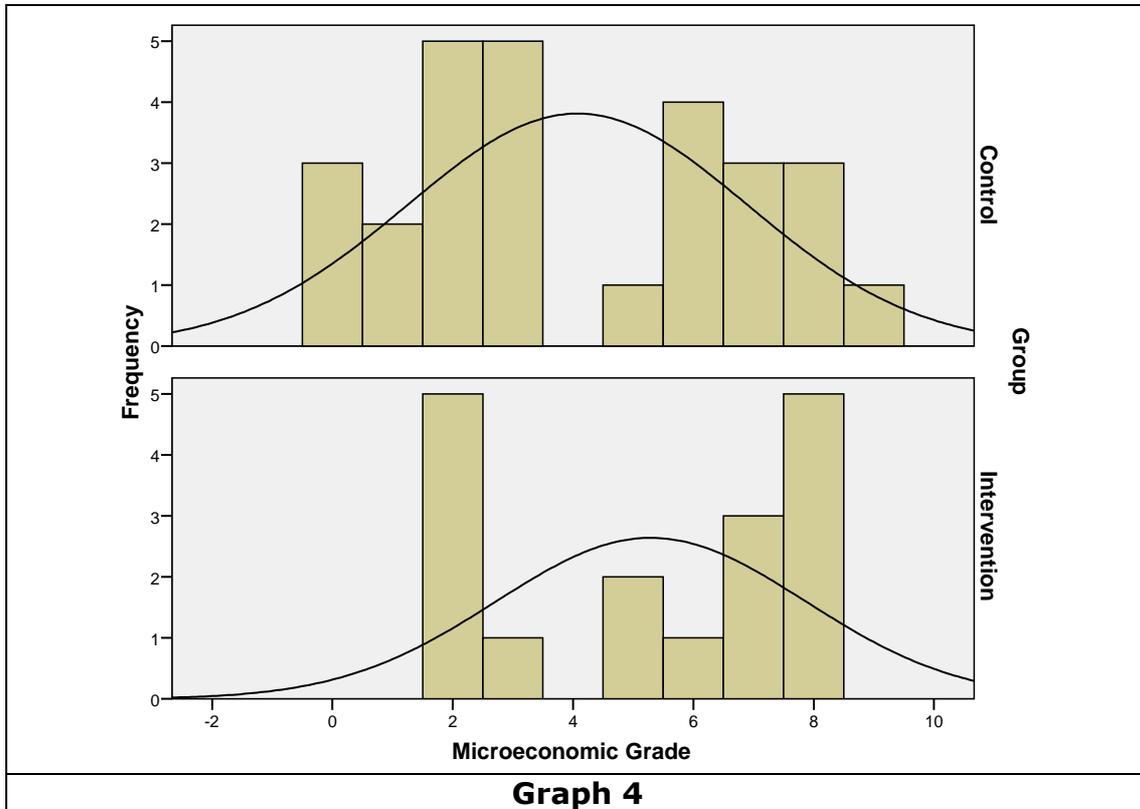
Graph 2 illustrates the histograms of the Post-test grades for each group separately.



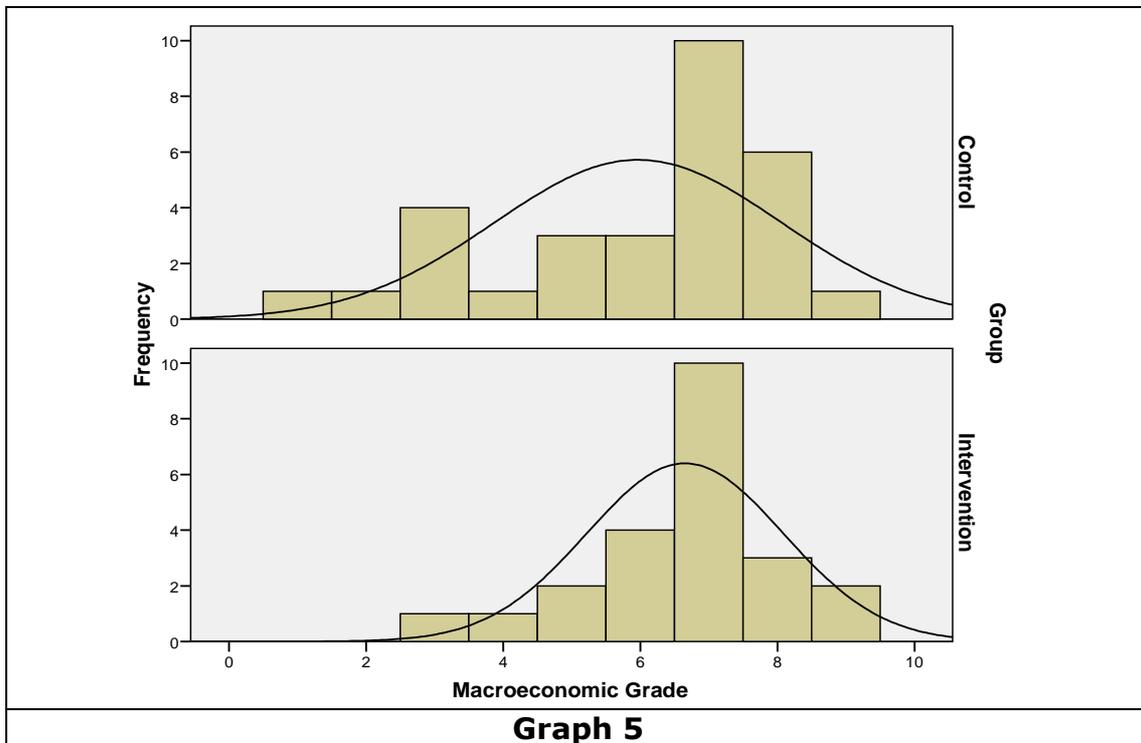
Graph 3 illustrates the histograms of the difference in grades between the Pre-test and the Post-test for each group separately.



Hereupon, Graph 4 illustrates the histograms of the grade in Microeconomics for each group separately.



Next, Graph 5 illustrates the histograms of the grade in Macroeconomics for each group separately.



6. Conclusions

The important role of informatics in the educational process is beyond arguments and this does not only mean introducing a new tool in all levels of teaching but developing a new dimension in educational technology. Computers are being diversely used in education, although there are various views as to the effectiveness of using them for teaching. However, it has been claimed by many researchers that computers can be of invaluable assistance in teaching economics both for teachers and students. It can offer learning opportunities with the general aim to enhance teachers' communicability of knowledge and students' understanding. Thus, teachers of economics are aware of the benefits of technology and are trying to get acquainted with it. At the same time they should assist the creation of appropriate educational software.

Educational software development is at a very early stage in Greece. The inflexibility of our educational system along with the insufficient teacher training in new technologies make the task of incorporating new informatic applications in the teaching process difficult. The teaching hours available for economic modules are few and the number of economic modules at the Department of Statistics and Insurance Science at the University of Piraeus are restricted and most are choice courses, therefore a science that has many applications in many of our life is not paid the appropriate respect.

The most important research conclusions about higher education are:

1. Clarity in presentation, enthusiasm and respect towards student views had the greatest positive influence on lesson evaluation by students. On the contrary, teachers underestimate significantly these two factors and overestimate the importance of being well prepared for the lesson and knowing their subject-matter.
2. Students' attitude towards Economics affects their knowledge of the subject. In general "attitudes" towards Economics derive more from what students learn rather than being motive of what they learn.
3. Student effort matters and students claiming to have tried harder at a module acquired higher grades, so tension and the total amount of time spent studying affects the learning of Economics.
4. Different students of Economics learn the subject in different ways. Very little is known about how particular teaching methods influence particular student traits. More recent studies support that student learning styles, dependent, independent or co operational, affect the total of economic knowledge. It has been further discovered that if the teaching style matches the students' learning style, the result is positive – 50% higher performance.
5. Sex matters, since two thirds of studies on understanding economics have discovered a statistically important differentiation between male and female students. In particular, men have a higher level of comprehension compared to women in Economics and they get better grades than women in tests such as TUCE. The difference is small but statistically important, while only one third of the studies that relate student sex with learning discovered a statistically important difference in favour of men. Namely when we use a flow model and we attempt to explain acceptance at the end of the lesson there is usually no difference between male and female students. In other words, they can be taught economics to the same degree. There are many explanations towards where the original disadvantage derives and one of these mentions the means of measurement used for the evaluation. Most studies make use of multiple-choice tests as a means of measurement. The findings show that boys are better at multiple-choice tests whereas girls do better at questions with longer answers and they also have higher abilities in space and numbers.
6. Having studied economics at school was not a negative factor for student performance at University but did not provide an important advantage either. In general however further research is required with larger student samples and from different educational systems.
7. Teaching assisted by games and computers is almost as effective but probably costs more than conventional teaching. Computer based study systems appear to be more effective than game and simulations especially for students of weaker performance. Educational programmes are effective because students can reach a standard level of qualification sufficiency in less time but students are not very fond of them. Students enjoy being taught according to their personal style and this increases performance in some cases. In general research results show that the advantages of applying

the use of computers in teaching economic modules are controversial.

8. The size of the class little affects performance. However, some researches have discovered that larger classes can have negative effects in some economic fields and may influence financial benefits from education. According to Blinder the issue is of great importance and further research is required.
9. Having mathematical background knowledge helps comprehension of economics and respectively studying economics enhances mathematical abilities to a satisfactory level.
10. Students prefer computer-based lessons over traditional lessons to a very high percentage.
11. The conclusions from this research are related to the conclusions of researches carried out at foreign University Institutions.

8. References

1. Abel Andrew & Ben Bernanke "Macroeconomics", Volume A' και B' .
2. Agarwal, R. & Day, A. E., (1998). "The impact of the internet on economic education". Journal of Economic Education, Spring 1998, 29 (2), 99-110.
3. Makridou-Bousiou D. & Tsopoglous St., (2001) "The use of informatics in economic education".
4. Simkins, S. P. (1999). "Promoting active – student learning using the World Wide Web in economics courses". Journal of Economic Education, vol. 30, summer, pp 278-286.
5. Sosin K., (1997). "Impact of the Web on economics pedagogy".

STAFF UTILIZATION AND INSTITUTIONAL EFFECTIVENESS IN SECONDARY SCHOOLS IN CROSS RIVER STATE – NIGERIA

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Abstract

This study investigated staff utilization and institutional effectiveness in Cross River State secondary schools. Out of the total population of 2,100 teachers from 165 secondary schools in the State, 600 teachers from 60 secondary schools were drawn as sample for the study through stratified sampling technique.

The mean, standard deviation, and r-coefficient were used to answer the research questions while Pearson Product Moment Correlated and independent-test statistic were used to test the hypothesis.

The findings showed that appropriate subjects placement has direct relationship on students academic performance, smaller class sizes have positive direct relationship on students academic performance.

A reduction of teacher workload influences teachers productivity and increased students' performance. High teachers class size, and workload influence their level of job satisfaction and morale. Finally, there is a difference in task accomplishment of teachers who are appropriately placed. It was recommended that teacher should be appropriately placed in terms of their subjects relevance. Government and proprietors of schools should recruit competent teachers to reduce the incidence of inverse relationship between teacher demand and supply.

Keywords: Staff – Utilization - Effectiveness - Workload

1. Introduction

1.1. Background to the Study

The Level and development of any country is to a large extent dependent on the number of trained, competent and utilized manpower available for production and management of resources. This implies that the use of human resource in any aggregate system may likely make or mar the organizational effectiveness of such system. Organizational effectiveness in the schools is determined through the nature of manpower utilization. This is because the structures themselves without human capital are incapable of attaining the schools goals.

Staff utilization refers to the nature of usage of teachers in the schools and this may has implications for the actualization of school corporate goals. It is from

here that the concept of school effectiveness becomes apt as applicable to this study and it is the extent to which organizational goals are achieved. (Agabi 1997) (Adams 1992) (Akangbou 2004) (Ebong 1990) and (Colloids and Potlywhite 1998).

1.2. Statement of the Problem

Records which the researcher collected from staff disposition. Which indicate staff serial number, subject of specialization, subject taught, class size, gender and work experience from most secondary schools in Cross River State revealed that teaching staff are either over worked or under-worked and in another situation some teachers are wrongly placed in terms of teaching relevance. Yet these institutions, which were established to obtain optimal efficacy through proper utilization of teaching staff are still yearning to achieve the dream, in order to be viewed as effective. It is these manifestations in the school, especially in the secondary school system, that warrant this investigation.

1.3. Purpose of the Study

The main purpose of this study was to assess staff utilization and its relationship with institutional effectiveness in Cross River State Secondary Schools. Specifically, the study was to find out:

1. *Whether subjects placement of teachers relate to students academic performance.*
2. *Whether there is relationship between teachers class size and students academic performance.*
3. *Whether teachers workload have any relationship with students academic performance*
4. *Whether there is significant difference in teachers teaching task accomplishment in terms of their subject's relevance.*
5. *The extent to which teachers class size relates with their satisfaction.*
6. *Whether teacher's workload relate with their satisfaction.*
7. *The extent to which class size relate to the teachers morale.*
8. *Whether teachers work load related with their morale.*

1.4. Significance of the Study

The findings of the study will provide insight into the level of staff-utilization recorded in technical, vocational and other subjects in secondary schools in Cross River State. This is bound to promote administrative effectiveness of secondary schools principals as they school administrators will identify the exact limits for teacher class size, workload capable of enhancing such effectiveness in schools. The findings will also revealed the impact of staff subjects placement on students achievement to schools administrators.

The findings will keep abreast educationist and all manner of people concerned with education, with the nature of staff usage in secondary schools in the state. The findings will equally provide relevant information to the Management of Science and Technology Board (STEB) and the Post Primary School Board in the

state about the nature of staff usage in schools. This is bound to guide the management of the board appropriately in the usage of their staff.

The findings will advance useful hints and suggestions on how teaching and learning effectiveness can be achieved through proper job allocation and appropriate allocation of required work load as well as a rational teacher-students ratio. The findings will show usage of teachers in Secondary schools in the state which is considered as less developed in Nigeria.

Lastly, the findings will provide a strong academic basis for further research in an effort to reduce or completely eliminate wastage from liberal Arts and Science subjects in the Nigerian schools system. The findings will be useful to all manner of persons concern with the provision and management of Labour matters on education as it revealed the impact of staff utilization on the system. This revelation would guide employers of labour on the usage of manpower.

The findings will assist employers of labour within the education sub-sector on the current practice of staff usage in secondary schools in Cross River State. The findings will serve as a basis for international comparism of the Nigeria states with others in world in terms of staff usage. This comparism will be demonstrated on the basis of the variables under study. It revealed the nature of teacher utilization and its likely impact school effectiveness.

1.5. Scope of the Study

In terms of content, the study covers teaching staff utilization whose sub variable include, teacher subject placement, class size, work load and its impact on institutional effectiveness whose sub variable include student academic performance, level of teachers satisfaction and morale, as well as teaching task accomplishment of teachers. In terms of geographical location the study was carried out in Cross River State Secondary Schools. The study covered all the State Government owned secondary schools in Cross River South and Cross River North education zones. Private Secondary schools were not included in the study.

1.6. Research Questions

The following research questions guided the study;

- 1) How do teachers subjects placement relate to students academic performance?
- 2) How do teachers class size relate to students academic performance?
- 3) To what extent does teachers work load relate to students academic performance?
- 4) What is the difference between teachers appropriately placed and those inappropriate placed in their teaching task accomplishment?
- 5) How does teachers class size relate to their job satisfaction?
- 6) How does teachers' class size relate with their morale?
- 7) To what extent does teachers workload relate with their satisfaction?
- 8) How does teachers workload relate to their morale?

1.7. Hypotheses

The following null hypotheses were tested at .05 level of significance in this study:

- Ho1. There is no significant relationship between teachers subjects placement and students academic performance.
- Ho2. There is no significant relationship between teachers class size and students academic performance.
- Ho3. There is no significant relationship between teachers workload and students academic performance.
- Ho4. There is no significant difference between teachers appropriately placed and those inappropriately placed in terms of their teaching task accomplishment.
- Ho5. There is no significant relationship between teachers class size and their job satisfaction.
- Ho6. There is no significant relationship between teachers class size and their morale.
- Ho7. There is no significant relationship between teachers workload and their job satisfaction.
- Ho8. There is no significant relationship between teachers workload and their morale.

2. Research Design

This study was a survey research aimed at assessing the level of staff utilization and institutional effectiveness in Cross River State secondary schools. This was so because the study used a group of respondents who were representative of the population through data collection. It was survey because it describes a phenomenon that has already taken place through the use of questionnaires and observations.

2.1. Population

The population for this study consists of 2100 graduate teachers in one hundred and sixty five public secondary schools. From the three education zones in state, 40 secondary schools from Ogoja zone and 79 secondary schools from Calabar zone, and Ikom 64 total 165.

2.2. Sample and Sampling Technique

The researcher adopted the stratified sampling technique for the selection of teachers for the study. The three education zones constituted the strata. The researcher sampled 600 teachers from sixty secondary schools through disproportionate stratified sampling technique. This represents 30% of the entire teacher's population.

Table 1
Distribution of Study Population and Sample in public secondary schools by the Educational Zones in Cross River State.

	No. of schools per zone	Total number of teachers sampled schools	No. of schools sampled	Sample No. of teachers
<i>Calabar educational zone</i>	61	750	22	200
<i>Ikom zone</i>	64	900	23	250
<i>Ogoja zone</i>	40	450	15	150
<i>Total</i>	165	2100	60	600

Source: Planning, Research and statistics, Cross River State.

Table 2
Personal data of the research respondents by location, gender, qualification and work experience

Frequency distribution of respondents by location.

	Frequency	Percentage	Valid percent
Valid Rural	275	45.8	45.8
Urban	325	54.2	54.2
Total	600	100.0	100.0
	600	100.0	

Frequency distribution of respondents by gender

	Frequency	Percentage	Valid percent
Valid	308	51.3	51.3
Female	292	48.7	48.7
Male	600	100.0	100.0
Total	600	100.0	

Frequency distribution of respondents by qualification.

	Frequen cy	Percen t	Valid percent	Cumulative percent
Valid HND	18	3.0	3.0	3.0
NCE	2	.3	.3	3.3
Fist Degree	361	60.2	60.2	7.5
Masters Degree	194	32.3	32.3	39.8
PHD	25	4.2	4.2	
Total	600	100.0	100.0	100.0

Frequency distribution of respondents by work experience.

	Frequency	Percent	Valid percent
Valid Less	32	5.3	5.3
Than2year	40	6.7	6.7
2-4 years	393	65.5	65.5
5-9 yrs			
10 yrs &	135	22.5	22.5
above total	600	100.0	100
Total	600	100.0	

Table 2 showed that more schools in urban responded to the questionnaire than those in rural areas, this indicate a frequency of 325 against 275. This suggests that there are more schools in the urban that were used for the study.

Table 2 also showed that males responded more to the questionnaire items than females, the frequency were 308 for males and 292 for females.

Table 2 equally showed that the respondents with first degree have the frequency of 361 closely followed by master's degree with the frequency of 194.

Table 2 finally showed that most of the respondents have 5-9 years of experience with the frequency of 393 closely followed by 10 years and above with the frequency of 135. Then 2-4 years and lastly less than 2 years.

2.3. Instrumentation

The researcher developed a research instrument called Staff Job Utilization and Institutional Effectiveness Questionnaire (SJUIEQ). With the investigator to elicit information from respondents. The instrument was in two parts. The first part was expected to collect information on personal data of the respondents such as name of school, location, gender, qualification of staff and area of specialization, subject taught, number of lesson periods taught in a week, staff teaching cognate experience and class size or number of students offering such subject.

The second part of the instrument elicited information on how staff utilization relate to teachers' satisfaction and moral using the four point researcher made scale. The researcher adopted the National Examination Council result for 2002/2003 in English language and Mathematics to assess students performance. Data for this study were generated using a 44 items questionnaire and document analysis of student's performance in NECO for Senior Secondary School Examination SSCE 2003 for all the schools in Cross River State in English Language and Mathematic. The responses to the questionnaire items 11-44 were weighted on the four point scale of 4points High Task Accomplishment, (HTA) 4 point Moderate Task Accomplishment, (MTA) 3points, Low Task Accomplishment, (LTA) 2points, Very Low Task Accomplishment (VLT) 1points for items 11-18. For item 19-34 were weighted on the four points scale of Highly Satisfied (HS) 4points, moderately satisfied (MS) 3points, Low satisfaction (LS) 2points and Not

satisfied (NS) 1point, items 35-44 were weighted on the four points scale of Very High Morale (VHM) 4points, High Morale (HM) 3points Moderate Morale (MM) 2points and Low Morale (LM) 1point. The weighted means of this response were derived and used in the analysis of relationship and differences as appropriate in addressing the research questions and hypotheses. The student performance in NECO was equally weighted on the 9 points scale thus A1 9points, B2 8points, C3 7points C4 6points, C5 5points, C6 4points, D7 3points, E8 2points F9 1point. Total enrolment was weighted on nine points. The performance rate was then determine as a ratio of total weighted performance over total weighted enrolment times one hundred over one. The data from respondents was scored as follows, using the specification below as a model. National Policy on Education recommends class size of **1:40** and the Cross River State recommends **24** teaching periods per teacher, per week.

For class size: Appropriate Class Size is **1-40** and is scored **3** Less appropriate Class size ranges from **41-50** is scored **2** Inappropriate Class size ranges from **51** and above and is scored **1** For workload per teacher per week Appropriate workload is **7-24** and is scored **3** per teacher per week Less appropriate workload ranges between **25-30** periods per week, per teacher is scored **2** Inappropriate workload ranges from **31** and above periods per week, per teacher and is scored **1** For placement: Appropriate placement: If teaching the subject qualified in is scored **3**. Less appropriate placement: If teaching in the same subject family is scored **2**. Inappropriate placement: If teaching the subject not in the same family is scored **1**. Note: Subjects family includes Arts, Sciences, Social Sciences, Vocational and Technical subjects.

2.4. Method of Data Analysis

The statistical method that was used is the mean and standard deviation to answer the research questions while the Pearson product moment correlation and independent t-test was used to test the hypotheses as appropriate. The independent t-test was used to test hypothesis **4** while the person product moment covelation was we test hypotheses **1, 2, 3, 5, 6, 7, 8**. The unit of analysis for research questions **1 – 3** and hypotheses **1 – 3** were schools through the eyes of the sampled teachers, while that of research questions **4 – 8** and hypotheses **4 – 8** were done on the basis of the sampled teachers. The whole statistical analysis were done with the use of statistical package for social science (SPSS 7.5)

An r-coefficient with negative values suggests a negative Correlation while the ones with asterisk showed that the test is significant at 0.01 Level of significance.

3. Answers to Research Questions

3.1. Research Question 1

How does teacher's subject placement relate to student academic performance?

Table 3
Means standard deviation and r-coefficient of the relationship between teachers placement and student academic performance.

S/N	Variables	Mean	SD	r-coefficient
1.	Student Performance Rate	32.59	12.84	.50
2.	Teacher Placement	2.02	.37	

N = 60 Schools

Table 3 shows the extent of teacher's placement appropriateness of 2.02 and student performance rate of 32.59. This implies that teachers are just teaching subject related to their field and it has an r-coefficient of .50. In other words the more teachers are appropriately placed the better student have prospect of doing well in their academics

Research Question 2: How do teachers class size relate to students academic performance.

Table 4
Mean standard deviation and r-coefficient of the relationship between teachers class size and student academic performance.

S/N	Variables	Mean	SD	r-coefficient
1.	Student Performance Rate	32.58	12.83	0.91
2.	Teacher Placement	157.8	701.48	

N = 60 Schools

Table 4 shows a positive correlation of 0.91 between teachers class size and student academic performance. The extent of teacher's appropriateness in class size is 157.8 and the performance rate of students is 32.58.

Research question 3: To what extent does teacher's workload relate to student academic performance?

Table 5
Mean standard deviation and r-coefficient between teachers workload and academic performance of students.

S/N	Variables	Mean	SD	r-coefficient
1.	Student Performance Rate	32.58	12.83	-.54
2.	Teacher Placement	2.18	.42	

N = 60 Schools

The analyzed data presented above indicates student performance rate of 32.58 and teachers workload of 2.18 which indicate that there is a negative correlation between teachers workload and students academic performance.

Research Question 4: There is no significant difference between teacher appropriately placed and those inappropriately placed in their teaching task accomplishment.

Table 6
Mean and standard deviation of the difference between teachers who are appropriately placed and those inappropriately placed in their teaching task accomplishment.

S/N	Comparing Variables	Mean	SD	Standard error
1.	Task accomplishment with relevant placement.	2.58	.33	1.38 E-02
2.	Irrelevant of placement	1.83	.46	.191 E-02

N = 60 Schools

Table 6 shows that there is a difference between teacher's task accomplishments in relevant placement from irrelevant placement.

Research Question 5: How does teacher's class size relate to their Job satisfaction?

Table 7
Mean, standard deviation and r-coefficient of the relationship between teachers class size and their satisfaction.

S/N	Influencing Variables	Mean	SD	r-coefficient
1.	Teachers class size	66.21	17.69	-.031
2.	Teachers satisfaction	1.87	.33	

N = 600 Schools

Table 7 shows that there is a negative relationship between teachers class size and their job satisfaction. In order words, the higher the class size the lower their satisfaction

Research question 6: How does teacher's class size relate to their morale?

Table 8
Mean, standard deviation and r-coefficient of the relationship of teacher's class size and their morale.

S/N	Variables	Mean	SD	r-coefficient
1.	Teachers class size	66.21	17.69	.660
2.	Teachers satisfaction	1.564	.37	

N = 600 Schools

Table 8 shows that there is a negative correlation between teacher's morale and large class size. The higher the class sizes the lower the morale of teachers

Research question 7: To what extent does teachers workload relate to their job satisfaction?

Table 9
Mean standard deviation and r-coefficient of the relationship between teacher workload and teachers job satisfaction.

S/N	Variables	Mean	SD	r-coefficient
1.	Teachers class size	2.19	.47	-.007
2.	Teachers satisfaction	1.90	.30	

N = 600 Teachers

Table 9 shows a negative correlation between teachers work load and their job satisfaction.

Research question 8: How does teacher’s workload relate to their morale?

Table 10
Mean, standard deviations and r-coefficient of the relationship between teachers workload and their morale.

S/N	Variables	Mean	SD	r-coefficient
1.	Teachers class size	2.19	.47	.133
2.	Teachers satisfaction	1.49	.37	

N = 600 Teachers

Table shows that there is an inverse relationship between teachers workload and their morale.

3.2. Hypothesis I

There is no significant relationship between teachers subjects placement and students academic performance.

Test of significant relationship between teacher’s placement and academic performance of students is presented in table 11

Table 11
Test of significant relationship between teachers subjects placement and students academic performance.

S/N	Variables	Mean	SD	r-coefficient	2-tailed sig.	remarks
1	Student Performance Rate	32.59	12.84	.50	.710	significant
2	Teacher placement	2.02	.37			

N = 60 schools

The result of the test addressing the hypothesis is presented in table 11.

Table 11 The r-coefficient of .05 which is the level of relationship between appropriate teacher's placement and students academic performance was subjected to test of significance. The results in table (11) showed a two tail significance value of **0.710**. This significant value is by far higher than the 5% at which the researcher is prepared to accept or reject the hypothesis. This means there is no significant relationship between teacher's placement and academic performance of students. The null hypothesis is therefore not rejected as the researcher (failed to reject it) and conclude as such.

3.3. Hypothesis 2

There is no significant relationship between teachers class size and students academic performance.

The result of the test addressing the hypothesis was presented in table 18.

Table 12

Test of significant relationship between teachers class size and students academic performance.

S/ N	Correlated variables	Mean	SD	r-coefficient	2-tailed sig.	Remark sign.
1	Students performance	32.58	12.83	0.91	.50	sig.
2	Teachers class size	157.3 1	.701			

N = 60 schools

The above table 12 showed an r-coefficient of .50 is higher than the r-coefficient of .05 which the researcher is prepared to reject or accept the null hypothesis thus, the significant value of .50. This means that there was no significant positive relationship between teachers class size on students academic performance, therefore teacher are merely over loaded or underloaded in their class sizes. The researcher therefore failed to reject the null hypothesis.

3.4. Hypothesis 3

There is no significant relationship between teacher workload and student academic performance.

Table 13
Test of significant relationship between teachers workload and students academic performance.

S/N	Influencing variables	Mean	SD	r-coefficient	2-tailed sig.	Remark sign.
1	Students performance	32.58	12.83	-.054	.68	Sig.
2	Teachers workload	2.18	.42			

N = 60 schools

The result of the test addressing this hypothesis is presented in table 13. The r-coefficient of .05 which is the level of relationship between teachers workload on students academic performance was subjected to a test significance, it revealed a significant two tailed value of .68 which is also by far higher than the .05 confidence interval that the researcher is prepared to reject or accept the null hypothesis. This means that there is no significant relationship between teachers workload and students academic performance. The researcher therefore failed to reject the null hypothesis and conclude that there is a significant relationship between teachers workload and students academic performance as found in the study.

3.5. Hypothesis 4

There is no significant difference between teachers appropriately placed and those inappropriately placed in their teaching task accomplishment.

Table 14
Mean, standard deviation and t-test of the difference between teachers appropriate and inappropriate subjects placement in their teaching task accomplishment.

S/N	Comparing teachers variables	Mean	SD	Standard error mean	95% confidence interval of difference
1	Task accomplishment with relevant placement	1.83	.33	1.38E-02	
2	Teachers accomplishment with irrelevant placement	2.58	.46	1.91E-02	

N = 600 teachers

Table 15**Paired sample correlations of relevant and irrelevant subjects placement of teachers.**

Task accomplishment with relevant placement	N	correlation	Sign.
	600	.29	.000

Table 16**Paired differences of task accomplishment with relevant and irrelevant subjects placement of teachers.**

Teachers accomplish with relevant and irrelevant placement	task with both relevant and irrelevant	χ	SD	95% confidence interval lower upper	t of	df	Sig (2 tailed)
		-.74	-.49	-.78 - .70	-37.23	598	.000

The analysis for hypothesis was examined in tables 14, 15 and 16. This mean and standard deviation for teacher task accomplishment with relevant placement indicate 1.83 and .33 respectively while task accomplishment with irrelevant placement indicates 2.58 and .46. For mean and standard deviation. The calculated t-test value is a negative value of -37.23 at 598 degree of freedom, with t two tailed significant value of .000 lower than the .05 which the researcher is prepared to reject or accept the hypothesis. To this extent therefore, the null hypothesis is rejected. This means there is a significant difference in task accomplishment of teachers who are appropriately placed from those who are not.

Hypothesis 5

There is not significant relationship between teacher's class size and their job satisfaction.

Table 17**Test of significant relationship between teacher's class size and their job satisfaction.**

S/N	Correlated variables	Mean	SD	r-coefficient	2-tailed sig.	Remark sig.
1	Teachers class size	66.21	17.69	-.031	.45	
2	Teachers satisfaction	1.87	.33			

N = 600 teachers

The result of the test addressing the hypothesis is presented in table 17 above.

The r-coefficient of .05 which the level of the appropriate relationship between teacher's class size and their satisfaction was

subjected to a test of significance. It yielded a two tailed significant value of .45 which is higher than 0.05 Alfa levels which the researcher intends to test. This test is significant and the researcher failed to reject the null hypothesis and conclude that teachers class size in this study does not relate to their job satisfaction. The relationship is negative meaning that the increase in student-teacher ratio the lesser teacher satisfaction and vice versa.

3.6. Hypothesis 6

There is no significant relationship between teacher's class size and their morale.

Table 18

Test of significant relationship between teachers class size and their morale.

S/ N	Correlated variables	Mean	SD	r-coefficient	2-tailed sig.	Remarks
1	Teachers class size	66.21	17.69	-.157**	.000	Sig.
2	Teachers morale	1.56	.33			

N = 600 teachers

The r-coefficient of .05 which is the level of the relationship between teachers class size and their morale was also subjected to a test of significance which yielded a two tailed significant value of .000 and r-coefficient - .157**. This implies that there is an inverse relationship between teacher's class size and their morale. This further suggests a negative relationship between teacher's class size and their morale. The hypothesis was therefore rejected. Beyond this point the test for correlation was said to be highly significant at 0.01 even though it was not the basis for testing the hypothesis, see appendix. The asterisk indicates that there is a negative relationship.

3.7. Hypothesis 7

There is no significant relationship between teacher's workload and their job satisfaction.

Table 19

Test of significant relationship between teacher's workload and their teacher's job satisfaction.

S/ N	Correlation variables	Mean	SD	r-coefficient	2-tailed sig.	Remar k
1	Teachers workload	2.19	.474		.86	Sig.
2	Teachers satisfaction	.30		.007		

N = 600 teachers

The result of the analysis above in table 19 is significant because the two tailed significance value is .86 higher as against 0.05 which is the benchmark for decision in this study. There is a negative relationship between teachers workload and their satisfaction with their jobs. The relationship is also inverse, the researcher therefore failed to reject the null hypothesis and conclude as such.

3.8. Hypothesis 8

There is no significant relationship between teacher's workload and their morale.

Table 20

Test of significant relationship between teacher's workload and their morale.

S/ N	Correlated variables	Mean	SD	r-coefficient	2-tailed sig.	Remar k sig.
1	Teachers workload	2.91	.47	.133**	.001	
2	Teachers morale	1.49	.28			

N = 600 teachers

The result of this test in table 20 is also significant even at 0.01 although the researcher was testing at 0.05. The two tailed significant value of .001 and the calculated value of .133** was derived and it showed that the test was not significant, since the calculated value is lesser than .05 confidence interval. Again there is a negative correlation between teacher's workload and their morale. See asterisks on table 26 above.

3.9. Summary of Findings

- Appropriate teachers subjects placement has direct relationship with students academic performance;
- Small class sizes have positive direct relationship with student's academic performance.
- A reduction in teacher's workload has direct relationship with student's academic performance. The lesser workload the increased in students performance.
- Teachers with relevant subject placement record high task accomplishment in terms of academic performance achievement in schools.
- Teacher's high class size is related to their satisfaction with their jobs.
- The higher the class sizes of teachers the lower their morale.
- The higher teacher workload the lower their satisfaction with their jobs. There is inverse relationship between teacher workload and their morale.
- There is a negative correlation between teachers workload and their morale

3.10. Discussion of Findings

3.11. Teachers subject placement and student's academic performance

The study found that teachers appropriate job assignment has direct relationship with students academic performance. This findings is in league with the views of (Ajayi 2004) and (Okebukola 2004) who argued vehemently that teachers task accomplishment is determine by the nature of his placement in terms of subjects relevance. It was again argued by the Nigerian Education Development Council that as part of the rule in providing a foundation level support and sustainability of education is the fact that teachers in schools should be placed as appropriate. One of the entrants of such position is the lack of teachers in most schools in the state and worse still is the fact that Government Education reforms of 2004 under Duke's led administration drifted away all (NCE) teachers to the primary schools, the secondary schools are now empty with few teachers with no appropriate subjects relevance which influence students performance negatively.

3.12. Teachers class size and students academic performance

In this research question and hypothesis it was found that teachers class size has direct positive relationship with students academic performance. The finding is related to the opinion of (Enukoha 2004) and (Mkpa 2004) who at various times shared the views that class size is directly responsible for what happen in school at the end of day. The study as confirms that findings of the American Educational Research Association who discovered that small class sizes have made significant strides in California Wisconsin and elsewhere in recent years. It was concluded that class size reduction program should reduce class size by hiring additional 100,000 new qualified teachers. The finding is also in agreement with Tennessee's (2005) longitudinal class size study on student's achievement which support smaller class sizes and its impact on students learning. It was also a matter of concern for the Clinton's administration to lower class size in school in USA. Before he left government house.

3.13. Teacher's workload and student academic performance

The finding is this research question and hypothesis showed that a reduction in teacher workload will lead to positive relationship with students academic performance and vice versa. It follows that school effectiveness is not guaranteed.

This finding however is in agreement with the opinions of (Herbison 1973), (Bur 1992), (Adesina 1990) and (Cailiods 1989) who have variously opined that increase workload for teachers without a corresponding increase in their morale will lead to decline productivity. It is for this reason that Dennison (Agabi 2002) in his theory of residual contribution opined that conventional economics theorizing is becoming inadequate and unscientific in respect of inputs-outputs matrixs during production and that improvement in employees heath, compensation, hygiene etc are capable of also influencing teacher productivity. When this occur students are like, to have enhanced learning and knowledge.

3.14. Task accomplishment in appropriate and inappropriate placement of teachers

The finding of this research question and hypothesis showed that teachers task accomplishment is higher for teachers who are appropriately placed in their teaching subjects and vice versa. The findings showed a difference in teachers task accomplishment. The findings summarized the opinions of Bruton (Agabi 1997), (Akangbou 1983) who believed that for effectiveness, square pegs should be put in square holes. Again where there exist square pegs in round holes the should be rechisel, this suggest retraining of teachers to cope with the demands of their jobs. (Bowen 1990), (Long 1986), and (Keeves 1990).

3.15. Teachers class size and their Job satisfaction

This finding of both the research question and hypothesis proved that high class sizes have the capacity to reduce teacher's level of satisfaction with their jobs.

This finding is in league with the views of (Mc Keechi 1987) who pointed that there is a relationship between teachers class size and the level of teachers satisfaction. Also (Enaohwo 1990) explained that class size as a potential audience is a critical variable in determining cost effectiveness of school program. The findings also add to the exiting body of knowledge as it revealed that teachers class size has direct influence on teachers satisfaction and conversely influence teachers zeal to put in their best.

3.16. Teachers class size and their morale

The finding in this research question and hypothesis showed that the higher the class sizes the lower the morale of teachers. This findings is in consonance with the views of (Ellebeng 1997) and (Berman 1987) who all agreed that teachers morale is related to teacher class size and this has far reaching effects for students learning, the health of the organization and the health of the teachers, the finding also showed that morale and achievement are related. It was in that direction that (Miller 1987) agreed that teachers morale can have positive influence on pupil attitude and learning, raising teachers morale level does not only make teachers placement for teachers appropriate but also learning more pleasant for students.

3.17. Teachers workload and their satisfaction

This finding showed that the higher the workload of teachers the lower the level of satisfaction. This finding is related to the recent report on job satisfaction and leadership, good behaviour, positive school atmosphere and teacher autonomy as working condition associated with higher teacher satisfaction. (The national center for education studies 1997) also established what is in league with this finding. The study found that teachers who are given moderate workload are more satisfied with their jobs and vice versa. A weak relationship was found

between teacher excessive workload beyond the specification and their level of satisfaction with their jobs. This finding was supported by the United States Natural Centre for Education Statistics, (Stelund 1995) and (Godwin 1987).

3.18. Teacher's workload and their morale

The finding here revealed that there is an inverse relationship between teacher's workload and their level of morale. The finding is an agreement with the views Berman (1987) and (Blasé and Kirby 1992) also articulated that principals can strengthen teachers morale by assigning to them moderate workload and standing behind them, in face of threat from parents, for effective principals should serve as guidance to teachers. The test showed an inverse relationship between teacher's workload and their morale.

3.19. Educational implications of the study

With the findings of the study in the background, there are far reaching implications for staff utilization and institutional effectiveness in Cross River State Secondary Schools. The findings imply that for school effectiveness to be attained, appropriate placement of teachers will lead to task accomplishment. The teacher's morale is low inhibiting their task accomplishment. The teachers satisfaction is low and it has implication for task accomplishment in school. However, that high teacher class size and workload have a weak correlation on their satisfaction and morale. The findings also implied that there should be need for redistribution of teachers in the state in line with rational economics calculus, that additional teachers be employed in secondary schools in the state. Finally that there is need for retraining of teachers in secondary schools in the state.

3.20. Recommendations of the study

Sequel to the educational implications mentioned with respect to the findings, the researcher recommends the following.

1. That teachers should be appropriately placed in terms of their subjects relevance for at has capacity of enhancing students academic performance.
2. That smaller class size be adhered to for it has a direct positive influence on student's academic performance.
3. That teacher's work load is moderate. For it has a direct influence on student's performance.
4. Teachers should be given moderate class size and workload in order to stimulate their morale and increased the satisfaction in order to put in their best.
5. More qualified teachers be employed to reduced the inverse relationship between teacher demand and supply.
6. Employers of teachers should consider teachers interest to teach as a career, for this in itself is already an indices for teacher's satisfaction and morale.
7. Principals and all other education administrators should ensure that appropriate teachers subjects placement, class sizes, and workload are

adhered to through periodic supervision and inspection of teacher's activities in school.

3.21. Summary

This study investigated staff utilization and its influence on institutional effectiveness in Cross River State Secondary Schools. The study found that appropriate subject placement of teachers has a direct influence on student's academic performance. Also that assigning too much class size and workload beyond the specification impede teachers productively thereby reducing the rate of teachers satisfaction and morale and as a result it affect the academic performance of students. It was Recommended that proper placement of teachers should be encouraged after the recruiting process of additional teachers to reduce the inverse demand and supply of teachers as found in this study, since it has capacity to put teachers in a position to do what is just required of them. This has implication for the effectiveness of the institutions as the schools were now viewed as ineffective in terms of the variables that were considered in the study.

3.22. Conclusion

From the findings of this study, it was concluded that when teachers are appropriately placed in terms of their teaching relevance, given manageable class sizes and work load, they are bound to have enhanced performance which will manifest in academic achievement of student during end of school year examinations. The satisfaction and morale levels of teachers are also likely to rise. When this happen it follows that putting square pegs in square holes in the school system will likely yield effectiveness on part of the teachers, student and school system.

References

- Adams, C. F. (1992). Finding Psychic Rewards in Today's Schools': Clearing House 65(6) 343-347.
- Agabi, C. O. (1997). Wastage in manpower utilization.** M.EdThesis of Education University of Port-Harcourt.
- Agabi, O. G. (2002). Finance and Economic of Public Education. Port-Harcourt; ICES.**
- Ajayi, K. (2004). The role government in establishing a foundational level for support and sustainability of education in Nigeria: A lead paper presented at 2004 Annual Conference of (NAEAP). University of Jos.**
- Akangbou, S. D. (1985). The Economics of Education Planning in Nigeria. India: Vikas Publishing PVL Limited.**
- Bur P. (1992). The Base for Human Resources Development and Utilization Policy for Nigeria in Yahaya, A. D. & Akinleye C. L. (Ed.) Human Resource Development and Utilization Policies and Issues. Ibadan; Spectrum Books Limited for Ascon.**

- Colloids F. & Postlewait, T. V. (1989). Teaching and learning conditions in developing countries. In Colloid P(ed).** The Prospect for Educational Planning: A Workshop Organized, p. 134-174, UNESCO HEP.
- Colloids F. & Postlewait, T. V. (1989). Teaching and learning conditions in developing countries. In Colloid P(ed).** The Prospect for Educational Planning: A Workshop Organized, p. 134-174, UNESCO HEP.
- Ebong, J. M. (1990).** Fundamentals of economics and finance of public education. **Unpublished Memograph. University of Port-Harcourt.**
- Ellenber, F.C. (1927) Factors Affecting Teacher Morale. "NASSP Bulletin" (56), 12.
- Enaohwo, J. O. (1990). Economics of education and the planning challenge. India: Anmol Publication.**
- Enukoha, O. I. (2004). Human resource development: A case for a re-examination of teacher education programmes in Nigeria. A lead paper presented at curriculum conference of Nigeria (CON) University of Uyo.**
- Godwin, A. L. (1987) Vocational Choice and realities of teaching. S. Bolin & McConnell Falk (Eds). New York, teachers College, Columbia University**
- Keeves (1990). The University administrators in academics;** Bulletin of the America Association of University Professor. **Washington D.C.**
- Long, D. H. (1986). Teaching in rural soviet school is not bed of roses** Opinion Papers. **Eric pp. 299-300.**
- McKeachie F. (1987). Improving of secondary education imbalance reform of secondary education:** Bulletin of the international Bureau of Education **Paris, UNESCO.**
- Miller, W. C. (1981). Staff Morale, School Climate, and Education Productivity. **Educational Leadership**, 38(6).
- Mkpa, M. A. (2004). Challenges of curriculum implementation, A Key note address presented at the 19th curriculum organization of Nigeria (CON).**
- Okebukola, P. (2005). Quality Assurance in the Nigerian University system: A Key note address presented at 2005 fellowship/seminar award of curriculum organization of Nigeria, University of Jos.**
- Stenlund, K. V. (1995). Teacher perceptions Across Cultures: The impact of students on teacher Enthusiasm ad Discouragement in a Cross-cultural Context.'** The Alberta Journal of educational research.

The Influence of School Readiness and Age on the School Performance of Learners in Grade 1 and 4.

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Abstract

Learners can be seen as ready for school when they experience successful school performance after entering in Gr.1. School performance is influenced by Bandura's view that learning is a cognitive function where the child forms a mental representation of his observations or experiences and then creates structures through which the same content can be demonstrated. For the child to be able to perform all these processes on an adequate level, he/she must have reached a certain level of development and school readiness. Development, school readiness and school performance goes hand in hand when the child enters formal school. This interrelation is still influencing the child in Grade 4.

In a longitudinal empirical research, the school readiness and age of learners were compared with their school performance in home language and mathematics marks in Grade 1 and again in Grade 4. Age did not affect school readiness or school performance. But from the empirical research it was evident that school readiness indeed influences the learner's school performance in Grade 1 and again in Grade 4. Thus, problems in terms of school readiness can still have a negative influence on the learner's school performance in Grade 4. School readiness is still a very relevant concept and children who might experience learning problems can be identified with a school readiness test.

Keywords: School readiness – Perceptual development – Grades 1-4 - School performance – School entering age

1. Introduction

The importance of school readiness when learners enter school is a well-known fact from the literature (Abott-Shim, Lambert, & McCarthy, 2003: 191-214). School readiness can best be influenced, predicted and guaranteed by the quality of the early learning experiences and the early care that the learner receives (Fontaine, Torre, Grafwallner, 2006: 99-109). Only when the learner's school readiness is intact can he/she experience positive school performance.

Today, the learner is not the only responsible for school readiness. Thus, the onus for school readiness is not only on the learner, but it is also the responsibility of the school (Outcomes Based Education) in the sense that the school should be ready for the learner (socio-environmental approach) to be able to meet the learner's individual developmental needs (Hojnosky & Missall, 2006:

602-614 and Petriwskyi, Thorpe & Tayler, 2005: 55-69). Therefore, this research will deal with school readiness from a socio-environmental approach.

2. Aim of the research

This research is aimed at the learner, when entering school in Grade 1 and again when these specific learners are in Grade 4. The relation between school readiness and academic performance in Gr. 1 and academic performance in Grade 4 will be explored. The influence of age on the learner's school readiness and school performance will also be determined. The following research questions were posed: Which factors influence the learner's school readiness? Does the learner's school readiness influence academic performance in Grade 1? Is there a relation between school readiness and academic performance in Grade 1 and the learner's school performance in Grade 4? What is the relation between age, school readiness and school performance?

The research questions were investigated by means of a literature review and an empirical investigation. The research in this article had the following aims:

To explore the different factors that influence school readiness in Grade 1.

To explore factors influencing the Grade 1 learner's school readiness and subsequently the influence thereof on Grade 1 academic performance.

To explore whether school readiness and academic performance in Grade 1 still influence learners' school performance in Grade 4.

To explore whether age influences learners' school readiness and academic performance in Grade 1 as well as in Grade 4.

3. Hypothesis

For this study the following two hypothesis were formulated:

Hypothesis 1:

There is a statistical significant correlation between scores on the Aptitude Test for School Beginners (ASB) and school performance of learners in Grade 1 and again in Grade 4.

Hypothesis 2:

There is a statistical significant relation between the learners' age and school performance in Grade 1 and again in Grade 4.

4. South African school contextualisation

South Africa practises an Outcomes Based Educational Approach. School is compulsory from Grade 1 up to Grade 9. Grade R (Reception year) and Grades 10-12 are voluntary. The learner can be admitted to Grade 1 when he/she is five

years old, but turns six on or before 30 June in the Grade 1 year. However, if parents feel that their learner is not ready for school at the age of five, they can choose to send him/her to Grade 1 at age six, turning seven (Education Laws Amendment Act, 2002. Act 50 of 2002).

Grades R-3 is the Foundation Phase and Grades 4-6 the Intermediate Phase. As Grade 4 forms the first year of the Intermediate Phase, the learner often finds it a very difficult year. If the learner still has difficulties in terms of school performance, it often comes to the fore during Grade 4.

5. School readiness

Learners can be seen as school ready when they experience successful school performance when entering the formal school in Grade 1. Qualifying criteria for successful entry into the formal school are as follows:

Cognitive skills including language and literacy abilities. Previous literacy experiences and phonological processing play a very important role. General knowledge also forms part of cognitive school readiness. (Pogorzelski & Wheldall 2005: 1, Savage & Carless, 2005:45-61, Wright, Diener & Kay, 2000: 99-117).

Physical skills like perceptual and motor skills (Moletsane & Bouwer, 2000).

Adequate emotional development (emotions and the other domains can never be separated) forms the inner discipline for the child to *want to* learn. Emotional stability that furthers the child's independence is also part of school readiness (Wright, Diener & Kay, 2000: 99-117, Folds 2005: 1, Broadhead, 2004:123 and Bagdi & Vacca, 2005:145-150).

Social skills that include situational readiness like socio-cultural differences and demographic controls are of importance for the formal school situation (Raver, Aber, & Gershoff, 2007:96-115 and Blair, 2002: 111-127). The theory of Bronfenbrenner emphasises the importance of positive interaction between community, family and school (Schulting, Malone & Dodge, 2005:860-871).

Self-regulation skills that will influence learning behaviour such as persistence and attention that contribute very much to the child's over all school readiness. Basic self-regulating skills like paying attention, following instruction and inhibiting inappropriate actions are all skills that are part of self-regulation (McClelland, Cameron, Connor, Farris, Jewkes, & Morrison, 2007:947-959 and Fantuzzo, Bulotsky-Shearer, McDermott, McWayne, Frye, & Perlman. 2007. 44-62).

All the mentioned skills will be influenced by demographic factors such as age, gender and socio-economic status.

5.1 School readiness from different paradigms

School readiness can be dealt with from different paradigms. These paradigms are as follow:

5.1.1 School readiness from a medical model

According to the medical model dealing with school readiness, a learner's failure in terms of school performance is a 'result' of limitations within the individual. If the individual learner has an immaturity and/or a lack of behavioural development are observed, the learner should be granted an extra year. If the necessary time for maturation is not allowed, the learner may be at risk of school failure (Mantzicopoulos & Neuharth-Pritchett 1998; May & Kundert 1997).

When learners are pushed to achieve beyond their abilities they could manifest problems such as negative school performance, delinquency, drug abuse, suicide, psychosomatic illness, depression, and anxiety. Therefore maturationalists give the learner the 'gift of time' to allow him/her an extra year to mature emotionally, socially and intellectually and to develop the required skills (May & Kundert 1997).

When school readiness is viewed as an internally controlled process (as in the medical model), a "wait-before-you-teach" approach will be followed. Mantzicopoulos and Neuharth-Pritchett (1998) are of the opinion that this view separates the learner's knowledge and skills from the context in which he/she develops. The medical model does not take the social and environmental factors in the learner's life into concentration.

5.1.2 School readiness from a socio-environmental paradigm

May and Kundert (1997) states that school readiness should be dealt with from the social constructivist perspective which focuses on the school's ability to accommodate (OBE) the normal developmental variations in children. Coolahan, Fantuzzo, Mendez and McDermott's (2000) developmental-ecological perspective emphasises the importance of learners being supported within their relevant "social context". They are of the opinion that there is a relation between play, learning behaviour and conduct. These paradigms are based on the theories of Piaget, Skinner, Watson, and Vygotsky. This study will refer to this paradigm as the socio-environmental paradigm. "Socio" is derived from the fact that the learner's interaction with people is very important. The theory of Feuerstein (1986:45-55) is relevant as the educator (parent or teacher) fulfils the role of mediator between the learner and the environment. The mediator will open up the environment as a whole for the learner. Thus, the environmental influences cannot be isolated from the social (mediator) influences. Mantzicopoulos and Neuharth-Pritchett (1998) state that environmental influence, teacher instruction, and parental involvement are important factors in terms of school readiness. Such stimulation is conducive to increased intellectual ability and a positive overall achievement.

This paradigm not only focuses on the status of the learner, but also emphasises the context of the school and how it interacts with the learner. As such it dissociates itself from the medical model and is associated with the new outcomes based method of teaching, namely that the school must be ready for the learner and not the learner for the school. Learners do not simply need time to mature, they need more than time. The emphasis on the importance of positive interaction between community, family and school (compare the theory of Bronfenbrenner (Landsberg, Kruger, & Nel, 2005: 80-83)) strengthens this paradigm (Schulting, Malone & Dodge, 2005:860-871).

This way of thinking still acknowledges that heredity plays a role while also emphasising that learning is dependent on environmental stimulation. Learning and behaviour can be shaped by stimulation (enhancing and controlling the environmental conditions) so that learning will be enhanced by interaction and collaboration with adults (Moletsane & Bouwer, 2000). Thus, learning is not solely dependent on the child's biological make-up, but is also related to the *conditions of the child's environment*.

This research will view school readiness from the Socio-Environmental paradigm as the learner can never be taken out of his life-situation.

6. The relation between school readiness and school performance

School performance refers to the progress children make in all aspects of their school career. Successful school performance refers to cognitive, physical, emotional, social adjustment and self-regulating skills like distractibility, adaptability, paying attention, following instruction and inhibiting inappropriate actions (Wright, Diener & Kay, 2000: 99-117). All these skills are critical elements for school performance. Learners who enter school without these skills, especially the self-regulating academic skills, have a significantly greater risk for difficulties like peer rejection and poor academic achievement (McClelland, Cameron, Connor, Farris, Jewkes, & Morrison, 2007:947-959). In contrast learners with high levels of self-regulation achieve on significantly higher levels of literacy and numeracy.

That is also why there is a strong association between attention-giving behaviour and school performance (Chang & Burns, 2005, 247-263 and Wright, Diener & Kay, 2000: 99-117).

A learner's school performance can be stymied by a lack of school readiness, but school performance requires much more than just academic skills (Wright, Diener & Kay, 2000: 99-117). Emotional and social intelligence (Landsberg, Kruger, & Nel, 2005: 100-103), resilience and self-confidence are all vital ingredients of school performance. Teachers are often very aware of the importance of a emotional supportive context before learners can have successful learning at school (Price, 2002: 305-320). Negative school performance (like learning problems) is associated with antisocial and conduct problems (Yu, Chan, Cheng, Sung & Hau 2006. 331-341).

The learner's total environment is divided into sub-environments of community, peers, family and school (Hung & Marjoribanks, 2005: 3-13 & Schulting, Malone & Dodge, 2005:860-871). Although all the sub-environments are of great importance, the family and the family's social status continues to have an unmediated association with the learner's school performance, cognitive functioning, language development and social and emotional functioning (Hung & Marjoribanks, 2005: 3-13, NICHD 2003, 581-593 & Schulting, Malone & Dodge, 2005:860-871). The importance of the family can be refined to the parent's interaction with the learner. Parent-learner interaction is a more powerful predictor of the learner's school performance than the family background such as socio-economic status (Hung & Marjoribanks, 2005: 3-13).

School performance goes beyond cognitive, emotional and social skills and self-regulation such as the abiding of classroom rules and behaving in ways that are valued by teachers. School performance is also about the long-term improvement of broader life outcomes such as increased adult employment and the avoidance of incarceration (Petriwskyi, Thorpe & Tayler 2005. 55-69). Therefore the learner's latent potential must be developed to help him/her to become a fully-fledged adult. Different kinds of intervention at different times are necessary to help the learner to develop all his/her latent potential (Perez-Johnson & Maynard 2007, 587-616).

7. The relation between age and school performance

"It is entirely possible that younger entrants, being in some cases almost a full year younger than older entrants, start out first grade slightly behind their older classmates, but make as much progress during the course of the school year, concluding first grade only a few percentile points lower" Morrison, Alberts & Griffith (1997). This shows that the degree of progress made by the younger first-graders, given their starting point, was identical to the progress made by the older learners. This study also shows that younger first-graders, as a group, made normal progress over the course of the first grade. Entrance age, in and of itself, did not appear to constitute a major risk factor in school readiness. This study also showed that in general differences in achievement diminished in later years.

Byrd, Wietzman and Auinger (1997) state that it is not known whether learners gain any long-term advantages by being older than the majority of the class. They imply that being older than their classmates can adversely affect the learners' behaviour. Adolescents, who are 'old-for-graders' irrespective of grade retention, have higher rates of adolescent risk behaviour. Disadvantages for older learners only realise during high school. Some data suggest the older learners are more likely to smoke, drink, use drugs, engage in risky sexual activities, have suicidal intentions, and have violent behaviours.

According to the socio-environmental paradigm, it cannot be concluded that old-for-grade learners would have problems if they began school with their same-age peers. In contrast, the medical model states that young-for-grades would experience many problems if they entered school at an early age. Age does not significantly influence school success. School readiness however, is the

important factor that influences school performance. It can be concluded that most learners entering school as 'unready', if handled appropriately, can catch up. Individual differences will occur and each case must be considered on its own merits. When children are tested for school readiness, it must be considered that a specific learner's problems can be overcome.

8. Research methodology

Empirical work was conducted in terms of panel study longitudinal, quantitative research (Neuman 2006: 37-40) in a primary school in the Free State Province of South Africa. The Aptitude Test for School Beginners (ASB) was applied to Grade 1 learners. The learner's dates of birth and their academic records (Home Language and Mathematics) for the Grade 1 July examinations and again for the Grade 4 November examinations were placed on record.

8.1. Study group

The study group began with one-hundred and fifty-seven learners (157) but ended four years later with one-hundred and fourteen (114) children. Eighty-eight children were Afrikaans-speaking and forty-nine children were of English-speaking origin. In Grade 1 the general age of the learners varied between 6 and 7 years.

All the learners were tested in their mother tongue. They are all from an average to above average socio-economic background. All of them had attended Grade R the year before they entered Grade 1 in the primary school.

8.2. Measurement

The Aptitude Test for School Beginners (ASB) was applied within the class situation. The tester as well as three assistants was present. All the instructions of the test were strictly adhered to. The learners' academic records for Home Language and Mathematics for the Grade 1 July examinations and the same learners' Grade 4 November examinations were placed on record.

8.3. Rationale for choosing the test

The Aptitude Test for School Beginners (ASB) was chosen because it tests the school readiness of children that just entered school in Grade 1. The sub-tests measure the following abilities in detail: perception, spatial relations, reasoning, numerical abilities, gestalt, co-ordination, memory and verbal comprehension. This test was used because its statistical reliability and validity are intact.

8.4. The purpose of the instrument

The instrument:

- obtains a differentiated picture of certain aptitudes of Grade 1;
- can be used as an aid to place Grade 1 children in homogeneous groups;
- can assist in planning teaching methods;
- can assist in predicting further scholastic achievement by means of the test scores (Olivier & Swart 1974).

8.5. Statistics used

The following statistics were used:

To determine different correlations a Pearson correlation was applied and to determine differences a multivariate test of significance was applied.

9. Discussion of the results

9.1. The relation between school readiness and school performance

Table 1.1
The correlation between Aptitude Test for School Beginners (ASB) and school performance in Grade 1

	ASB	Subtest 1 Persep-tion	Subtest 2 Spatial	Subtest 3 Reaso-ning	Subtest 4 Nume-rical	Subtest 5 Gestalt	Subtest 6 Coordi-nation	Subtest 7 Memory	Subtes 8 Verbal Com-prehension
Grade 1 Home Language	Pearson Correla-tion (r)	0,34	0,29	0,20	0,37	0,50	0,26	0,24	0,26
	Sig.(2-Tailed) (p)	0,00 **	0,00 **	0,01 **	0,00 **	0,00 **	0,00 **	0,00 **	0,00 **
Grade 1 Maths	Pearson Correla-tion (r)	0,31	0,37	0,19	0,36	0,22	0,15	0,32	0,30
	Sig.(2-Tailed) (p)	0,00 **	0,00 **	0,00 **	0,00 **	0,77	0,07 *	0,00 **	0,00 **

N=137

*≤0,05=significant

**P≤0,01=highly significant

From Table 1.1 it can be seen that all of the sub-tests of The Aptitude Test for School Beginners (ASB) correlate highly significantly with the learner's performance for Home Language in Grade 1.

It can also be seen from Table 1.1 that all of the sub-tests of The Aptitude Test for School Beginners (ASB) except sub-test 6: Co-ordination and sub-test 5: Gestalt correlate highly significantly with the learner's performance for Mathematics in Grade 1.

Sub-test 6: Co-ordination correlates significantly with the learner's school performance in Mathematics. This may be due to the fact that co-ordination skills are essential for writing skills and are evaluated as part of Home Language, but is not necessarily important with regard to Mathematical skills.

Sub-test 5: Gestalt does not have a significant relationship with the numeracy school performance of the learners. This may be due to the fact that reading and writing skills (Gestalt) do not necessarily correlate with numeracy skills and performance.

The above means that if the learner did not perform well on The Aptitude Test for School Beginners (ASB), he/she will most probably not have good school performance in Grade 1. The opposite will also be true namely that if the learner had good performance on The Aptitude Test for School Beginners (ASB), he/she will most probably have good school performance in Grade 1.

The only difference between Home Language and Mathematics is Sub-test 5: Gestalt and Sub-test 6: Co-ordination. This leads us to derive that Mathematics is based on the same skills and building blocks as Home Language. It can also be derived that the performance of Home Language and Mathematics influence each other. The verbal skills of the learner forms at this stage the basis for his/her school performance.

Table 1.2
The correlation between Aptitude Test for School Beginners (ASB) and school performance in Grade 4

	ASB	Subtest 1 Percep- tion	Subtest 2 Spatial	Subtest 3 Reason- ing	Subtest 4 Nume- rical	Subtest 5 Gestalt	Subtest 6 Coordi- nation	Subtest 7 Memory	Subtest 8 Verbal Compre- hension
Grade 4 Home language	Pearson Correla-tion (r)	0,189	0,223	0,341	0,238	0,272	0,064	0,270	0,203
	Sig.(2- Tailed) (p)	0,044 *	0,017 *	0,000 **	0,011 *	0,003 *	0,499	0,004 **	0,030 *
Grade 4 Maths	Pearson Correla-tion (r)	0,127	0,287	0,268	0,396	0,254	0,020	0,281	0,228
	Sig.(2- Tailed) (p)	0,177	0,002 *	0,004 **	0,000 **	0,006 **	0,831	0,002 **	0,015 *

N=114

* $\leq 0,05$ =significant - ** $P \leq 0,01$ =highly significant

Table 1.2 shows that Sub-test 1: Perception, Sub-test 2: Spatial, Sub-test 4: Numerical, Sub-test 5: Gestalt and Sub-test 8: Verbal comprehension have a significant correlation with the learner’s performance in Home Language in Grade 4. Sub-test 3: Reasoning and Sub-test 8: Verbal comprehension had a highly significant correlation with the learner’s performance in Home Language in Grade 4.

Sub-test 2: Spatial and Sub-test 8: Verbal comprehension had a significant correlation with the learner’s performance in Mathematics in Grade 4. Sub-test 3: Reasoning, Sub-test 4: Numerical, Sub-test 5: Gestalt and Sub-test 7: Memory had a highly significant correlation with the learner’s performance in Mathematics in Grade 4.

In Grade 4 it was only sub-test 1: Perception and Sub-test 6: Coordination that did not have a significant correlation with the learner’s school performance in Mathematics. Although perception did have a significant correlation with the learner’s performance in Home Language in Grade 4, it did not have a significant correlation with the learner’s performance in Mathematics in Grade 4. From this can be derived that Mathematics in Grade 4 is based on higher order thinking skills.

These above mentioned results confirm to us that school readiness with its subdivisions as it was described in the research, does have a significant correlation in Grade 1 and it still has a significant correlation with school performance in Grade 4. This brings us to the conclusion that if a child had difficulties with the school beginners test, he/she will most probably have difficulties with school performance in Grade 1 and even still in Grade 4. Problems in terms of school readiness can still have a negative influence on the learner’s school performance in Grade 4.

School readiness is thus still a very relevant concept and children with learning problems that an influence their school performance, can be identified with a school beginners test.

Table 1.3
The correlation between school performance in Grade 1 and school performance in Grade 4

		Grade 1 Home language	Grade 1 Maths	Grade 4 Home language	Grade 4 Maths
Grade 1 Home language	Pearson correlation (r)		0,586	0,555	0,508
	Sig. (2-tailed) (p)		0,000**	0,000**	0,000**
Grade 1 Maths	Pearson correlation (r)	0,586		0,549	0,609
	Sig. (2-tailed) (p)	0,000**		0,000**	0,000**
Grade 4 Home language	Pearson correlation (r)	0,555	0,549		0,840
	Sig. (2-tailed) (p)	0,000**	0,000**		0,000**
Grade 4 Maths	Pearson correlation (r)	0,508	0,609	0,840	
	Sig. (2-tailed) (p)	0,000**	0,000**	0,000**	

N=116

* $\leq 0,05$ =significant – ** $P \leq 0,01$ =highly significant

Table 1.3 shows the correlation between all the subjects in the Grades 1 and 4 years. It shows that learners who did well in their Home Language also did well in their Mathematics in Grades 1 and 4. From this can be derived that if a learner performs well in Home Language, he/she will most probably also perform well in Mathematics. If the learner performed well in Grade 1 he/she also performed well in Grade 4. This shows that at this stage, Mathematics is very much dependant on the child's verbal skills. It also confirms to us that previous school performance is a very good indicator of future school performance.

9.2. The effect of age on school performance

In order to find out whether age plays a big role in the school performance of these learners two groups were formed according to age. Group 1 consists of all the learners whose birthday is in the first nine months of the year. Group 2 consists of all the learners whose birthday is in the last three months of the year. Thus, the learners whose birthdays are from the first of October and later were considered to be the younger learners in the group.

Table 2.1
Multivariate tests of significance differences in school performance of the two age groups.

Variable	F	Sig. of F
Subtest 1: Perception	8,06769	0,005 **
Subtest 2: Spatial	0,13214	0,717
Subtest 3: Reasoning	0,09934	0,753
Subtest 4: Numerical	0,00029	0,986
Subtest 5: Gestalt	0,05359	0,817
Subtest 6: Coordination	0,39704	0,530
Subtest 7: Memory	0,79933	0,373
Subtest 8: Verbal Comprehension	0,00006	0,993
Grade 1 Home Language	0,00562	0,940
Grade 1 Mathematics	0,67174	0,414
Grade 4 Home Language	1,38213	0,242
Grade 4 Mathematics	2,36845	0,127

* $\leq 0,05$ = significant

** $P \leq 0,01$ = highly significant

According to the tests of significance difference, the performance on the Aptitude Test for School Beginners (ASB) in the two age groups differs highly significantly only with regard to perception.

When dealing with school readiness and school performance, age should not be regarded as more important than individual development. When the learner enters school while he is still young, it is important to pay attention to the development of perception.

10. Conclusions

This research comes to the following conclusions:

The different factors that influence school readiness are the factors mentioned earlier. The factors that were tested by the subtests on the Aptitude Test for School Beginners (ASB) are the factors that influence school performance.

The Grade 1 learner's school readiness indeed influences the learner's academic performance in Grade1 as can be seen in Table 1.1.

School readiness and academic performance in Grade 1 indeed influences the learners' academic performance in Grade 4 as can be seen in Tables 1.2 and 1.3. The first hypothesis is thus accepted.

Age does not, however has a significant influence on school readiness or school performance in Grades 1 and 4 as can be seen in table 2.1. The second hypothesis is thus not accepted.

11. Recommendations

Age should not be taken (between realistic parameters) into consideration when dealing with school readiness and school performance. It is clear that although age did not influence school readiness or school performance, school readiness indeed influences the learner's school performance at least up to Grade 4. Therefore, the learner's individual development in terms of school readiness forms the factors that influence school performance (De Witt & Booyen 2007:85-92).

School readiness tests should be used widely. Learners who do not perform well on the school readiness test will most probably be the learner with problems in terms of school performance.

This research recommends that a holistic approach should always be followed. These findings underline what Blair (2002:18) said: Although we are faced with a lot of changes in the 21st century which bring along new strategies for education, school readiness with its detailed subdivisions, will always have a significant influence on school performance.

References

- Abott-Shim, M., Lambert, R. & McCarthy, F. 2003. a Comparison of school readiness outcomes for children randomly assigned to a Head Start program and the program's wait list. *Journal of Education for students placed at risk*, 8(2), 191-214.
- Ayres, A.J. 1995. *Sensory integration and the child*. Los Angeles, California: WPS.

Bagdi, A. & Vacca, J. 2005. Supporting social-emotional well being: The building blocks for early learning and school success. *Early Childhood Education Journal*, 33(3) 145-150.

Blair, C. 2002. School readiness. Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist*, 57 (2), 111-127.

Broadhead, P. 2004. *Early years play and cooperation*. RoutledgeFalmer, London.

Byrd RS, Wietzman M & Auinger P 1997. Increased behavior problems associated with delayed school entry and delayed school progress. *Pediatrics*, 100(4), 654-661.

Chang, F. & Burns, B.M. 2005. Attention in preschoolers: Association with effortful control and motivation. *Child development*, 76(1), 247-263.

Coolahan K, Fantusso J, McDermott P & Mendez J 2000. Preschool peer interactions and readiness to learn: relationships between classroom play and learning behaviors and conduct. *Journal of Educational Psychology*, 92(3), 458-465.

De Witt, M.W. & Booyesen, M.I. 2007. Die klein in fokus. 'n Sielkundig-opvoedkundige perspektief. Pretoria: Acacia.

Education Laws Amendment Act, 2002. Act 50 of 2002. <http://www.info.gov.za/aboutsa/education.htm#Education-policy>.

Fantuzzo, J., Bulotsky-Shearer, R., McDermott, P.A., McWayne, C. Frye, D. & Perlman, S. 2007. Investigation of dimensions of social-emotional classroom behaviour and school readiness for low-income urban preschool children. *School Psychology Review*, 36(1), 44-62.

Feuerstein, R., Hoffman, M.B., Rand, Y., Jensen, M.R., Tzuriel, D. & Hoffmann, D.B. 1986. Learning to learn: Mediated learning experience and instrumental enrichment. In, *Facilitating cognitive development: International perspectives, programs and practices*. Edited by: Schubel, M. & Maher, C. New York, Haworth.

Folds, V. Tray Tasking. 2005. Activities that promote reading and writing readiness. Thomson, (New York) Australia.

Fontaine, N.S., Torre, D.L. & Grafwallner, R. 2006. Effects of quality early care on school readiness skills of children at risk. *Early childhood development and care*, 176(1), 99-109.

Hojnosky, R.L. & Missall, K.N. 2006. Addressing school readiness: Expanding school psychology in early education. *School Psychology Review*, 35(4), 602-614.

Hung, C-L. & Marjoribanks, K. 2005. Parent's teacher's and children's school outcomes: a Taiwanese study. *Educational studies*, 31(1), 3-13.

Landsberg, E., Kruger, D. & Nel, N. 2005. *Addressing Barriers to Learning, A South African Perspective*. Pretoria, van Schaik.

Mantzicopoulos P.Y. & Neuharth-Pritchett S. 1998. Transitional first-grade referrals: An analysis of school-related factors and children's characteristics. *Journal of Educational Psychology*, **90**(1), 122-133.

May D.C. & Kundert D.K. 1997. School readiness practices and children at-risk: examining the issues. *Psychology in the schools*, **34**(2), 73-84.

McClelland, M.M., Cameron, C.E., Connor, C.M., Farris, C.L., Jewkes, A.M. & Morrison, F.J. 2007. Links between behavioural regulation and preschoolers' literacy, vocabulary, and math skills. *Developmental Psychology*, **43**(4), 947-959.

Moletsane M.E. & Bouwer A.C. 2000. Criteria for effective pre-literacy education in daycare centres in informal settlements. *Tydskrif vir opvoeding en opleiding*, **21**(2), 30-43.

Morrison F.J., Alberts D.M. & Griffith E.M. 1997. Nature-nurture in the classroom: Entrance Age, school readiness, and learning in children. *Developmental Psychology*, **33**(2), 254-262.

Neuman, L.W. 2006. *Social research methods. Qualitative and quantitative approaches*. Pearson, Boston.

NICHD. 2003. Early Child Care Research network. Do children's attention processes mediate the link between family predictors and school readiness? *Developmental Psychology*, **39**(3), 581-593.

Olivier, N.M. & Swart, D.J. 1974. *Manual for the aptitude tests for school beginners*. Pretoria: Human Sciences Research Council.

Perez-Johnson, I. & Maynard, R. 2007. The case for early, targeted interventions to prevent academic failure. *Peabody Journal of Education*, **82**(4), 587-616.

Petriwskyi, A., Thorpe, K. & Tayler, C. 2005. Trends in construction of transition to school in three western regions, 1990-2004. *International journal of early years education*, **13**(1), 55-69.

Pogorzelski, S. & Wheldall, K. (2005). The importance of phonological processing skills for older low-progress readers. *Educational Psychology in Practice*, **21**(1), 1-22.

Price, H. 2002. The emotional context of classroom learning: a psychoanalytic perspective. *Eur J. of Psychotherapy, Counselling & Health*, **5**(3), 305-320.

Raver, C.C., Aber, J.L. & Gershoff, E.T. 2007. Testing equivalence of mediating models of income, parenting, and school readiness for white, black, and Hispanic children in a national sample. *Child development*, **78** (1), 96-115.

Savage, R. & Carless, S. 2005. Learning support assistance can deliver effective reading interventions for 'at-risk' children. *Educational Research*, 47(1), 45-61.

Schulting, A.B., Malone, P.S. & Dodge, K.A. 2005. The effect of school-based kindergarten transition policies and practices on child academic outcomes. *Developmental Psychology*, 41(6), 860-871.

Wright, C., Diener, M. & Kay, S.C. 2000: School readiness of low-income children at risk for school failure. *Journal of children & poverty*, 6(2), 99-117.

Yu, C.C.W., Chan, S., Cheng, F., Sung, R.Y.T. & Hau, K-T. 2006. Are physical activity and academic performance compatible? Academic achievement, conduct, physical activity and self-esteem of Hong Kong Chinese primary school children. *Educational Studies*, 32(4), 331-341.

Évaluation authentique : une démarche différente d'évaluation des apprentissages/ Le cas de la Grèce

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Résumé

Au centre du processus d'apprentissage, l'évaluation demeure largement synonyme de tests de niveau, de certification ou de repérage à partir de référentiels de compétences et ceci restant globalement l'affaire des enseignants. L'apprenant n'est que peu mêlé au choix des modalités de sa propre évaluation. Comment faire pour l'engager plus largement dans une démarche d'évaluation maîtrisée de ses connaissances? En responsabilisant l'apprenant qui peut passer tour à tour du rôle d'évalué à celui de co-évaluateur? Après avoir défini les notions fondamentales de notre étude, on décrira les traits principaux d'une évaluation authentique, les techniques proposées aux enseignants, on passera à la recherche des critères d'authenticité et, finalement, on soulèvera quelques problèmes associés à l'évaluation authentique en présentant les données d'une recherche réalisée en Grèce du 15 mai au 20 juin 2006 ayant comme but la mise en évidence des intentions des enseignants grecs envers les nouvelles pratiques d'évaluation.

Mots-clés : évaluation authentique – élève – portfolio – autoévaluation – évaluation basée sur l'observation

1. Introduction

L'évaluation traditionnelle, telle que l'on connaît dans le monde de l'éducation scolaire, repose sur des éléments indirectement liés, des substituts efficaces et simplistes, dont on pense pouvoir tirer des conclusions pertinentes à partir des performances de l'étudiant sur des défis estimés (Kassotakis, 2003). L'évaluation authentique, de l'autre part, terme que l'on voit poindre dans le monde de la mesure et de l'évaluation éducative depuis quelques années, ne relève pas du contrôle, c'est-à-dire de la mesure des performances obtenus, objective peut-être mais externe, mais de la caractérisation d'un processus formatif au cours même des activités. Il s'agit d'une évaluation intégrée aux apprentissages et à la formation. De cette façon, l'autoévaluation et la co-évaluation sont rendues possibles, des lors que l'apprenant tente de travailler sur le sens de son engagement dans la formation (Dimitropoulos, 2003).

Perrenoud (2001) constate qu'il y a une contradiction bien claire entre l'évaluation dite *formative* et celle-ci appelée *certificative* : L'évaluation formative suit une logique de régulation, elle vise à soutenir le processus d'apprentissage, à aider l'apprenant à se rapprocher des objectifs de formation. Elle s'inscrit,

donc, dans une relation de confiance, un travail coopératif. De l'autre part, l'évaluation certificative est vue comme un jugement dernier, elle intervient à la fin d'un cursus d'études ou d'un module et, à ce stade, il n'est plus temps d'apprendre encore, c'est le moment du bilan, l'heure de la vérité. Le rapport entre l'évaluateur et l'évalué est alors moins coopératif, car leurs intérêts sont divergents. L'évaluateur veut établir de façon aussi réaliste et précise que possible le niveau de connaissances et de compétences atteint par l'apprenant, alors que ce dernier tente de faire illusion. Selon le pédagogue, l'évaluation certificative est une variante du jeu du chat et de la souris ! Il est nécessaire de signaler que mieux vaut dans l'esprit des élèves, de leurs parents, des étudiants, même des professeurs quelquefois, un QCM qui ne mesure rien d'essentiel, mais paraît plus « objectif » que le jugement d'un professionnel compétent et expérimenté, qu'on estime d'emblée « subjectif ». Et là, se relève la question fondamentale de la formation des enseignants. La compétition et la sélection renforcent cette obsession, et c'est bien clair que la compétition entre établissements et le souci de leur réputation conduit souvent les professeurs à anticiper la certification et à se montrer plus durs que l'examen final. Dans ce contexte et en tenant compte de la pensée du professeur Perrenoud (2001) que *l'évaluation scolaire est malade du soupçon*, on pourrait admettre qu'il y a sûrement des risques d'erreurs et des jugements arbitraires ou partiels avec l'évaluation authentique, mais il est nécessaire de souligner qu'on pourrait, quand même, conserver son esprit dans la réalité scolaire, confier le jugement à quelqu'un d'assez compétent et honnête pour qu'on puisse lui faire confiance et rejeter, dans la mesure du possible, le soupçon entraîné par l'évaluation traditionnelle. Selon Wiggins (1993), l'évaluation est authentique lorsqu'elle examine directement les performances des étudiants sur des tâches intellectuelles utiles. L'étudiant peut démontrer par l'évaluation authentique sa maîtrise des compétences en l'utilisant dans un cadre le plus réel possible. Les examens traditionnels ne sont que des moyens de montrer que l'étudiant se rappelle des éléments d'informations ou qu'il peut appliquer machinalement des techniques. Selon Ryan (1994), l'évaluation authentique consiste à n'évaluer que l'élève en tant qu'individu comparé exclusivement à son propre effort précédent. Les enseignants peuvent utiliser d'autres genres de tests que ceux qui ne font appel qu'à la mémorisation. Ils demandent à leurs élèves de démontrer les habiletés et les concepts qu'ils ont maîtrisés. Cette stratégie est l'évaluation authentique (Perrenoud, 1998).

1.1 Les traits principaux de l'évaluation authentique

Wiggins (1998) et Perrenoud (2001) définissent avec clarté les traits-critères principaux d'une évaluation authentique :

- L'évaluation n'inclut que des tâches contextualisés
- L'évaluation porte sur des problèmes complexes
- L'évaluation doit contribuer à ce que les étudiants développent davantage leurs compétences
- Il n'y a aucune contrainte de temps fixée arbitrairement lors de l'évaluation des compétences
- La tâche et ses exigences sont connues avant la situation d'évaluation
- L'évaluation exige une certaine forme de collaboration avec des pairs
- La correction prend en considération les stratégies cognitives et métacognitives utilisées par les étudiants

- La correction ne tient compte que des erreurs importantes dans l'optique de la construction des compétences
- Les critères de correction sont déterminés en faisant référence aux exigences cognitives des compétences visées
- L'auto-évaluation fait partie de l'évaluation
- Les critères de correction sont multiples et donnent lieu à plusieurs informations sur les compétences évaluées.

Janine Huot (2007) souligne par rapport à l'évaluation authentique : une tâche basée sur la performance consiste en une activité qui requiert la démonstration par les apprenants de leurs aptitudes à intégrer leur savoir, savoir-faire et jugement dans un contexte authentique. Une telle tâche possède une ou plusieurs caractéristiques suivantes :

- Elle exige l'utilisation de connaissances et d'habiletés dans un contexte représentant des situations ou problèmes réels
- Elle permet de découvrir la démarche utilisée par les apprenants pour affronter une situation donnée, plutôt que se limiter au résultat final
- Elle fait appel à plusieurs résultats d'apprentissage ou compétences
- Elle exige l'utilisation d'aptitudes intellectuelles complexes, de cette façon, la mémorisation est rejetée.
- Elle permet d'observer de multiples facettes de l'apprentissage
- Elle donne aux apprenants le choix des types de production pour exhiber ce qu'ils ont appris.

Par tout ce qui précède, on pourrait dire que l'évaluation authentique vient pour qu'on sorte de la logique de l'évaluation traditionnelle : lorsqu' une classe a fait un projet, on est tenté de faire une épreuve pour attester de ce que les élèves ont appris, au lieu de partir du principe que le maître les a observés pendant plusieurs jours et qu'il n'a pas besoin d'une trace écrite pour savoir qui a progressé et qui ne l'a pas fait. C'est une évaluation qui mesure précisément ce que les élèves apprennent, au cœur, plutôt qu'à la fin de l'enseignement.

1.2 Techniques de l'évaluation authentique/ Comment l'utiliser en classe ?

L'évaluation authentique utilise des activités d'apprentissage qui exigent l'utilisation de la pensée réflexive des élèves.

L'évaluation de la performance examine l'habileté de l'élève à utiliser ses habiletés dans une variété de contextes authentiques. Ce type d'évaluation oblige souvent l'élève à travailler collaborativement et d'appliquer habiletés ou concepts pour résoudre des problèmes complexes.

Les tâches à court et long terme seraient :

- écrire, réviser et présenter un rapport à la classe
- faire une expérience scientifique pendant une semaine et d'analyser les résultats
- travailler en équipe afin de préparer un débat de classe

Investigation de courte durée. Plusieurs enseignants utilisent l'investigation de courte durée afin d'évaluer la maîtrise des concepts de base de l'élève. Ce type d'investigation débute avec un stimulus tel : un problème de maths, une bande

dessinée, une carte, un court extrait d'un récit ou d'un texte. L'enseignant demande ensuite à l'élève d'interpréter, de décrire, d'expliquer. Ces investigations peuvent utiliser des questions à choix multiple.

Questions ouvertes. Les questions ouvertes, entamées aussi par un stimulus, demandent aux élèves de répondre avec :

- une courte réponse orale ou écrite,
- une solution mathématique,
- un dessin,
- un diagramme, charte ou graphique.

Portfolios. Un portfolio documente l'apprentissage pendant un certain temps. Cette perspective à long terme reflète l'amélioration de l'élève en lui montrant l'importance de l'autoévaluation, la correction et la révision (Andreadakis, 2005). Le portfolio de l'élève peut inclure :

- un journal personnel,
- des évaluations faites par ses pairs,
- ses projets d'art, diagrammes, chartes, graphiques,
- un travail ou un rapport de groupe,
- ses notes personnelles,
- ses brouillons et ses copies finales. Une autre dimension du portfolio, très répandue dans la bibliographie francophone, basée sur l'emploi pédagogique des Nouvelles Technologies en classe, est le portfolio digital.

Autoévaluation. L'autoévaluation exige que l'élève évalue sa participation, son processus et ses produits (Andreadakis, 2005). Les élèves répondent oralement ou par écrit à des questions telles :

- Quelle était la partie la plus difficile du projet ?
- Quelle est/sera la prochaine étape de ton projet ?
- Si tu pouvais recommencer, que ferais-tu différemment ?
- Qu'as-tu appris de ce projet ?

L'évaluation authentique est réussie lorsque l'élève connaît les attentes des enseignants. Les enseignants doivent s'assurer et clairement expliquer leurs attentes au début du projet. La grille d'évaluation doit être remise à l'élève avant d'entamer le projet. De cette façon les élèves sont au courant de quelque chose de très important : Ils connaissent les critères de l'évaluation, comment ils seront jugés et il n'y a plus de soupçon, ni de jugements arbitraires.

1.3 Problèmes associés à l'évaluation authentique

Selon Messick (1995), il existe deux standards d'évaluation quand il s'agit d'évaluer les compétences. Le premier type est le standard de contenu qui concerne ce que l'étudiant doit connaître et être capable de faire pour un sujet précis. L'autre type concerne le standard de performance qui indique le degré de compétence qu'un étudiant doit atteindre à un moment donné. Pour Messick, il y a un conflit entre le temps nécessaire pour passer une évaluation authentique et la nécessité d'évaluer toute la matière apprise. Une épreuve authentique demande beaucoup de temps et évalue peu de choses. Pour Solano-Flores (1997), il y a quelques problèmes associés avec l'administration de certains tests. Il explique que le montage et le démontage de l'équipement peut prendre tellement de temps que l'administration des tests devient presque impossible.

Quelquefois, l'utilisation de matériel qui sera détruit au cours de l'évaluation authentique devient coûteuse. Les institutions peuvent alors utiliser du matériel moins cher, mais de qualité inférieure. La mauvaise qualité des matériaux introduit alors des erreurs de mesure et fausse les résultats finals. Il souligne également le problème de la fidélité entre les différents évaluateurs. Pour lui, il est très important de former les évaluateurs afin que d'une façon générale leur évaluation soit standardisée. Pour Berf F. Green (1995), si les autorités scolaires veulent pouvoir comparer les résultats de l'évaluation authentique d'une année à l'autre, il faut s'assurer que les résultats de performance puissent être comparables. Des changements dans l'administration des tests créent des difficultés de comparaison. D'autre part, si d'une année à l'autre, on utilise les mêmes tests, l'information circule parmi les étudiants. Les étudiants se préparent alors uniquement en fonction d'une épreuve spécifique. On assiste, de cette façon, au bachotage. Selon Andreadakis (2005), l'évaluation authentique possède de nombreuses qualités, mais elle ne peut pas dans tous les cas remplacer l'examen traditionnel, papier-crayon. Pour ce qui est de vérifier l'acquisition de connaissances, l'examen traditionnel a fait ses preuves. On peut facilement en déterminer la fiabilité, la validité et la comparabilité.

2. Notre enquête

Notre enquête, effectuée du 15 mai au 20 juin 2006 et ayant comme but de relever les attitudes des enseignants grecs du Secondaire par rapport à l'évaluation dans le cadre scolaire, se propose de donner des réponses à une série de questions portant sur le sujet épineux de la performance et de sa mesure (nécessité de l'évaluation, critères adoptés, moyens d'expression des résultats, adoption des formes alternatives, techniques etc.). Comme instrument méthodologique, on a utilisé le questionnaire écrit. Sa rédaction était le résultat d'une étude attentive de la bibliographie proposée (Cohen & Manion, 2000; Blackledge & Hunt, 2000; Robson, 2007). 200 exemplaires ont été distribués, via un réseau des collègues, dont ils nous ont été retournés, bien remplis, les 170. Il faut retenir que le questionnaire a été distribué aux enseignants travaillant exclusivement au secteur public, du département de Kozani (Grèce du Nord), dont le nombre total atteint les 1480 professionnels.

Dans le présent article, pour des raisons de brièveté et pour qu'on ne s'éloigne pas du sujet traité, tel qu'il est décrit dans le titre, on se limitera aux attitudes exprimées des enseignants grecs interrogés envers l'évaluation authentique. Des détails sur l'échantillon sont présentés au tableau 1, ci-dessous:

Tableau 1

Caractéristiques démographiques des enseignants interrogés

SEXE	N	%	ANNÉES DE SERVICE	N	%	CHAMPS DISCIPLINAIRES	N	%
Hommes	61	35,9	1-5	83	48,8	RÉLIGION	12	7,1
			6-15	49	28,8	LETTRES	41	24,1
Femmes	109	64,1	16-25	30	17,6	MATHÉMATIQUES	24	14,1
			Plus de 25	8	4,7	AUTRES	93	54,7

Le tableau suivant met en évidence les réponses des enseignants interrogés par rapport à la question posée.

Tableau 2

Répartition des fréquences des réponses données concernant l'adoption des formes alternatives d'évaluation dans le cadre scolaire

APPLICATION DES FORMES ALTERNATIVES D'ÉVALUATION	OUI		NON		SANS RÉPONSE	
	v	%	v	%	N	%
	58	34,1	112	65,9	0	0,0

L'étude des éléments qui résultent du tableau précédent nous amène à des constatations bien pertinentes : Une écrasante majorité de professeurs grecs (112 ou 65,9%) n'a jamais utilisé de formes alternatives dans le cadre de l'évaluation scolaire. Il faut retenir que dans le questionnaire distribué, une série de nouvelles et moins concurrentielles formes d'évaluation, telles que le portfolio, l'autoévaluation, l'évaluation basée sur l'observation leur a été proposée.

Dans une assez faible proportion (58 ou 34,1%) les enseignants de l'échantillon déclarent qu'ils ont déjà utilisé certaines parmi les formes proposées. L'analyse qualitative des réponses de ceux qui se posent positivement au sujet traité met en évidence l'autoévaluation comme la forme la plus largement adoptée. Le double caractère de l'autoévaluation est, également, relevé de la part des enseignants interrogés : d'une part, tout dépend de l'attitude des apprenants, autrement dit, la fonction de l'évaluation devient efficace et fructueuse quand les apprenants se montrent responsables et sévères, mais de l'autre, sa valeur se rend faible, quand les apprenants surestiment leurs capacités et leurs compétences.

Une infime minorité de professeurs affirme l'utilisation du portfolio, mais il résulte de ce qui précède par l'analyse qualitative du contenu de leurs réponses qu'ils ignorent la fonction réelle et scientifique du portfolio dans la pratique scolaire : On notera seulement qu'il y a des enseignants qui l'utilisent juste pour comparer la démarche des élèves entre eux, attitude qui montre clairement leur ignorance par rapport à l'emploi et l'adoption du portfolio dans la procédure de la mesure des compétences. Sans entrer dans les détails, reste à se demander quel est le niveau de formation des enseignants grecs par rapport au sujet de notre article. Les professeurs grecs se montrent négatifs envers l'usage des formes alternatives d'évaluation, ils résistent à tout ce qui est nouveau pour que leurs pratiques acquises dès le début de leur carrière professionnelle ne soient perturbées. On justifierait cette attitude, si l'on tenait compte de la mauvaise infrastructure de nombreux bâtiments scolaires en Grèce ou de la culture installée, selon laquelle tout ce qui est nouveau cache des menaces ou des dangers, surtout parce qu'il atténue le rôle du professeur en classe. N'oublions

pas que l'attribution des notes lui donne du prestige et le rend tout puissant. Finalement, les enseignants interrogés semblent à ignorer l'évaluation basée sur l'observation, puisque personne ne l'utilise comme pratique d'évaluation dans le cadre scolaire.

3. Conclusion

Une évaluation authentique est possible à tous les niveaux de l'enseignement et dans tous les champs disciplinaires. Elle demande de travailler au cœur des pratiques sociales (dire, écrire, construire, jouer, chanter...) et de faire sans cesse l'aller-retour entre les compétences à construire et les savoirs qu'elles demandent de mobiliser (évaluation) et d'intégrer (apprentissage). Intégrer l'évaluation à un apprentissage suppose, avant tout, de partager l'évaluation avec les apprenants, en les associant à l'identification des progrès obtenus. L'évaluation traditionnelle est trop souvent synonyme de tests de niveau, de certification et elle reste globalement l'affaire des formateurs. Or, une évaluation authentique ne relève pas du contrôle, mais caractérise le processus formatif au cours même des activités. A condition de ne pas se laisser emporter par l'ivresse de la production et de mettre régulièrement les élèves en situation d'observer, d'analyser, de comprendre et donc d'améliorer ce qu'ils font et les enseignants en situation de se former et d'admettre les apprenants comme co-évaluateurs bien consciencieux. En Grèce, où le domaine de formation des enseignants du secteur public, telle qu'est vécue les dernières années, semble avoir des lacunes et des défauts, l'évaluation authentique reste à l'écart. De nouvelles formes d'évaluation, telles que le portfolio ou l'autoévaluation, sont fréquentées rarement dans les établissements publics, d'une part à cause de l'ignorance constatée des professeurs ou encore des soupçons exprimés de la part des autorités scolaires (tout ce qui est nouveau et hors du commun est affronté avec méfiance), et de l'autre à cause de la mauvaise infrastructure. Il est à noter qu'en Grèce, officiellement, les enseignants doivent évaluer les compétences des apprenants exclusivement de façon traditionnelle (examens écrits ou oraux) et l'adoption des formes alternatives reste facultative et dépend du niveau de formation de l'enseignant et de sa volonté de s'échapper du traditionnel en intégrant l'authenticité dans sa pratique quotidienne en classe. Tout effort de changement, nécessaire dans le domaine fragile de l'éducation, sera infructueux et se heurtera sur des obstacles insurmontables si la mentalité collective ne s'évolue. On a besoin des approches différentes, et il faut de la maturité d'esprit, afin qu'on les adopte. Et là, vient s'ajouter au sujet de l'évaluation, la question, toujours épineuse, de la formation continue.

Références

Andreadakis, N. (2005). *L'évaluation des élèves-Éléments de méthodologie*. {notes universitaires}. Université de Crète, 2005-2006. Rethymno, Grèce.

Berf F., Green. (1995). *A Comparability of Scores from Performance Assessments*, in Educational Measurement. Issues and Practices.

Blackledge, L., & Hunt, B. (2000). *Sociologie de l'Éducation*, traduit en grec, Deligianni. (4^{ème} édition), Athènes : Metaichmio.

Cohen, L. & Manion, L. (2000). *Méthodologie de Recherche Éducative*, traduit en grec, Mitsopoulou & Filipoulou. (4^{ème} édition), Athènes : Metaichmio.

Dimitropoulos, E. (2003). *L'évaluation éducative- L'évaluation de l'élève*. (7^{ème} édition). Athènes : Grigoris.

Depover, C. & Noël, B. (1998). *L'évaluation des compétences et des processus cognitifs : modèles, pratiques et contexte*. Bruxelles : De Boeck.

Hivon, R. (1993). *L'évaluation des apprentissages*. Québec : Éditions du CRP.

Huot, J. (2007). *Un aperçu de l'approche pédagogique basée sur la performance* (<http://fox.nstn.ca/huot/formation/edu-perf.html>), consulté le 14 août 2007.

Kassotakis, M. (2003). *L'évaluation des élèves*. (11^{ème} édition). Athènes: Grigoris

Messick, S. (1995). *A standard of validity and the validity of standards in performance assessment*, in Educational Measurement. Issues and Practices.

Merle, P. (1996). *L'évaluation des élèves. Enquête sur le jugement professoral*. Paris : PUF.

Perrenoud, Ph. (1998). *L'évaluation des élèves. De la fabrication de l'excellence à la régulation des apprentissages*. Bruxelles : De Boeck.

Perrenoud, Ph. (2001). *Évaluation formative et Évaluation certificative: Postures contradictoires ou complémentaires?* {notes universitaires}. Université de Genève. Faculté de psychologie et des sciences de l'éducation.

Solano-Flores, G. (1997). *A Development of Performance Assessment in Science*. Conceptual, practical and logistical issues, in Educational Measurement. Issues and Practices.

Robson, C. (2007). *Real Word Research*. Blackwell Publishing.

Ryan, C. (1994). *Authentic Assessment*. USA: Teacher Created Materials Inc.

Wiggins, G. (1993). *The case for authentic assessment*. Eric: Digest.

Eco-Learning: Teachers' education for sustainable education futures

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Abstract

Environmental education is becoming an integral part of education and in Agenda 21 (United Nations, 1992) an agreement was made between nations regarding the contribution of environmental education in the defence of the environment. Environmental education aims to increase students' pro environmental practices with a combination of knowledge, actions and school wide approaches. However, a potentially influential group has been omitted from promotion of environmental literacy. Teachers in pre-service courses and programs are not targeted in terms of their knowledge and awareness of environmental issues. This paper reports on research undertaken to assess the extent of pre-service teachers' knowledge, beliefs and practice related to teaching about sustainability. The results show that more informed understanding of sustainability as scientific and social knowledge needs to be incorporated into pre-service teaching programs in order to ensure that sustainability education is effective. In order to increase students' understanding of sustainability issues, we argue that pre-service teachers need more informed education about sustainability in teaching preparation programs.

Keywords: Teacher Education – sustainability education–knowledge – teaching

1. Introduction

Environmental education aims to increase students' pro environmental knowledge and practices fostering understandings and concern about the interrelatedness of economic, social, political and ecological sustainability (UNESCO, 1988). Environmental education helps students understand environmental issues, their social and political context, while teaching students the relevant knowledge and attitudes necessary for making decisions and taking action in the light of a better understanding about the environment and its importance. Ultimately, environmental education seeks to engender new behaviours and practices towards the environment (UNESCO, 1988).

In recent studies (Kurup, Hackling & Garnett, 2002, and Jenkins & Pell, 2006) have shown that secondary school students appear to have a limited understanding about environmental issues. These studies advocate for more targeted educational programs that foster greater learning about the environment and creating a more powerful platform from which students can use

their knowledge to make informed decisions through their personal actions. In addition, these studies recommend highly developed teaching and learning strategies aiding student capacity for developing lifelong learning and informed decision-making for future action. The next generation of students will need a more urgent grasp of sustainability knowledge, require help in forming certain beliefs about the protecting the environment and require further motivation to move their beliefs towards intended actions. The knowledge and skills of up and coming teachers are critical pedagogical tools.

While there has been much focus on students' education, the education of teachers has been lagging. In a recent high level report to West Australian government, Wooltorton (2002) identified the lack of teacher education and teachers' insufficient knowledge about sustainability as a major impediment to environmental education. Criticism was also levelled at teacher education institutions, which have neglected updating teachers' knowledge base on issues relevant to sustainability and environmental education. Wooltorton states,

Often, global environmental problems are not perceived by teachers or local communities as problems with local solutions. That is, environmental problems are considered to be someone else's problem for someone else to solve. One teacher summarised her perception of her colleagues' attitude like this: 'The environmental crisis has not yet deprived us of any of our comforts, therefore we do not take any interest'. In general, regular marketing messages promote established cultural habits of unsustainable consumption (Wooltorton, 2002).

The importance of environmental education, coupled with the apparent neglect of teaching the teachers about sustainability and environmental education illustrates an adaptive error in the way that teacher education has responded to current social and economic issues.

In this paper we argue that pre service teachers need greater preparation in knowledge of the environment and sustainability in order to impact on the quality of their teaching and the information they provide to students. For this reason, the paper focuses on assessing the knowledge base of pre-service teachers in relation to sustainability and teaching of sustainability. The research also assesses prospective teachers' attitudes to teaching sustainability and draws conclusions about the quality of pre-service education and training programs for enhancing the capacity of new teachers to teach about environmental sustainability. By analysing the survey responses of over 190 pre-service teachers currently undertaking teacher education, the results show that more needs to be done to prepare prospective teachers for the important task of environmental literacy and to better respond to new teachers' attitudes that teaching about the environment is the responsibility of all teachers.

2. Preparing New Teachers

While the decade of the 90s has focussed on remaking teacher professionalism (Hargreaves, 2000; Lawn, 1996; McClure, 1999), the global imperatives of sustainability and social interconnectivity require more focussed attention on a new skill and knowledge set for teachers in which the global/local concerns are part of the teaching repertoire. Luke (2004) alludes to the activation of teachers' social and cultural ties, as the growing cosmopolitanism of teaching. It implies teachers' looking outwards, into the community, both local and global, and bringing issues into the lessons and experiences of the classroom. It implies a more open school-social economic system relationship where social, cultural and political issues flow into school curriculum and made relevant for classroom learning. It suggests the school-community relationship is more fluid, complex and challenging. In the case of understanding issues relevant to sustainability, the cosmopolitanism of teachers, in which they are able to unpack the ecological, social and political that underpin arguments and issues related to environmental sustainability, are further complicated when considering the scientific understandings necessary for unpacking the concepts relevant to sustainability. For example, understanding concepts such as climate change, carbon trading and global warming, require a rudimentary understanding of the science that explains these phenomena. It suggests that the new cosmopolitanism of teaching is socio-scientific and well as socio-cultural. Hence, it could be argued that the teacher of the 21st century is constructed as a socio-scientific professional.

Enhancing the social, cultural and scientific skill set of teachers creates demands for a renewed teacher education program, which goes beyond the managerialist and technicist approach to teaching and learning. The identification of teacher quality as a factor in determining quality educational outcomes has focussed teacher education on a specific skill sets corresponding to student achievement (Hanusek, 1986). As reported by Darling-Hammond (1999), teacher education and meeting accreditation standards is critical in producing good teachers. She states;

Among variables assessing teacher "quality," the percentage of teachers with full certification and a major in the field is a more powerful predictor of student achievement than teachers' education levels (e.g., master's degrees). Darling-Hammond (1999:38)

Teachers' certification is indicative of teachers having met particular requirements for effective teaching, including content knowledge and pedagogical skills and knowledge. Accreditation correlates very strongly with student achievement (Darling-Hammond, 1999) and the preparation of new teachers is fertile ground for creating a quality teaching force. It follows that, "more productive teacher education programs" are desirable (Darling-Hammond, 1999) .

Almost a decade later from Darling-Hammonds comprehensive report of teacher quality, the vernacular of environmental sustainability has entered public discourse and educational discourse. This suggests that a decade later 'productive teacher education programs' take on new meaning as expectations and educational outcomes about student learning include achievement environmental education. As intimated, achievement in environmental education

would help engender new understandings, behaviour and attitudes towards the environment (UNESCO, 1998). For example, the Australian Government showcase the importance of environmental education. The dedicated sustainability education web site states,

“Sustainability education develops skills, knowledge and values that promote behaviour in support of a sustainable environment. It is not confined to formal schooling. It also occurs in a wide range of non-formal education settings at work and at home” (<http://www.environment.gov.au/education/>). Accessed 27 February.

The Australian Education Department has many educational programs and committees dedicated to achieving the aforementioned mission. For example, The Australian Sustainable Schools Initiative (AuSSI) integrates sustainability education into a holistic programme with measurable environmental, economic, educational and social outcomes (<http://www.environment.gov.au/education/>). In response to government recognition and promotion, there has been a proliferation of curriculum materials dedicated to environmental education across a range of educational sectors. The proliferation of materials, teaching plans, strategies, and resources in environmental education creates expectation that the area is well served.

There are a few important factors evident in environmental education that aid in better decisions and actions, as a measure of student achievement in environmental education. These include not only knowledge about such topics as sustainability, climate change, waste reduction, and so on, but also, education that promotes certain attitudes and beliefs in conjunction with accurate information and knowledge making. The value of knowledge, as a driver for behavioural change, has been identified as critical. Patchen (2006) identifies the importance of knowledge as a foundation for creating emotional responses to environmental issues, such as climate change. He states, “The greater people’s knowledge about climate change, the more likely they were to say they were willing to take a number of positive actions (e.g., choose a car that gets good gas mileage), (Patchen, 2006: 24). Peoples’ information deficiency may hinder action, he surmises that,

Because they frequently lack accurate information about the causes of global climate change, often people offer only vague solutions to this problem or endorse solutions that are ineffective. Because many people do not know that energy conservation and energy efficiency (in the use of oil, coal, and natural gas) are the best ways to reduce the gases that produce climate change, they do not focus on these strategies as the best means to reach this goal. (Patchen, 2006:24).

According to behavioural change theorists (Ajzen & Fishbein, 1980), knowledge, attitudes and beliefs are necessary for greater probability of behavioural change. For example, Fishbein’s theory of reasoned action aims to identify the links between knowledge, attitudes and beliefs, and how these correlate with probable action. A person’s beliefs about an issue, in addition to their beliefs about behaviour helps to shape attitudes and decision making about intentions to behave in particular ways. The starting point from which to shape beliefs is better knowledge. Deeper understanding of environmental issues contributes to

more founded beliefs about an issue which helps to foster particular attitudes towards the beliefs. The authors' propose that the better informed students are about sustainability, the more likely their beliefs and attitudes will align to positive decision-making enabling sustainability actions and behaviours.

However, as intimated earlier in Woollorton's report, there are critical weaknesses in the implementation and outcomes of such educational strategies, and one of these is the education of teachers to enhance student achievement in sustainability education. Assuming the accuracy of evidence showing that teacher quality, inclusive of teacher content knowledge, pedagogical knowledge and skill and teacher education, are elemental to producing quality teachers, new content, pedagogies and education about sustainability are necessary in the next generation of teachers if quality environmental education is to produce better educational outcomes for students.

3. Method

A survey instrument was developed to gauge students' responses to questions about students' scientific understanding of key concepts relevant to sustainability such as climate change and greenhouse emissions. The survey consisted of 19 multiple choice questions. Participants were able to choose more than one answer in some questions. In most questions, a five point Likert scale was used. Students were also asked their opinions about pedagogy and their teaching programs in relation to sustainability knowledge and practice. One hundred and ninety one students participated in the survey, although not all opted to answer every question. Overall, the response rate was 70.7 per cent. The students were a mixture of rural and urban students, national and international, primary and secondary education pre-service teachers and of different age groups and mixed gender. A more detailed statistical analysis of the results will be discussed in a forthcoming publication, (Kurup and Vongalis-Macrow, 2008), however, this paper intends to explore the results pertaining to knowledge and attitudes of prospective teachers in relation to sustainability.

4. Results

When analyzing pre-service teachers' knowledge about two key concepts relevant to sustainability, namely climate change and greenhouse gases, the results show that the knowledge levels vary widely. Table 1 shows pre-service teachers' responses when asked to identify green house gases. The participants were given a list of gases to choose and they were able to choose more than one gas. From the 152 responses who answered the question, over 44 percent included all the gases. This shows that 44.7 percent of pre-service teachers have some understanding about what makes up green house gases. However, it means that a significant proportion of pre-service teachers (65 percent) have a serious misunderstanding about what makes up green house gases. It could be said that their working knowledge is lacking. In addition, what is also significant about the responses comes from the number of pre-service teachers who opted not to answer the question. It may be possible to conclude that around 20

percent of pre-service teachers did not have enough knowledge and or confidence to attempt to answer this question.

Table 1: Pre-service teachers response to meaning of green house gases

What are greenhouse gases?		
Answer Options	Response Percent	Response Count
carbon dioxide	42.10	64
methane	39.50	60
oxides of nitrogen	19.70	30
chlorofluoro carbons (CFCs)	37.50	57
ozone	7.20	11
all of the above	44.70	68
answered question		152
skipped question		39

The same cohort of 191 pre-service teachers was asked the meaning of climate change. The term climate change is used extensively in school curriculum and also has become a vernacular for sustainability in environmental studies, media and popular culture. It is a well recognised term and it was included in the survey for these reasons. The results follow.

Table 2: Pre-service teachers responses to meaning of climate change

Do you think climate change means		
Answer Options	Response Percent	Response Count
change in average temperatures	65.40	102
change in weather forecasts	15.40	24
increase in sea water level	16.00	25
global warming	46.20	72
answered question		156
skipped question		35

The results show a slightly more comprehensive understanding of climate change. Over 65 percent of respondents were able to answer correctly. However, over 46 percent answered that climate change means global warming, which although the concepts are related, they are not interchangeable. This points to a major misunderstanding of climate change. Over 31 percent of students showed a misunderstanding of climate change and as in table 1, nearly 18 percent of students opted not to answer.

From these two basic indicators of working knowledge and understand of two key concepts relevant to sustainability, the results show a lack of sound knowledge about climate change and greenhouse gases. Of course, there are limitations in assuming that pre-service teachers lack knowledge about these two concepts because knowledge can be demonstrated in a variety of ways, one of which is

defining and explaining. However, these two tables show that pre-service teachers' knowledge about sustainability can be improved, and that more emphasis needs to be placed on content and knowledge related to sustainability concepts in order to improve new teachers' core knowledge about sustainability.

Another form of knowledge refers to social knowledge about sustainability. As argued, the cosmopolitan teacher has greater awareness of social and cultural issues and how these diffuse into the curriculum, schooling and teaching. While Tables 1 and 2 assessed pre-service teachers' understanding of scientific concepts relevant to sustainability, Table 3 assesses teachers' political, organizational, economic knowledge. Table three, assessed pre-service teachers' understanding of policy knowledge relevant to sustainability. In other words, the survey asked how well informed teachers' were about government policy relevant to issues of sustainability and the political environmental strategies.

Table 3 Pre service teachers' awareness of environmental policies

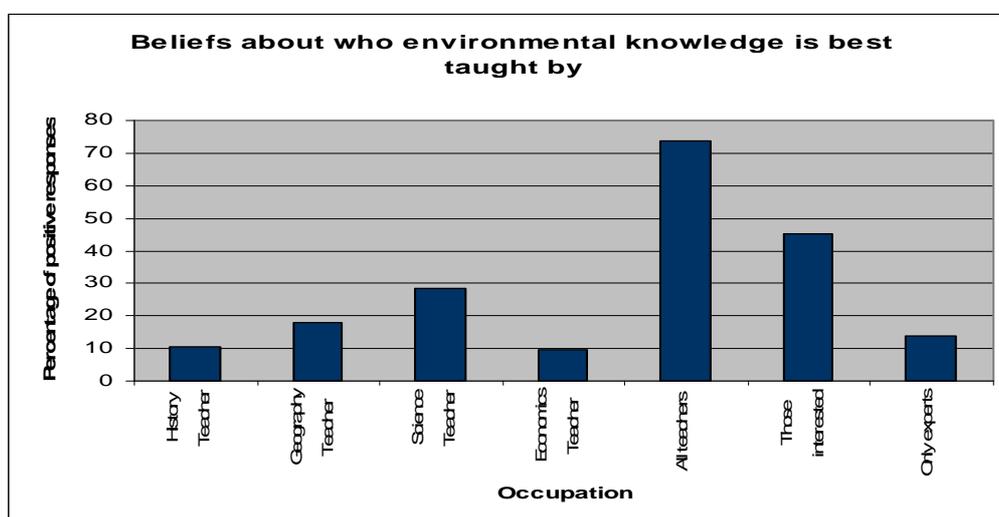
Government policy on environmental issues (State and Federal)			
Answer Options	Yes	No	Don't Know
I am familiar with State government policies about sustainability	31	79	33
I am familiar with Federal government policies about sustainability	31	76	36
Answered question			143
Skipped question			48

Close to 80 percent of pre-service teachers admitted to no familiarity with government policies about the environment. There appears to be an even larger gap in pre service teachers political, organizational and economic information about sustainability and thus indicates that for many prospective teachers the lack of knowledge about government policy may require more intensive learning if they are to contextualize the technical and scientific understanding within the broader political, organizational and economic contexts of environmental education. Furthermore, Table 4 shows that even though pre-service teachers may not have a familiarity about government policy, when asked to rate which aspects of the environment government policy should focus, over 90 percent indicated that all the factors in table were critical. In fact, the factors listed in the table were identified by government policy as critical to environmental policy. This indicates that although pre-service teachers may lack confidence and lack direct knowledge of government policy, they were able to make educated guesses about general policy content.

Table 4 Pre-service teachers responses about the content of environmental policy

Environmental policies should focus on:		
Answer Options	Percent response	Response Count
sustainable water use	14.70	21
land degradation	7.70	11
cleaning up waste	9.10	13
climate change	9.10	13
clean energy	11.20	16
all of the above	91.60	131
answered question		143
skipped question		48

A significant number of pre-service teachers could identify the critical elements of government environmental policy, indicates that teachers may have a working POETic (political, organizational, economic, technical) knowledge, although their technical knowledge is more limited and their access and awareness of actual policy is also limited. In other words there is a foundation knowledge level in teachers. This perhaps reflects the results of Table 5 where pre-service teachers were asked their opinion which teachers were more suitable or had the responsibility to teach about the environment and sustainability.

Table 5 Who should teach about sustainability?

The responses showed that the majority of pre-service teachers, 73.6 percent believe that teaching about the environment and sustainability is the responsibility for all teachers. The second most common response, 45.1 percent, identified those teachers interested in the discipline. The scientific knowledge base for understanding the science of climate change, as a basis for deeper understanding of concepts related to sustainability, is identified as the basis for science teachers teaching about the environments and sustainability (28 percent).

When student teachers were asked to assess their capacity to make a difference, table 6 shows that most believe they have a personal role to play.

Table 6 Can I make a difference?

Please tick the most appropriate response to the following statements:							
	Strongly Disagree	Somewhat Disagree	N/S	Somewhat Agree	Strongly Agree	Rating Average	Response Count
I have a role to play in creating solutions	0.0% (0)	3.2% (5)	4.5% (7)	35.0% (55)	57.3% (90)	4.46	157

Table 6 illustrates the cosmopolitanism of new teachers in that they align their role as global citizen and teacher in forging some kind of identity and practice which seeks to promote sustainable actions in order to achieve environmental solutions.

Another survey question asked students to rate the importance of knowledge about sustainability and the results indicated that 84 percent of pre-service teachers identified having a knowledge base as the main criterion for teaching about the environment.

5. New teachers : new attitudes

The survey results indicates definite beliefs of prospective teachers that they have an important role in environmental education as it has become the responsibility of not one group of teachers, but of all teachers. The results affirm the beliefs embedded in sustainability pedagogy which suggests that the responsibility is not the domain of one discipline, but the responsibility of all teachers. For example, in the Pedagogy of Indignation (2004), Friere wrote, "Ecology has gained tremendous importance at the end of this century. It must be present in any educational practice of a radical, critical, and liberating nature" Friere (2004:47). Certainly, to new, cosmopolitan teachers, the importance of environmental sustainability creates an interdisciplinary professional identity in which all teachers have responsibility. From Friere's philosophical advocacy for more radical and liberating ecology centred practice, current pedagogical reforms embed sustainability education into a broader framework of learning. Most recently, Huey-li Li (2006) in promoting a new 'terrestrial' pedagogy stated that "...the recent 2002 World Summit on Sustainable Development asserted that the pursuit of sustainable development must go beyond economic progress to include "peace, economic and social justice, concern for future generations and nature itself." Huey-li Li (2006:88). The results echo these comments in identifying that prospective teachers regard themselves as part of the creative solution to environmental issues. Pre-service teachers are aware that knowledge about the environment and sustainability blurs disciplinary boundaries and has something to do with practices, values and beliefs beyond the classroom and beyond science. Perhaps in order to give more authority to pre-service teachers in their understanding of social and economic aspects of environmental education, teacher education program need to be inclusive of government policy and the critique of government policy. This would enable new teacher to have not only a suspicion of what may be in government policy, but also, have a

greater understanding of political content of environmental policy and how this may impinge of education, practice and reform.

The results from the presented research resonate with the claims made by David Orr, who stresses that educational reform would involve the axiomatic recognition of ecological literacy across schools. Such reform would break down barriers in terms of disciplinary domains, focusing education on raising the capacity for students to ask "What then?" and construct scenarios and action plans. Orr argues against the compartmentalization of knowledge because environmental knowledge requires that students have "a sense of connectedness, implications, and ecological citizenship, and [that] will provide the competence to act on such knowledge."⁹³ . Being able to ask "what then" becomes a critical question for students and teachers when teaching and learning about the interconnectedness of politics, knowledge, action and consequences.

The results do illustrate a current debate in pre-service programs about the content of programs and the degree of input into developing pedagogical skills and knowledge. Teaching about sustainability poses challenges for teachers and teacher educators. It is reasonable to expect the focus on knowledge, especially in the light of the research which identified that all teachers should bear the responsibility of teaching about the environment and sustainability. Presumably, underpinning these intentions is the need to bring up the knowledge level of all teachers.

6. Concluding Remarks

While programs have been implemented in schools and as part of teachers' professional development, teachers in pre-service courses and programs are not targeted in terms of their knowledge and awareness of environmental issues and this omission may have serious implications for effective teaching of environmental literacy in the future. The results show that more informed understanding of sustainability as scientific and social knowledge needs to be incorporated into pre-service teaching programs in order to ensure that sustainability education is effective. In order to increase students' understanding of sustainability issues, we argue that pre-service teachers need more informed education about sustainability in teaching preparation programs.

Student teachers may lack quality scientific knowledge and understanding of key sustainability issues and therefore teaching environmental literacies may be compromised. Beginning a teaching career with a deficiency in a key aspect of critical social and scientific knowledge raises issues about how this learning deficit may be addressed in subsequent professional development. Without adequate scientific knowledge and informed decision making capacity related to sustainability issues, pre-service teachers may not incorporate pro environmental knowledge, learning and pedagogy as part of their professional learning and training. The result may produce a lag in student learning and responsible decision making related to promoting effective environmental literacy and sustainable behaviours.

In order to address the issues related to the professional learning of pre-service teachers, the paper analysed research that examined a cohort of pre-service teachers' knowledge and beliefs about sustainability. The research shows, that

there is great enthusiasm amongst pre-service teachers for great emphasis on sustainability in schools and in their pre-service programs, however, the knowledge base for understanding sustainability, as scientific phenomena, and sustainability as social policy, requires more focussed attention in order to ensure that teachers of the future are more effective in teaching about sustainability issues.

References

- Ajzen, I & Fishbein, M. *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice Hall. 1980; I. Ajzen. *The Theory of Planned Behavior*. *Organizational Behavior and Human Decision Processes*, 50, 1991, 179-211. Australian Education Department (2007) <http://www.environment.gov.au/education/> accessed 27 February, 2008.
- Bonnett., & Michael. (2006). Education for sustainability as a frame of mind. *Environmental Education Research*, 12(3-4), 265-276.
- Clark, C., & Lampert, M. (1986). The Study of Teacher Thinking: Implications for Teacher Education. *Journal of Teacher Education*, 37(5), 27-31.
- Darling-Hammond, L. (1999). *Teacher Quality and Student Achievement: A Review of State Policy Evidence (Document R-99-1)*. Washington University: Center for the Study of Teaching and Policy.
- Fokkema, J., Jansen, L., & Mulder, K. (2005). Sustainability: necessity for a prosperous society. *International Journal of Sustainability in Higher Education*, 6(3), 219-228.
- Ford, P., Garvin, T., Harlow, D., Mears, C., Meymaris, K., Otero, V., Peressini, D., Reidel, M., & Waite, B. (2005). Integrating Technology into Teacher Education: A Critical Framework for Implementing Reform. *Journal of Teacher Education*, 56(1), 8-23.
- Green, B., & Reid, J. (2004). Teacher education for rural-regional sustainability: changing agendas, challenging futures, chasing chimeras?. *Asia-Pacific Journal of Teacher Education*, 32(3), 255-273.
- Hargreaves, D. H. (2000). *The Production, mediation and use of professional knowledge among teachers and doctors: A comparative Analysis*. Paris: OECD.
- Jenkins, E. W. and Pell, R. G. (2006) "'Me and the Environmental Challenges": A survey of English secondary school students' attitudes towards the environment', *International Journal of Science Education*, 28:7, 765 - 780
- Kagawa., & Fumiyo. (2007). Dissonance in students' perceptions of sustainable development and sustainability: Implications for curriculum change. *International Journal of Sustainability in Higher Education*, 8(3), 317-338.
- Kearney and DeYoung, (1989) *Exploring the Differences between Recyclers and Non-Recyclers: The Role of Information*. *Journal of Environmental Systems*, 18, 1988-89, 341-351;
- Kearney and R. DeYoung. (1995) *A Knowledge-Based Intervention for Promoting Carpooling*. *Environment and Behavior*, 27, 1995, 650-678.

Kurup, P.M., Hackling, M.W., & Garnett, P.J. (2002). Understandings of, beliefs about, and intentions to act regarding the Greenhouse effect. Proceedings of the 17th International Conference on Chemical Education, Beijing, China, August, 2002. p.64.

Lawn, M. (1996). *Modern Times? Work, Professionalism and Citizenship in Teaching*. London: The Falmer Press.

Luke, A. (2004). Teaching after the Market: From Commodity to Cosmopolitan. *Teachers College Record* 106(7), 1422-1443.

McClure, M. W. (1999). Teaching-the peculiar profession: A review essay. *Educational Administration Quarterly*, 35(4), 562-572.

Macnaghten, P and Jacobs, M (1997), Public Identification with Sustainable Development. *Global Environmental Change*, 7, 5-24.

Neal, P. (1994). *A Handbook of Environmental Education*. New York: Routledge.

Onwueme., Inno., Borsari., & Bruno. (2007). The sustainability asymptogram: A new philosophical framework for policy, outreach and education in sustainability. *International Journal of Sustainability in Higher Education*, 8(1), 44-52.

Patchen, Martin,(2006) Public Attitudes and Behavior About Climate Change, October 2006, PCCRC Outreach Publication 0601, October 2006, pp. 53. Available at http://www.purdue.edu/climate/pdf/Patchen_percent_200P0601.pdf

Weaver, A (2002) Determinants of Environmental Attitudes, *International Journal of Sociology*, 32, 2002, 77.108.

UNESCO-UNEP. (1988). Sustainable development via environmental education. *Connect*, 13(2), June 1988, 1-3.

UN (United Nations). (1992). UN Conference on the Environment and Development. Agenda21: Rio Declaration, Forest Principles. New York: United Nations.

Wheeler, KA & Bijur, AP (2000). *Education for a Sustainable Future: A Paradigm of Hope for the 21st Century (Innovations in Science Education and Technology)*. New York: Springer.

Sandra Wooltorton (2002) *Education for Sustainability A Background Paper Prepared for the State Sustainability Strategy*, Edith Cowan University (South West Campus), August, 2002 Publisher: The Sustainability Policy Unit, Department of the Premier and Cabinet.

Writing Narratives: An exploration of the role of essay writing in the lives of students

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Abstract

Investigating the relationships between essay writing, gender, social class, ethnicity and non-direct entry into university, researchers have suggested reasons why some students experience difficulties with writing: misunderstandings and differing expectations between students and tutors regarding the purposes of academic writing; mixed and often negative messages in tutor feedback; and unequal power relationships between tutors and students. However there is a paucity of research exploring the relationship between students and the role of essay writing in their lives. A multi-methodological framework is employed to uncover the experiences of undergraduate students and the role(s) essay writing plays in their lives. Using a theoretical framework which draws on Socio-cultural theory, it is argued that it is important to explore the relationship between undergraduate students' experiences of essay writing and the role that this plays in their lives at university. In particular, their experiences of agency, participation and negotiation of the academic writing practice.

Keywords : Student writing – Sociocultural theories - Subject positions

1. Introduction

Research studies have looked at the difficulties undergraduate students might have in learning how to write essays at university. Rather than viewing essay writing as a skills process where students develop a set of skills which they can then apply to virtually any writing context, academic literacies researchers view academic writing as a social practice (Lea and Stierer, 2000). Academic writing is characterised by being shaped by social rules, it is embedded in social contexts, it involves the consideration of social purposes and relationships are formed within it. This important research means that it is possible to explore social and contextual reasons why students may experience difficulties with learning how to write essays. For example, it has been suggested that students can experience difficulties because of the perceived high status of academic writing (Ivanic and Simpson, 1992); power imbalances between tutors and their students (Boud, 1995); students' and tutors' differing expectations of the requirements of essay writing (Lea and Street, 1998) and students' lack of awareness of the requirements necessary for writing essays (Lea and Street, 1998; Lillis, 1997). Such research highlights that difficulties can occur because of problematic rules and relationships and inequalities of power in relation to the assessment of student writing.

My research extends on previous research relating to the student experience of writing essays. When talking about academic writing as a social practice,

researchers have made links to identity and have explored the relationships between student writing and gender, social class and ethnicity but not in enough detail. In addition, nor have they captured the movement of identities. For example, Lillis (1997) has shown that a particular group of Black female bilingual students had a different way of writing and that they had problems learning how to write because the rules of HE were not always explicit, and Ivanic and Simpson (1992) and Francis et al. (2001) have identified class and gender issues showing that some students struggle to develop a relationship between their own identity and their writing. Whilst insightful with regard to talking about writing as a social practice, this research tends to group people together within the structural groups of gender, social class and ethnicity and views identity as static rather than fluid. Arguably, in order to understand more fully academic writing as a social practice it is necessary to seek a more complex picture and finer grained analysis.

Using sociocultural theory this study explores the fluidity and movement of identity by considering how writing fits into students' overall existence, in particular how students participate and negotiate their way through the practice. After talking to the student participants in this study it became clear that they have mixed experiences of writing essays and for some of them, the writing of the essays does not really figure in their lives as students. Whilst some were keen to talk about their experiences of writing essays and their relationships with the other students and tutors others were more keen to also tell me about their experiences of *being* at university; how important their social lives and the friendships they have made are and how writing essays interferes with this. In this paper I will draw on students' talk taken from a focus group transcript with four third year Religious Studies students and individual interviews with two of those students, Becky and Richard (pseudonyms). I will present Becky's and Richard's stories and will consider the positions that are made available to them, ones they choose to take up and those they choose to resist, and how.

2. Theoretical Framework

The theoretical approaches that create the framework underpinning this study are Communities of Practice (Lave and Wenger, 1991; Wenger, 1998), 'Figured Worlds' and Subject Positions (see for example Holland, Lachicotte, Skinner and Cain, 1998).

2.1. Identity and Participation

Wenger (1998) defines identity as the sharing of a common set of values, emotions, rules of engagements, purposes, communications and enterprises. Identity in this sense is fluid and complex rather than fixed. Wenger (1998) argues that participation is essential to the construction of identity. When referring to the term 'participation', he incorporates the "process of being an active participant in the practices of social communities and constructing identities in relation to these communities" (p. 4). He claims that "such participation shapes not only what we do, but also who we are and how we interpret what we do" (1998 p. 4). As Wenger explains "in practice we know who

we are by what is familiar, understandable, usable, negotiable; we know who we are not by what is foreign, opaque, unwieldy, unproductive" (1998 p. 153). However, the individual is excluded from his discussion of identity within communities.

Wenger's theorisation characterises identity in terms of fluidity and a sense of belonging and being in a collective or shared endeavour. This is appropriate within a framework exploring the role of essay writing in students' lives. It makes it possible to consider the identities the students have and how these influence the role essay writing plays. However, the exploration of individual identities is fundamental to this study and this is something that Wenger does not consider. This is important when understanding academic writing because the identities that students bring with them into the practice may affect the way they participate and approach writing essays. One concept which does have the potential to enable the exploration of the students is Subject Positioning.

2. 2. Figured Worlds and Subject Positions

Students are engaging in Higher Education through writing which acts as a medium. Many discourses surround the act of writing. Research studies looking into students' difficulties with writing essays have identified academic discourses that are related to power issues. Therefore, to try and understand the role of essay writing, it is necessary to explore the students' 'figured worlds' and positions which are made available to students in relation to discourses. Weedon (1987) points out the notion that discourses within institutions and social practices determine the approaches which constitute individuals as 'subjects':

To speak is to assume a subject position within discourse and to become subjected to the power and regulation of the discourse

(Weedon, 1987 p. 119).

An exploration of subject positions reveals the roles students enact as students/writers and the roles that essays play in their lives. Through an exploration of subject positions it is possible to explore why the students are positioned in the ways they are and how this influences their identities and approaches to essay writing and the role that essay writing has for individuals.

3. Research strategy

A focus was placed on capturing students' approaches to writing essays at university and their opinions, attitudes, beliefs, judgements and emotions about the academic essay writing process. The main aim was to capture group discourses and cultures within seminar groups and then to explore students' individual narratives to look at how they position themselves within the wider group discourses. With this in mind, a multi-method approach was used to collect and generate data sets. The students were asked to participate in a focus group and an individual interview. Forty- four students attended a focus group and twenty students were interviewed. In addition to experiences of writing, students' responses to tutor feedback and whether they find it helpful, interesting or understandable were explored.

4. Student Stories

Richard:

I do really enjoy writing essays. I've always enjoyed writing, like in my journals and creative writing many years ago at school. There's just something refreshing about reading and learning new concepts and then using your ideas creatively to bring everything together.

Becky:

I'm not saying you're a geek, each to their own. But for me, I don't like essays, they're right borin', nah, that's not me. If I have an essay to do it always happens a few hours before it's due. You're probably think that's well bad, but I've got so many other things to do, playing [sport], meeting up with friends, Lightening on Monday, The Loft on Tuesday, The Cross on Wednesday and Sense on Thursday and Saturday. And I just feel rough durin' the days, can't do nowt but sleep.

These statements are taken from the transcripts of two Religious Studies (RS) students. They are interesting for many different reasons and highlight two very different student approaches to writing essays at university. Becky is an extreme case of one overall subject position the "socialisers" and Richard is a "studier". In this section of the paper I explore the two examples of Becky and Richard.

4.1. The seminar group

Becky, Richard, Bethany and Sophie are third year students either studying a major or a joint major in RS. Bethany and Richard chose to study RS because they are interested in the subject and keen to further their academic knowledge and Becky and Sophie are studying it because they think a degree will increase their job prospects. Whilst they are all part of the seminar group there is a divide: Bethany and Richard are friends outside of the seminar and Becky and Sophie are very much individual members of the group. Whereas Bethany and Richard enjoy the academic side of university and have worked on projects together before, Becky and Sophie prefer the social side and only occasionally talk to the others during the seminar. They do not talk to each other outside the seminar. All of them end up writing just before the deadline but Bethany, Sophie and Richard do start the process about three weeks before the deadline. Bethany and Sophie find it difficult to motivate themselves and Richard takes time to think. Becky on the other hand starts writing hours before the deadline. This shocked the other students and they challenged Becky's behaviour, curious to know what she spends the rest of her time doing: 'but what do you do the rest of the time, when you should be studying?' (Bethany). Here, Bethany positions Becky as a student who is 'not good'. As the others described, being a 'good student' is someone who 'reads a lot', 'writes with thought' and 'just generally shows an interest'. With this in mind, the other students position Becky as 'not good' because she openly talks about how important socialising is as opposed to studying. The marks the students receive vary from 55- 77 and as a group, they think that their tutors unfairly mark their work harshly and find it frustrating

when tutors are inconsistent with what they want: 'all the tutors want different things, it's so frustrating- we never really know what they want' (Sophie). Having given a brief overview of the group I will now tell Becky's and Richard's stories.

4. 1. 1. Becky's Story

Becky is studying a joint honours degree in RS and History. She wants to be a RS teacher in a secondary school and plans to continue studying on a PGCE course after graduating. She chose to go to university because when she was studying for her A-Levels she was told that it would help her to get a better job and she had heard lots about being at university; 'I'd heard lots of good stuff about the social life at uni'. Now Becky is pleased that she went to university, 'if I hadn't come to uni, then I wouldn't 'ave thought about teaching'. Becky also told me that she came to university because all her friends were going and it's 'just expected nowadays really'. For Becky, the social life at university is very important: 'what are important to me are the great friends I've made, playing for the uni [...] and [...] teams and going out all the time'. Becky told me that she spends most of her time either playing sports, meeting up with friends and partying in pubs, clubs or bars and sleeping. I asked her when she manages to study and she told me that she does not really have time to and usually ends up doing it at the last minute just before a deadline, 'that's the only thing that's disappointed me here, I've had to do more work than I thought I would'. In her discussion of what she thought university would be like she said that she thought she would only have to 'put the work in' during the exams and not do three essays every term. She elaborated that this is what her friends from back home had told her when they went and that she thought it was similar at all universities. When I asked Becky how the studying and essays makes her feel she said that she feels disappointed by the amount of work and that it is just something she has to do to get by. However, she feels happy because she 'manage[s] to fit it [studying] in around seeing friends and playing sports'. She also likes the fact that studying means that she doesn't have to 'get a real job'. In this discussion Becky also mentioned that sometimes she feels like giving up university but she never does because she does not want to really and for this reason, makes sure that she always enjoys herself.

Becky and I discussed the last essay she had written for her RS course. She could not remember the title of the essay or what it was about but she could remember that she hated doing it:

It was horrible. As usual I put it off and put it off. Ended up doing it the night before it was due in, til I couldn't put it off anymore. I spent a couple of hours reading and doing some research. Started writing at about midnight, finished it around 4am, set my alarm for 8, went to sleep. Got up, read through it and handed it in.

In discussing Becky's approach to writing I asked her why she chooses to do her essays in this way. She told me 'cos I can'. She elaborated, 'doing it like this means I can still have a life playing sport and seeing friends'. She finds 'it really difficult to motivate [her]self and really hate[s] writing'. Instead of writing she prefers to discuss ideas, concepts and issues and she thinks of herself as someone who is good at debating orally but often struggles to construct an

effective argument when writing essays. In particular, Becky finds it difficult to start writing her essays and this puts her off them: 'I don't like the thought of starting an essay, I see it as a chore, it's an inconvenience'. Becky did enjoy writing essays when she was doing her A-Levels. She told me that she felt she had time to do them then and it was better because, 'my teachers were always there to help when I needed it'. I asked her if she thought there were any differences between writing at school and college and at university. She said that she enjoyed the freedom at school and college; 'being able to write about my ideas and opinions which I can't do here'. Elaborating on this, she pointed out 'I can only think of two essays where I've been able to really write about my ideas and opinions'. Becky also told me that she does not like writing essays at university because 'you get no second chance'. Expanding on this, she said she preferred writing essays at school 'where my teacher would look over lots of drafts of my essay rather than like it is here, at uni where you only get one chance to do an essay, then you hand it in and you get a mark and that's it'. Whilst she does not enjoy writing essays, she does like to 'put a different spin on essays so they're more interesting'. Becky told me that this meant that she likes to 'play devil's advocate and give the tutors something different and interesting so they'll give [her] a better mark'.

Although Becky told me that she *hates* writing essays she also told me, 'I want to get good grades' and she is always focused on the mark. For Becky, the mark is the most important part of writing an essay: 'it means a lot to me cos it shows my place here in a way and how good I am'. When writing an essay, she does spend time thinking about the essay and in particular different viewpoints that others will not have thought of, or that tutors may not have come across. This is interesting because thinking about essays is not something that she admitted to in the focus group; it is not part of her identity in the particular good/ not good student discourse that she likes to invoke. She told me that she does this to make her essays more interesting for the reader and 'to get better marks' and Becky does get 'better marks'. In her third year her marks have ranged from 64-74. Although the marks Becky gets are important to her, she told me that the actual essays are not. She only spends time on them, all be it, not very much time when she has a deadline. To clarify this, she does not see the writing of an essay important; 'It doesn't mean anything to me and I don't think I've learnt anything from doing them'. With this in mind, Becky rarely reads tutor feedback: 'I look at the mark but don't really see the point in reading it cos the comments will be about the essay and specifics of that'.

4. 1. 2. Richard's Story

Richard chose to study RS 'because I really enjoy the subject, especially learning about all the different cultures and traditions'. Richard told me that he really enjoys being part of the 'academic world' but is often disheartened by the numbers of apathetic and uninterested students. Richard has always enjoyed writing and describes researching and reading books as a 'favourite passion' of his. He elaborated on this, telling me that he also enjoys the challenges writing gives him: 'I enjoy seeking to develop my writing style and creativity'. He added though, there is also always a tension: 'a feeling that an essay will either work out or it won't'. The only time he does not enjoy writing an essay is when he is uninspired by the topic. When he is feeling uninspired he describes the writing

task as 'tiresome'. Richard does not just enjoy writing essays at university. He also enjoys writing for pleasure, 'writing letters and emails to friends, writing poetry, writing a diary and writing articles for online technology journals'. At the time of our interview Richard had just started writing in his diary again, 'writing is something that I find soothing, it's very natural for me and writing in my diary helps me when I'm a little tense'.

Richard and I discussed the last essay that he had written. He described it to me as 'fantastic'. Elaborating on this, he backtracked slightly and told me that he had a 'fantastic time doing it but the essay might not be that fantastic'. Richard enjoyed the essay because he found the question really interesting and felt that when he was researching and developing his arguments he learnt a lot. Learning from essays and writing more generally is something that Richard told me he gets pleasure from. He spent about three weeks in total completing the essay. The first two weeks he spent reading books, researching and developing his argument and then a couple of days before the deadline he began writing. When writing he often logs into Facebook and Messenger. Although he admits it is a 'dreadful distraction' he finds these social networking sites comforting:

writing an essay can be such a lonely experience, especially if I've left it to the last minute. It can be depressing too and just messaging friends or stalking people on Facebook once in a while is a reminder that there are people out there who love and care for you.

He is quite frustrated by his approach as he finds himself always writing till the deadline even though he begins the essays in plenty of time:

It's frustrating really. I don't mean to leave the writing till the last minute but because I like to think about the information I've read and to have the arguments sorted in my head before I write I find that I'm always writing right up until the last minute.

Richard also believes that because of this he is not a good student. I asked him why he thinks this and he said that good students are a lot more perfect and organised. Apart from the frustration, Richard said that he does not have any difficulties with writing essays. When I asked him why he thought this was the case when so many students do have difficulties when they write essays he said that it might be because he finds the technical requirements of writing essays easier whereas other students struggle with it:

There's so much emphasis placed on the technicalities of writing and they forget about their own creativity and their own views and opinions when they're writing...so cos I've not had this problem. I've had a head start and perhaps through practice have become better at expressing my own views and opinions.

Creativity is very important to Richard. He told me that his main motivation when writing an essay is making sure that it is creative and full of his own ideas. I asked Richard what he meant by creative and if he can be creative in his essays. He said that he can but at times it is difficult because of the rules that shape an essay:

You know, there's a tendency, isn't there? You're meant to support your essay with evidence and everything but I often feel that the evidence you're expected to give is only an opinion of another person....those kinds of conventions annoy me a lot....and other silly rules like referencing, I use the Harvard system and if someone wants to use a different system, that's not my fault.

Here, Richard also invokes the good/not good student discourse. By being creative, Richard seems to think that he cannot be a good student. However, he seems to be able to be creative even within the constraints of the practice that he mentions but does not recognise this and sees it as a tension between himself and the others. This could possibly be because unlike the other students who are following the 'rules' he tends not to. Whilst creativity is important to him, it is also important for him to get a 2:1 for his degree. When we had our discussions, although Richard's marks this year ranged from 55- 64, he felt that he might not get a 2:1 because of a module that 'went wrong' last year. He is desperate to get a 2:1 because of future career prospects:

There's so much pressure. If you get a 2:2 people think you're stupid.

Although Richard is desperate to graduate with a 2:1 he told me that the essays themselves are not important to him. What is important to him is his writing and he describes essays as a small part of that. Whilst the mark is important to him 'in the sense that it rewards all [his] hard work and it's nice to know tutors appreciate [his] ideas' Richard's main aim when he is writing an essay is to be creative and original:

If I act more like a computer, follow the rules and just write things from text books, I'm not very happy.

Richard always enjoys having his essays returned to him as well. He told me that he always reads the tutor feedback because he likes to know what people think of him and his writing. However, the feedback never has any impact on him. He describes the feedback as 'pointless...because they only criticise little things that will not help me in the future'.

To summarise, by illustrating these two students' stories I have highlighted two very different students studying the same subject in the same seminar group. For both of them, being awarded a 2:1 degree is important. However, their worlds are separated by their ideas and opinions of studying and what *being* a student is all about. Becky, a "socialiser" enjoys being at university because of the social opportunities it gives her; playing sports and socialising with friends whereas Richard who is a "studier" has a more romantic idea about being at university and he enjoys the academic side of university, the writing and the opportunity to discuss ideas freely with other students and academics. For Becky, writing essays is something that she fits in around all of her other, usually social commitments whereas Richard tends to spend a lot more time thinking about essays and participating in academic debates and discussions.

Both Becky and Richard also have different experiences towards writing essays. Richard admits that he enjoys writing and Becky does not. Although Richard would rather be writing a journal article or in his diary, he does enjoy the challenge of researching and writing essays. Becky on the other hand hates

writing them and admits that she puts them off for as long as she can. However, when they are writing essays they are both motivated by being creative and playing devil's advocate, something which Bethany and Sophie do not consider. As a result of their differing approaches to writing and the resources they draw on, they position themselves as very different students who participate within and around the practice in different ways. Compared with each other and Bethany and Sophie they have different approaches to writing essays, they both cannot recognise their achievement in 'being creative' or 'playing devil's advocate' within the constraints of the practice. Although they may not be explicitly aware of this, they both manage to get good marks. They also position themselves in similar ways regarding tutor feedback. Both of them are positioned as being judged by their tutors, but they manage to resist these positions in different ways. They do not see essays as important: For Richard it is his writing and the mark that is important and for Becky it is the mark. Therefore, Becky resists a position of being judged by looking only at the mark and not the tutor's comments and Richard reads the comments but never lets them influence him because he thinks it's pointless and it is his writing that is important and not the essay.

5. Conclusion

Originally I started this research with the intention of exploring in more detail the dynamics and complexities of students' essay writing and how it fits into their lives as students. However, following a preliminary analysis of the students' stories of their experiences and approaches towards essay writing what are emerging are students' opinions of what is important to them. A little to my surprise, the students were more keen to tell me about their social lives, what parties they go to or what sports they play rather than how often they go to the library or feel that they cannot express themselves in their writing. In this paper I have presented the stories of Becky and Richard who are two different students in one seminar group. Using these, an overview of their seminar group and subject positions I have illustrated preliminary ideas about movements of their identities and how students can be position themselves and be positioned in a variety of ways within and outside the wider group discourses.

6. References

BOUD, D. (1995) 'Assessment and learning: Contradictory or complementary?' In P. KNIGHT (Ed.) *Assessment for Learning in Higher Education*. London: Kogan Page Ltd.

FRANCIS, B., ROBSON, J. & READ, B. (2001). An Analysis of Undergraduate Writing Styles in the Context of Gender and Achievement. *Studies in Higher Education*, Vol. 26, No. 3 pp 313- 326.

IVANIC, R. (1998) *Writing and Identity: The discursual construction of identity in academic writing*. Amsterdam: John Benjamins Publishing Co.

IVANIC, R. and SIMPSON, J. (1992) 'Who's who in academic writing?' In N.FAIRCLOUGH (Ed.) *Critical Language Awareness*. London: Longman.

LEA, M. and STIERER, B. (Eds.) (2000) *Student Writing in Higher Education: New Contexts*. Buckingham: Society for Research into Higher Education.

LEA, M. & STREET, B. (1998) 'Student writing and staff feedback in higher education: an academic literacies approach'. *Studies in Higher Education*, Vol. 23 pp. 157- 172.

LILLIS, T. (1997) 'New Voices in Academia? The regulative nature of academic writing conventions'. *Language and Education* Vol. 11 (3) p. 182- 199.

LILLIS, T. (2001) *Student Writing: access, regulation and desire*. London: Routledge.

LILLIS, T. & TURNER, J. (2001) 'Student Writing in Higher Education: contemporary confusion, traditional concerns'. *Teaching in Higher Education*, 6 (1) 57- 68.

WEEDON, C. (1987) *Feminist Practice and Poststructuralist Theory*. Cambridge: Blackwell.

WENGER, E. (1998) *Communities of Practice: Learning, Meaning and Identity*. New York: Cambridge University Press.

Parent Input in Developing Teacher Understanding of Parent Issues when a Child has a Disability

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Abstract

Parent survey comments raise teacher awareness of children with disabilities and facilitate the parent-teacher collaborative experience. For 196 parents of children with disabilities in two Canadian survey studies, written parent comments supplementary to Life Management Survey responses were examined to give teachers insight into perspectives parents bring to the parent-teacher collaborative process. Primary roles parents have identified include roles as child's advocate, facilitating decision-making on educational and other life choices; as information gatherer and resource; and as creative problem solver. Each parent-identified role is richly supported by parent comments. Further insights are provided from Scorgie's examination of boundary ambiguity in parents of children with disabilities.

Keywords: Disabilities - Collaboration - Parents - Teachers - Education.

1. Introduction

The focus of the paper is on fostering parent-teacher collaboration by raising teacher awareness of perspectives of parents of children with disabilities. Previously unanalyzed parent survey comments shed some light on pertinent parent perspectives.

Our research over the last 15 years has focussed on parent effective life management when a child has a disability. We have identified and extended our understanding of nine themes related to parent effective life management (Scorgie, Wilgosh, & McDonald, 1996), with themes covering parent effective life management strategies, personal qualities, and transformational outcomes from parenting children with disabilities. These qualitative themes have been corroborated over four survey studies using the Life Management Survey (LMS) with parents of children over a range of ages and disabilities, in Canada (Scorgie, Wilgosh, & McDonald, 1997; Wilgosh, Scorgie, & Fleming, 2000) and cross-nationally in Italy (Nota, Soresi, Ferrarai, Wilgosh, & Scorgie, 2003; Wilgosh, Nota, Scorgie, & Soresi, 2004). In addition, we have continued our qualitative research longitudinally and cross-culturally, developing a model of the parent transformational process (Scorgie, Wilgosh, & Sobsey, 2004), based on parents' reports of how they have been transformed as parents of a child with a disability.

Andrews and Lupart (2000) stated that parents and teachers can work well together in meeting children's educational needs when they have awareness of each other's respective roles and responsibilities. By actively involving parents in the schools, collaborative partnerships can be developed. Parents' comments about how they have been affected by parenting a child with a disability can also provide teachers with insight into parent strengths and concerns. Carter, Clark, Cushing, and Kennedy (2007) emphasize the strong link between parent involvement and student achievement, and the need for schools to encourage parent involvement, particularly as their involvement tends to fall off over the years of schooling.

Therefore, our purpose is to examine comments Canadian parents have written, in addition to their responses on the LMS. These comments have not been examined previously; the current purpose is to provide possible insights into parenting issues for teachers, to facilitate the parent-teacher collaborative process. By increasing teacher awareness of parents' comments on their roles and responsibilities, teachers may come to a greater understanding of parental issues, thereby promoting positive parent-teacher relationships in the education of children with disabilities. Scorgie's (manuscript under review) overview of boundary ambiguity provides further insights.

2. Procedures

The first LMS study was conducted with parents who had been identified as managing life effectively, by support agency personnel, who distributed the survey by mail to the identified families. For the first study (Scorgie et al., 1997), LMS responses were returned directly to the researchers by mail by 80 parents of children with a broad range of ages and disabilities. The second study (Wilgosh et al., 2000) used the same procedures but broadened the focus to all parents of children with disabilities, not just those identified as managing life effectively. LMS responses were returned by 116 parents. This gives a total of 196 parent LMS completions, from which parent written comments have been reviewed, to select those best representing parents' perspectives on parenting children with disabilities as related to the parent-teacher collaborative process. These will be organized into topics or themes for discussion.

3. Results and Discussion

Parent comments fell into five topics or themes, each of which will be outlined and illustrated by parent quotations.

(1) Valuing the Child: Parents of children with disabilities offer insights for teachers and others into recognizing the inherent worth of individuals with disabilities to their families and broader communities. Parents accept and recognize their child as an individual with unique strengths and challenges. "It is important to accept who your child is really, not to accept others' views." "All children need to feel fully loved, warts and all, as they are, for themselves. You do not have to like the disability, but need to see the child first." "I do not accept

bad behaviour. It is hard sometimes to figure out what needs to be changed (e.g., swearing, undressing in public), what can be changed, and what you must simply accept." Parents value what their child has brought to the family. "One must value each child and what they bring." "All children need to feel valued as a person of worth and have their talents and work recognized." Parents report that their child with a disability has positively affected the lives of others. "Made others thankful for their blessings and aware of the needs of the disabled."

(2) Responsibility and Decision-making: The responsibility for the child's well being and success has been seen as strongly within the control of the family. "I will not let others control me or my son. I am his mother and I know him better than anyone." "The child and family have control of what is considered success for them." "We do not accept or allow others to control our circumstances. I view them as resources and I am responsible for accessing and coordinating what is best." Parents strive to discover what their child views as important, so that the child has consideration and responsibility in the choices made. "When we have failed as a family, it was in not considering our child's views but accepting others' views instead." Parents believe that they know as well as anyone else what is right for their child; they trust their instincts and believe they know their child best. "I feel the parent usually knows best but needs support to carry it out." "No one else has the right to decide what is best for my child." Parents want their child to learn to make decisions but recognize that they may always have to be involved in decision-making for their child. "Learning occurs if one is active and allowed to make mistakes. Living independently requires making decisions."

(3) Advocacy/Parent as Expert: Parents have learned to feel self-confident as advocates for their children, and are not afraid to speak out. "The children often don't get what is needed unless you speak out." "If parents don't get involved, their children will fall through the cracks." "My child's success depends on my ability to advocate for him." "Just being stubborn and not giving up. Believing she has a right to lead as normal a life as possible." "The parent who accepts the status quo has lesser chance of success." Parents have become experts on their child's condition, collecting and categorizing information. "Because you are the advocate, you need to be a knowledgeable one." "Knowledge of the condition has helped in understanding the child's behaviour and learning problems and what services and programs to use." "To gain more information, I gained more problem-solving and motivation techniques."

(4) Parent-Professional Collaboration: Parents recognize that they cannot do everything alone, they must be willing to accept help. "Our failures were when we did not reach out for help." "Rely on the professionals and their expertise, as long as these same people recognize no one knows my child like we do." "To cooperate and work with those who have skills and insights I don't have allows much greater progress and development. Nobody can do everything alone." Parents caution that they must set limits on external expectations, balancing roles of parent, teacher, and child advocate, because they are first and foremost the child's parents. "The system has forced us into an unbalanced role." "I learned to be a mom first and not turn into a teacher only, but work teaching into the normal home routines as possible." Parents have developed skills in working with professionals, encouraging a team approach. "Get a lot further if we work together." "We need to work together and respect each other equally." "Often parents are still looked on as inferior team members." Creative problem-

solving is essential to the process. "Ask questions, question everything, is it working? There is always an answer or solution out there."

(5) Parent Strengths: Parents have indicated that they have developed strong personal qualities and characteristics as a result of parenting a child with special needs. A number of qualities frequently named by parents are listed here, along with parent comments. (a) Creativity: "Because our daughter's condition is so rare, we have had to be creative. We have always had the attitude that she can and will progress." (b) Determination: "Stick to your guns. Do not worry about rocking the boat." "Never give up, no matter how hard things seem." (c) Flexibility: "I believe it is important to listen and to negotiate." (d) Self-esteem: "Believe in yourself and what you are doing." (e) Patience: "Need lots, lots, lots of patience." (f) Positive outlook: "Always look for positives, they will be there." (g) Resourcefulness: "If I can't find an answer, I'll find someone who might." (h) Sense of humour: "Laughing is better than crying." (i) Willingness to grow and learn: "We are amazed at how much we have learned through our having, caring for, and loving this delightful child." (j) Strong personal convictions: "You have to believe in what you are doing and that you are doing it for the right reasons."

4. Conclusions

The common thread throughout the parents' comments is their certainty that they know their child best and want a major role in making decisions for their child with a disability. They value each child with his/her unique strengths and challenges, talents and abilities. They emphasize the positive effects of their child on the family and the community.

They believe they have the primary responsibility for their child's well-being and success, recognize their strong need to be involved in the decision-making with regard to their child, and want their child to have experiences in choice-making to develop his/her own decision-making skills, to the extent possible. This strong conviction of personal responsibility has reinforced their development of a strong knowledge base on disability and confidence in their advocacy skills. They recognize, however, that they cannot do it all alone, and rely on professional collaboration, with the proviso that their role as parent comes before expectations that they serve supplementary roles as teacher, facilitator, etc.

These are strong parents, with creative problem-solving skills, determination, resourcefulness, and definite personal convictions. Teachers must demonstrate clearly that they value each child. They must recognize parents' roles and responsibilities in decision-making and problem-solving, as well as parents' strong advocacy and other strengths, and their knowledge base related to their child's disability. This recognition and demonstration can only enrich the parent-professional collaborative relationship. Teachers should be prepared in pre-service and in-service programs to work directly with these parents, recognizing their strengths without being threatened, as true collaborative partners.

Scorgie (manuscript under review) emphasized that professionals must explore sources of external boundary ambiguity in families of children with disabilities, in order to facilitate optimal collaborative partnerships to maximize child growth

and learning opportunities. Scorgie's data analysis identified sensitizing concepts of ambiguous loss and boundary ambiguity, which have direct relevance to our own data interpretation and, more broadly, to all parent-teacher collaboration when a child has a disability. Following diagnosis, parents face ambiguous loss, that is, unresolved questions and ongoing uncertainties creating stress, which may extend to questioning whether children are receiving most efficacious treatments, interventions and services. Parents also face boundary ambiguity, confusion over group structures and functioning. This extends to parent perceptions of membership, role, and boundary ambiguities, that impact on home-school collaborative initiatives and on-going efforts. For example, Scorgie's parents reported uncertainty about whether they were considered as valued and equal members of the collaborative team, and their team roles and responsibilities. Clearly, teachers must be aware of the extent to which these dimensions of parent ambiguity are factors in developing and facilitating effective parent-school collaborations. Professionals must find time to hear parents' stories, identify unique family attributes, perspectives and strengths, to foster greater understanding and enhance parent-school collaboration.

References

- Andrews, J., & Lupart, J. (2002). *The Inclusive Classroom: Educating Exceptional Children* (2nd ed.). Scarborough, ON: Nelson.
- Carter, E., Clark, N., Cushing, L., & Kennedy, C. (2007). Moving from elementary to middle school: A smooth transition for students with severe disabilities. In K. Freiberg (Ed.), *Educating Exceptional Children: Eighteenth Edition* (pp. 187-192). Dubuque, IA: McGraw-Hill.
- Nota, L., Soresi, S., Ferrarai, L., Wilgosh, L., & Scorgie, K. (2003). Life management and quality of life of parents of children with diverse disabilities. *Developmental Disabilities Bulletin*, 31(2), 155-181.
- Scorgie, K. (Manuscript under review). Boundary ambiguity in parents of children with disability: Insights on home-school collaboration.
- Scorgie, K., Wilgosh, L., & McDonald, L. (1996). A qualitative study of managing life when a child has a disability. *Developmental Disabilities Bulletin*, 24(2), 68-90.
- Scorgie, K., Wilgosh, L., & McDonald, L. (1997). A survey follow-up on managing life when a child has a disability. *Developmental Disabilities Bulletin*, 25(2), 65-69.
- Scorgie, K., Wilgosh, L., & Sobsey, D. (2004). The experience of transformation in parents of children with disabilities. *Developmental Disabilities Bulletin*, 32(1), 84-110.
- Wilgosh, L., Nota, L., Scorgie, K., & Soresi, S. (2004). Effective life management in parents of children with disabilities: A cross-national extension. *The International Journal for the Advancement of Counselling*, 26, 301-312.
- Wilgosh, L., Scorgie, K., & Fleming, D. (2000). Effective life management in parents of children with disabilities: A survey replication and extension. *Developmental Disabilities Bulletin*, 28(2), 1-14.

Action Research and Teacher Development: The Experience of Two In-service Secondary School Music Teachers in Hong Kong

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Abstract

This study reports an action research project of an in-service music teacher education program. Two in-service secondary school music teachers participated in this study. Each participant identified an action research question and conducted an individual project during teaching practice. Qualitative data was collected. Interviews being tape recorded. Triangulation and discussion with participants were used during the analysis process to verify the findings. Findings of the study focused on the benefits and constraints of practicing action research by in-service secondary music teachers. The participants enjoyed the freedom to investigate areas of their personal interests. Through actively investigating their own practice, they addressed the enhanced opportunity for them to reflect and improve professional practice, and appreciate the improvement of professionalism and confidence in addition to helping their students to learn music better. They experienced positive changes in classroom and ownership of their own professional growth. The constraints aroused include the lack of experience of action research at the beginning, and the lack of time to read related literature extensively.

Keywords: Action research - Qualitative methodology - Teacher Education - Music Education - Professional Development

1. Introduction

Action research has been used in many graduate and undergraduate teacher education programs. It is found that the process of action research can improve professional practices, help solving educational problems in daily instruction, as well as improving educational programs. Action research can help preservice teachers to reflect on their classroom instruction (Auger & Wideman, 2000), and empower experienced teacher to change through solving particular educational problem (Esposito & Smith, 2006). Collaborative action research can help experienced teachers, teacher educators and beginning teachers to generate professional knowledge, focus on meaningful inquiry and improve professional practices (Rock & Levin, 2002; Kremenitzer & Myler, 2006; Burn, 2007). Teacher educators also employed action research to inform curriculum development of teacher education programs (May, 2005; Scharmann, 2007).

In the field of music teacher education, some music teacher educators also advocate the use of action research as daily activities of classroom music

instruction and help teachers to reflect and improve professional practices (Bresler, 1995). Action research has been employed in music education research, such as exploring various ways to integrate music in language teaching (Miller, 1994), and experimenting instructional strategies of music composition in classroom settings (Miller, 2004; Major, 2007), as well as developing reflective thinking of pre-service music teachers at undergraduate level (Conway, 2000). Up-to-date, research on in-service music teachers' professional development through action research has not been found. This study attempts to bridge this gap.

2. Analytical framework

The analytical framework of this study is based on the curriculum making model (CMM) of teacher professional growth proposed by Clayton (2007). In daily classroom instruction, teachers may often encounter students who (1) may have problems in learning; (2) may not be interested in the subject content; and (3) may be too passive to participate in learning activities. According to Clayton (2007), change would occur through teachers' curriculum making that helped "managing student relationships to curriculum, developing claims of curricular ownership and understanding sources of classroom knowledge" (p. 226). By taking practical risks in these tension areas through curriculum making, teachers could experience conceptual changes as well as improvement in practice. Therefore, curriculum making can be regarded as a kind of professional development, while tension areas can be regarded as a pivot on which novice teachers' professional development could be resulted.

3. Contextual background

3.1. Teacher education programs in Hong Kong

There are various modes of teacher education programs offered by universities and post-secondary institutions in Hong Kong. Teacher education programs that lead to qualified teacher registration are funded by the government. These initial teacher education programs are designed to train either secondary or primary school teachers in specializing subjects. Full-time initial teacher education programs include: (1) One-year Postgraduate Diploma in Education program (PGDE); (2) Four-year undergraduate program with dual qualifications of a Bachelor degree plus a Diploma in Education (DE); and (3) Four-year undergraduate program that leads to a Bachelor in Education qualification. Part-time initial teacher education programs include: (1) Two-year Postgraduate Diploma in Education program (PGDE); and (2) Three-year Bachelor in Education degree program which consists of some part-time semesters and some full-time summer teaching blocks. Teacher education programs at the Master and Doctoral levels are offered by universities and post-secondary institutions as self-funded programs instead of funded by the government. These programs are usually offered as part-time mode to facilitate in-service teachers to further their professional development.

3.2. Structure of teacher education programs

Like the teacher education programs in other places of the world, the curricular components teacher education programs in Hong Kong usually consist of foundation studies, such as educational psychology, philosophies of education and educational sociology; curriculum studies and pedagogical studies of specializing subject; subjects related to professional development of teachers, and field experience (Ben-Peretz, 1995). However, teacher education programs are not homogeneous and there may be differences between programs, such as the institutional contexts, form of practicum arrangement and conceptual orientation of the program (Gimmestad & Hall, 1995).

3.3. Music teacher education in Hong Kong

Music teacher education is offered as one of the specializing subjects within the teacher education programs at the initial teacher training level. Teachers who hold a PGDE, or DE or B.ED qualification are regarded as qualified teachers. Full time music teacher education students complete the teacher education programs before they start teaching in schools. Part time music teacher education programs are offered for those teachers who may hold a bachelor degree in music and are proficient in playing one or more musical instruments, and have entered the teaching profession without any teacher qualification. They pursue the music teacher education programs while having a day-time teaching post in schools.

4. Purpose of Study

The purpose of this research is to describe how engagement in action research projects affected the professional development of two in-service secondary music teachers. It is hoped that this study will provide insights for music teacher educators on music teacher professional development.

5. Methodology

This study is designed as a dual case study that employs qualitative method. Two cases of secondary school music teachers are documented. Each participant is given a pseudonym to ensure anonymity.

5.1. Participants and Settings

The two participant of this study were recruited from a part time music teacher education program through convenient sampling (Creswell, 2005) because they were willing and available to be studied. They joined the research on a voluntary basis. They were in-service teachers who were teaching music in secondary schools in Hong Kong. They were in their second-year's study of a two-year part-time PGDE program and were enrolled in a two-semester course which focuses on reflective teaching. Both participants conducted an action research project during the course.

Alice and Ben taught music classes in two different secondary schools. Alice chose one group of Form One (ages 12-13) which consisted of 36 students while Ben chose one group of Form One which consisted of 38 students.

The profile of the two teachers is summarized in Table 1, which reflects certain features. First, the teachers participating in the project were young teachers in their twenties. Second, they had fewer than 5 years' teaching experience. Third, they held a Bachelor degree in music and were proficient in playing a musical instrument.

Table 1 Profile of participants

Case	School	Gender / Age	Years of teaching music in secondary school	Qualifications in music	Major Musical instrument	Music class chosen for conducting action research project
1. Alice	A	Female / 20s	2	B. A. in music	Piano	Form One (ages 12-13)
2. Ben	B	Male / 20s	4	B. A. in music	Violin	Form One (ages 12-13)

5.2. Procedures

This study was conducted in three stages. First, both participating teachers attended seminars on how to design and conduct action research in classroom. Each participating teacher identified an issue or problem that needed improvement in their own professional practice, and design a project of an action research which consists of a teaching unit and relevant teaching strategies to be conducted in their music classrooms. Consultation meetings were held to help teachers to focus on the problem that they considered necessary to improve in their classroom music instruction. Second, each teacher implemented the action research project in his/her music classes of his/her choice. The duration of each project depended on the time needed for the teacher and his/her students to complete the tasks of the project. The choice of music topic of the action research project was left to the discretion of the individual teacher. Verbal or written reflections on every lesson were recorded. Copies of students' work and all teaching aids were kept. Monthly consultation meetings were held to discuss on the design and implementation of the action research projects. Finally, interviews were conducted to solicit teachers' views about their experience of implementing action research projects in their classroom music instruction.

5.3. Data Collection and Analyses

Interviews were employed for data collection. A standardized semi-structured interview guide was used for interviewing. Teachers were asked to provide verbal or written reflections after every lesson they taught. All interviews and reflections were tape-recorded, transcribed and checked by the teachers before data analysis was done to ensure the authenticity and credibility of research outcomes (Guba & Lincoln, 1989). Triangulation that include the review of other materials such as textbooks, school documents, meeting records, teachers' notes and students' work was also employed (Creswell, 2005). All data were coded, categorized and analyzed.

Content analysis (Merriam, 1998) and pattern matching (Yin, 1994) were used as data analysis procedures for this study. Quotations from teachers' interviews were extracted form presentation in findings.

6. Findings

6.1. Case 1

Alice found that her students had difficulties in identifying tone colors of different western musical instruments. Therefore she focused her action research project on how to improve her students' abilities in identifying tone colors of western orchestral instruments.

6.1.1. Action research project 1

Alice designed a listening test for assessing students' achievement in recognizing tone colors. The listening test was used as pre-test and post-test which she administered twice to the one group of Form One students (n=36): BEFORE and AFTER she implemented her strategic curriculum making and instruction.

Alice designed a ten-lesson curriculum unit with ten sets of listening exercises to be implemented in ten consecutive music lessons. Each set of listening exercise had five listening excerpts. Alice guided students to differentiate the range, mechanisms of sound production and characteristics of musical instruments through the listening exercises. When Alice compared students' achievement in recognizing tone colors between the pre-test and post-test, she found that 32 students (n=36) gained higher scores in the post-test which evident students' improvement in differentiating different tone colors of musical instruments.

6.1.2. Students' opinions

Alice designed a short questionnaire to solicit students' opinions about her strategic curriculum making on helping students to differentiate tone colors of orchestral instruments. She found that students gained confidence and agreed

that her strategic curriculum making had helped them to improve. The majority of her students expressed that they like the listening activities. Table 2 shows the findings of the questionnaire.

Table 2 Students' opinions

Statements		Agree	Disagree
		(n=36)	
1.	I gained confidence in differentiating tone colors.	20	16
2.	I have improved in differentiating tone colors.	25	11
3.	Teacher's guidance and the listening exercises were helpful in my learning process.	29	7
4.	I like this listening curriculum.	26	10

6.1.3. Teacher's reflections

Alice reflected that she found it rather difficult to design the action research project at the beginning. She considered that the monthly consultation meeting was very useful and had helped her to focus on her research project.

"At first, I was worried whether I could conduct an action research in my music classes. Since I'm a part time student, I'm very busy and usually occupied by my daytime teaching job. The monthly meeting with my supervisor provided me the professional support on the design and implementation of the action research. I could have enough time to read relevant literature and prepare my work within a month's time before I could come up with some progress in my research project."

Alice was contented with her students' progress when she implemented the strategic planning of the listening curriculum. She did not know whether the curriculum would work out or not. However, she wanted to try it because she thought it might help some students to improve.

"My students seldom had a chance to listen to classical music in their daily life. After this project, at least they consciously know that they had improvement in music listening and gained some confidence. This is what I'm very happy to know about."

Alice experienced success in completing the action research project, and felt that she had progress a lot in her own professional development. However, she expressed that she had consumed a lot of time in the preparation work for this action research project.

"I've never done any research before. I did everything from scratch. I was so time consuming to prepare for the project. And now, I feel very happy and successful because I tried an alternative way of teaching through this action research project. Though it's risky to try something new, but it worked well. This is my own professional development. I read more books because of this action research, I think, from the academic perspective, I've learned more."

6.2. Case 2

Ben noticed that his students were not too interested to appreciate classical music, but they showed keen interests in watching audio-visual animation. According to the *Music Curriculum Guide* (CDC, 2003), students are expected to develop their abilities of analytical listening. Therefore he focused his action research project to investigate whether the use of audio-visual animation could help his students to improve in analytical listening skills.

6.2.1. Action research project 2

Ben designed a listening test for assessing students' achievement in analyzing some specific musical elements in selected music excerpts. These musical elements include "tempo", "meter", "dynamics", "tone color", "musical form" and "genre" as stated in the *Music Curriculum Guide* (CDC, 2003). The test was used as pre-test and post-test which he administered twice to the one group of Form One students: BEFORE and AFTER he implemented his strategic curriculum making and instruction.

Ben designed a 4-lesson curriculum unit with the use of audio-visual animations for his action research project. He guided his students to analyze the music elements with audio-visual animations that used classical music as background. When Ben compared students' achievement in the pre-test and post-test, he found that 19 students had improved, 12 students maintained the same score, while 7 students got less marks in the post-test. The majority of his students showed improvement in analytical listening through using audio-visual animations.

6.2.2. Students' opinions

Ben designed a short questionnaire to solicit students' opinions about the use of audio-visual animations for analytical listening activities. He found that his students indicated that audio-visual animations were attractive teaching aids that could arouse their interests and motivation of learning, because they would not like to listen without audio-visual animations. They expressed that the use of audio-visual animations could help them to improve in analytical listening.

Table 3 Students' opinions

Statements		Agree	Disagree
		(n=38)	
1.	The use of audio-visual animations can raise my motivation of learning analytical listening skills.	32	6
2.	Audio-visual animations can help me to improve in analytical listening.	24	14
3.	I like audio-visual animations to be used in music lessons.	30	8
4.	I like listening to music without audio-visual animations.	18	20

6.2.3. *Teacher's reflections*

Ben considered conducting action research project as a very valuable experience for him to reflect on his curriculum instruction and to enhance his interaction with students.

"It (action research) made me think carefully about my teaching and curriculum planning. Through preparing for the action research and the curriculum materials, I've learnt how to be more systematic in curriculum planning and I would spend more time to interact with students. It made my teaching more meaningful."

Ben reflected that he had to put a lot of effort to identify a focus for the action research project. However, he was very contented when he experienced the success in students' improvement in motivation and learning progress.

"I think the most difficult moment was when I don't know what to do for the action research project at the beginning. I didn't have much time for reading literature and thinking about it. You know, it's difficult to find a topic that's worth doing and make sense to me and students. ... Now the project is done and I'm so contented with my students' progress and improvement. It's so rewarding."

Ben regarded this action research project as a success for himself and his students. He found that his students were more attentive with the use of audio-visual animations and facilitated him to guide them in analytical listening activities.

"I think that the audio-visual animations might not help students to understand musical elements without my guidance. However, its attractiveness in fact made them more attentive to what I taught. As long as it can arouse their interests, it's the first step to improve their learning progress."

Ben considered the monthly consultation meetings as a powerful drive for him to accomplish the action research project.

"The monthly consultation meeting could help me working on the action research project. I needed somebody to talk to when I found myself losing directions in my busy teaching job. The meeting helped me to narrow down to a clear focus and I could plan my action research more systematically."

The time and effort used for preparation of audio-visual teaching aids was a major concern for Ben.

"It's very difficult to find audio-visual animations that use classical music as background. Even if I could find it, it took me so much time to extract it to become PowerPoint files to be shown in music class. However, when all these works were done, I enjoyed the moment of using it because students' responses were so good. ... honestly speaking, it's very time consuming to design this curriculum unit and to prepare these teaching aids when I'm so occupied by so many school duties."

7. Discussion

This study showed the cases of two in-service music teachers who tried implementing action research in their music classroom teaching. They received continuous consultation from their supervisor of the part-time music teacher education program that they enrolled in. Although both teachers found it difficult to start their action research project at the beginning, they got the courage to try designing curriculum unit to address their students' interests and needs in learning while receiving continuous consultation from their supervisor. From another perspective the involvement of their supervisor evident collaborative effort in making the action research projects possible for very busy in-service music teachers. Although the collaborative effort of the teacher educator of this study may not be comparable with those in other studies (Rock & Levin, 2002; Kremenitzer & Myler, 2006; Burn, 2007), such collaboration had helped both teachers of this study to focus on meaningful inquiry of their students' problems and improve in their own professional practices.

Similar to Clayton's notion about professional development through curriculum making (Clayton, 2007), the process of risk taking in the process of identifying problems for action research, designing curriculum and curriculum materials from scratch had brought new experience to these teachers and their students. Both cases demonstrated enhanced interests in the subject and improvements in students' learning progress. Both teachers experienced valuable professional development progress through conducting action research project on curriculum making. In addition to the areas that Clayton (2007) mentioned in her curriculum making model of professional development, both teachers of this study had helped their students to improve and enhanced interaction with students using short questionnaire at the end of the curriculum unit. They received encouraging feedbacks from students in regard of the curriculum unit, and feelings of success through helping their students to improve in learning.

8. Conclusion

From the perspective of teacher education, incorporating action research project that involve continuous consultation from teacher educators may increase the workload of teacher educators. However, such effort would not be in vain because teacher education students could receive more professional support in the process of conducting action research. Such arrangement could develop teacher education students to become reflective practitioners when they pursue teacher education program. According to the experiences of teachers demonstrated in this study, the effect of professional development would be maximized when curriculum making takes form as an action research project in the context of a teacher education program.

References

- Auger, W. and Wideman, R. (2000). Using action research to open the door to life-long professional learning. *Education, 12*, 1: 120-132.
- Ben-Peretz, M. (1995). Curriculum of teacher education programmes, in : L. W. Anderson (Ed.) *International Encyclopedia of Teaching and Teacher Education, 2nd ed.* (New York: Pergamon).
- Bresler, L. (1995). Ethnography, phenomenology and action research in music education. *The Quarterly Journal of Music Teaching and Learning, 6*, 3: 4-16.
- Burn, K. (2007). Professional knowledge and identity in a contested discipline: challenges for student teachers and teacher educators. *Oxford Review of Education, 33*, 4: 445-467.
- Clayton, C. D. (2007). Curriculum making as novice professional development. *Journal of Teacher Education, 58*, 3: 216-230.
- Conway, C. M. (2000). The preparation of teacher-researchers in preservice music education. *Journal of Music Teacher Education, 9*, 2:22-30.
- Creswell, J. W. (2005). *Educational Research*. Upper Saddle River, NJ: Pearson.
- Curriculum Development Council (2003). *Music Curriculum Guide* (Primary 1–Secondary 3). Hong Kong: CDC.
- Esposito, J. and Smith, S. (2006). From reluctant teacher to empowered teacher-researcher. *Teacher Quarterly, 45-60*.
- Gimmestad, M. J. & Hall, G. E. (1995). Structure of teacher education programs, in: L. W. Anderson (Ed.) *International Encyclopedia of Teaching and Teacher Education, 2nd ed.* (New York: Pergamon).
- Kremenitzer, J. P. and Myler, T. (2006). Collaboration between teacher educator and kindergarten teacher: A 4-year action research study to improve our own professional practices. *Childhood Education, 82*, 3: 165-170.
- Major, A. E. (2007). Talking about composing in secondary school music lessons. *British Journal of Music Education, 24*, 2:165-178.
- May, M. (2005). Improving teacher preparation. *Journal of Social Studies Research, 29*, 2: 4-8.
- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass.
- Miller, B. (1994). Integrating elementary music instruction with a whole language first grade classroom, *Bulletin of the Council for Research in Music Education, 123*: 36-39.

Miller, B. A. (2004). Designing compositional tasks for elementary music classrooms, *Research Studies in Music Education*, 22: 59-71.

Rock, T. C. and Levin, B. B. (2002). Collaborative action research projects: Enhancing preservice teacher development in professional development schools. *Teacher Education Quarterly*, 29, 1: 7-21.

Scharmman, L. C. (2007). A dynamic professional development school partnership in science education. *The Journal of Educational Research*, 100, 4: 235-242.

Yin, R. K. (1994). *Case study research: Design and Methods*. Thousand Oaks, CA: Sage.

Critical Reflection and Student Autonomy

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Abstract

This paper looks at an alternative teaching and learning approach in an adult education course and examines the ways of developing student autonomy by fully engaging them in critical reflection. If we believe that knowledge is the result of knowing and that learning is the business of extending the breadth of knowing, then education is a way to help students extend their experience of knowing and to gain a better understanding of learning. This article, drawing from a participatory action research project, discusses the role of critical reflection which warrants this kind of learning. This paper will show that during the process of critical reflection, while students recapture their experience, think about it and evaluate it, new experience becomes meaningful and thus new knowledge is made. It will also show how students gain a better understanding of self and become active learners.

Keywords: Education – Critical reflection – Student Autonomy.

1. Introduction

It is believed that knowledge is the result of knowing and that learning is the business of extending the breadth of knowing. It is also believed that one of the aims of formal education is to help students extend their experience of knowing and to gain a better understanding of learning. In other words, education is to help students understand that to learn is to make meaning from experience. Critical reflection as an important human activity warrants this kind of learning. When people recapture their experience, think about it and evaluate it, meaning of the experience is then made and opportunities for new learning are created.

This article examines the role of critical reflection in student learning as the major outcome of a participatory action research project and discusses how a group of students were fully engaged in critical reflection during the course they were undertaking. This article will demonstrate that, when students are engaged in critical self-reflection, facts and skills are learned more effectively, and that students are more motivated in skill development and personal transformation, which in turn will empower students to become active and autonomous learners.

2. The context of the study

The study was done within Batchelor Institute with a group of Indigenous students undertaking a Graduate Diploma course in Adult Education. Batchelor Institute, located in the Northern Territory Australia, is a tertiary institution for Indigenous adults only. The majority of students come from Indigenous communities within the Northern Territory, but in recent years, the institute has attracted more and more Indigenous students from other parts of Australia such as Queensland, New South Wales and Western Australia.

When discussing issues of Indigenous education in Australia, a common concern is the quality of education. Probably due to the political nature of Indigenous Education, in some tertiary courses, Indigenous students “are not required to perform at the same academic level as non-Aboriginal students studying towards the same award or same level of award” (McDaniel & Flowers, 1995, p.238). Such dilemma was noted a decade ago, and still exists today. As part of the consequence, it is observed, the Indigenous students graduated from those courses do not have the necessary skills to cope with the requirement of workplace or they do not have the necessary skills to cope with the requirement of academic life (McDaniel & Flowers, 1995). The majority of the students enrolled in the graduate diploma courses at Batchelor Institute were products of that kind of education.

Graduate Diploma in Adult Education was one of the few post graduate courses offered by the institute in 2002. As it was a new course, some units of the course only had a small number of students which allowed a flexible teaching mode. The unit “Investigative Project” was one of those units. This unit requires students to undertake an individual research project in education using qualitative approaches and to write up a research report at the end of the course. It is a practical unit to develop students’ critical thinking skills and analytical skills. The participatory action research took place in this unit.

The students enrolled in this research unit “Investigative Project” came from different organizations such as Aboriginal Community Clinic, Regional Land Council, etc. Most of them were graduates from universities other than Batchelor Institute.

What became apparent while teaching those students at the beginning of the course was that not only lacking necessary critical thinking and reflection skills to assess their own learning, most students had poor literacy skills and inadequate reading comprehension ability. It also became apparent that most students in that group had developed, from their previous studies, a habit of depending on ITAS^{lxxii} tutors for their written assignments. Now in this research unit, they found it difficult to line up with a tutor in conducting a research project because the research required some hand-on activities which could not be done by others except the researchers themselves. Apart from that there were not many tutors

^{lxxii} ITAS – stands for Indigenous Tutorial Assistance Scheme. This program provides free tutorials to Indigenous students after class to help them improve the presentation of their written assignments or to help them improve reading comprehension skills.

who had much understanding in educational research. So the challenge facing the students was that they had to rely on themselves to learn to do educational research. However, their lack of critical thinking skills and handicapped study skills would not give them enough power in making decisions and managing learning activities during the course. All the tasks incorporated in an independent research project seemed daunting to them. They were concerned that they might not be able to complete the course. Yet, at the same time, they expressed strong desire of learning some "concrete knowledge and skills of doing a proper research project" (class discussion, 2002).

Recognizing their difficulties and problems at the beginning stage of the course, the students and the lecturer decided to do a radical change to the teaching and learning approach. In order to increase their capacity of autonomy, it is crucial to have awareness of learning and establishing the high level of mental activity in learners. In other words, the students need to develop their meta-cognitive skills (Little, 1999), such as power of reflection, skills for decision-making and ability to undertake independent action. Thus participatory action research was identified as appropriate for the group to start their new learning journey together. The participatory action research aimed to build up student capacity so that they can control their own learning during the course of study. As a group, the students decided to do a participatory action research project on the first year learners in the higher education courses at Batchelor Institute to find out "What stops students from succeeding in their courses?" The topic came out of a common concern of the attrition rate of students at Batchelor Institute, and the research project generated a number of learning tasks for the students.

3. The method and the process

Participatory action research, also termed as participatory action learning in the more recent literature, builds on the critical pedagogy as a response to the traditional formal models of education where the teacher stands at the front and imparts information to the students. Participatory action research here is presented as a method and process and as a goal to help the students improve meta-cognitive awareness as well as their performance as learners. It locates the students at the center as learning agents. Instead of waiting for the lecturers to transmit knowledge to them, the students in the project were placed in a position to learn to control their own learning by actively planning, implementing, and monitoring their learning activities to achieve a set of goals. The lecturer's role was a resource person to guide and facilitate student learning. As the research project involved utilizing a systematic cyclical method of planning, taking action, evaluating and critical reflecting (O'Brien, 2001, McNiff, 2002) prior to planning the next learning cycle, the process of this participatory action research was a continuous action learning cycle for the students and all students were required to continuously reflect on their learning from the actions and proceed to initiate new actions on the spot.

The participatory action research was also used as a collaborative method to help the students make meaning of their learning experience and learn to implement independent and informed actions so that student capacity was built up to survive the course.

The key method adopted in this project was problem based learning approach. The problem based learning approach has its origins in Health science, but is now widely used in many professional training courses. The problem based learning approach is the key to link up all the learning cycles in the participatory action research project.

At every cyclical stage of the research project, the students' learning was self-assessed, and their difficulties and problems were identified and matched against the requirement of the course, then new learning tasks were discussed and designed as well as a time frame being set to implement each learning task to solve the identified problem. In other words, each learning stage had a problem based action learning plan for the students. In this way, the students had a control of their own learning and were constantly engaged in critical reflection during the whole process of the research project.

The project consisted of two major action learning plans for the group. Each action learning plan had a set of goals of addressing identified problems of the group which incorporated the requirement of the course and generated several learning activities. Each learning activity developed by the group had a clear goal of solving the identified problem such as "what do we know about educational research methodology", or "what are the major steps in developing a research plan".

The major requirements of the course were covered over those two action learning plans. The knowledge of research methodology and skills of planning a research project were included in the first action learning plan which prepared them for conducting a research project. The knowledge and skills of collecting data, analyzing data and writing up a report became the major activities in the second action learning plan. It was indeed a journey of learning how to do research by doing a research project together.

When there was a gap between the group activity and individual knowledge, individual students were required to develop individual learning contracts to catch up with knowledge and skills lacked, including their literacy skills.

In general, the students' learning tasks included two modes of activities: group and individual. Group tasks involved differentiating qualitative research from quantitative research, discussing popular methods in educational research and issues related to educational research, especially in the area of Aboriginal education. Group tasks also included identifying appropriate methods and techniques for their proposed research project. These were mainly realized through lectures, group reading activities and class discussions.

Individual tasks involved activities to improve English literacy skills and reading comprehension ability, broaden knowledge of research planning and interviewing techniques. Individual students who had a weak knowledge base were required to negotiate individual learning contracts with the lecturer according to their needs. Most individual learning contracts contained some simple questions against their problems and specific learning activities.

Although there were a number of learning tasks on their action list, the students didn't feel threatened as most actions were to be carried out as a team effort

with close supervision from the lecturer and all individual activities had clear instructions and learning steps to achieve specific purposes.

Whether identifying learning needs or developing action learning plans, the students were constantly engaged in critical reflection on their learning journey. To ensure the implementation of individual learning contracts, the students were also required to develop an individual progress file to be evaluated at the end of the course. The progress files contained individual's personal records of learning and achievement such as learning activities planned, self-assessment of the learning activities carried out, and future plans for personal and professional development.

4. The learning curves during the learning process

The initial analysis of the course requirement and the students' existing skills and knowledge put the students onto the action learning journey to learn to plan and manage their own learning activities, as well as learning to plan and conduct an educational research project.

There were two parallel lines of the project developed hand in hand. While broaden their skills and knowledge of educational research in the group, the students were also developing self-directed learning skills and critical thinking skills through completing individual learning activities.

The emergent process of the action learning in this study worked effectively to link participation, individual transformation and knowledge generation. It worked well as a means and an end in the development of personal capacity in coping with academic requirement.

There were two major learning curves during the whole learning journey that I want to emphasize here, because these two learning curves demonstrated transformative learning through critical reflection. They also showed the development of self-directed learning skills which increased the student autonomy.

The first learning curve appeared at the stage of data collection and the development of practical research skills, especially in terms of questioning techniques and seeking information from the existing literature. Arguments on what questions should be asked and how to tease out more information from potential participants sometimes became quite heated. After more reading activities on articles about ways of accessing information and interviewing techniques, the students completed a list of open-ending questions for the interviewees, and started their first interview as a trial of questions and as a test of their interviewing skills. Then they were asked to critically reflect on what they learned through the first interview.

While reflecting and evaluating their first interview experience, students all realized that not only some questions were ambiguous, their lack of questioning techniques and lack of self-confidence also created problems when interviewing others. Some of them came back from interviews with little information. It was

the students' common feeling that, in order to ask the questions well and to be able to get more information from the interviewees, the students themselves as researchers had to fully understand the purpose of their research project. The awareness of their own problems engaged them in more reading activities and discussions on the problems and concerns in Aboriginal education and educational research which in turn made them fine tune the purpose of the project.

This first critical reflection on their new experience resulted in a new list of revised questions which were clearer and more specific. Those who asked for ITAS tutors at the beginning of the course made no such request because they had realized that it was their own problem so that they had to learn to solve it themselves. This indicated that the students started to gain the ownership of their problems as well as their own learning. As the interviews proceeded, the students' self-confidence and questioning techniques developed hand in hand.

By the end of the data collection stage, all students had developed questioning skills. They learned to use alternative questions to "pull the interviewee back onto track" or "ask alternative questions for more information on the same topic". Their confidence in questioning technique also indicated that the student had gained a better understanding of the research project.

The second learning curve involved several arguments when the group came together for data analysis. One dilemma we all have is habits of mind which shape and delimit and sometimes distort the way we see things and feel things. Yet, we take that for granted. And those habits tend to limit the way we see the world, the way we feel and think about other people and ourselves. The influence of their habits of mind was reflected in the students' attitude to different opinions when analyzing data. While trying to identify common themes from the data collected, it was not surprising to hear, among the heated discussions, angry exchanges such as "*you're biased*", "*you only see your community*". There were too many themes emerged from the investigation. The students' opinions were, at a time, so diverse that the group could not see, or did not want to see the common themes.

However, those problems also became stimuli for more learning. I engaged them in more critical reflection to challenge their own assumptions, which opened up an alternative way to negotiate their values, feelings and meanings but not simply act their lives out on the basis of those they have been taking for granted. I raised more questions such as 'what makes a good learner'; 'what is the background of this argument'. I also made them do more readings to find out what professionals had discovered on the similar issues. This pushed them a bit further in their reading activities followed by a critical self-reflection on their own listening skills and tolerance for differences. It turned out to be very dynamic and active learning which was leading to individual transformation. Finally, three common themes related to the first year learners' study difficulties were pulled out of the data. The students stated after that that they understood better what learning meant to them.

5. Critical reflection and student autonomy

Knowledge exists within context and within relationships between all entities. To move towards this understanding there is a need to bring meaning to experience at hand. The participatory action research project put the students in the context to negotiate the meaning of their learning experience. The students not only gained a better understanding of the connectedness between things from engaging themselves within curriculum at the level of content, process and practice. They also gained a much better understanding of themselves. Through out the course, critical reflection, which entails critical thinking about one's own learning, was integral to the whole learning process. The critical reflection was used as a tool to make the experience meaningful and to make learning conscious which maximized their outcomes in learning.

One of the significant learning outcomes of the project is the increased student autonomy. Student autonomy is broadly defined as the capacity to take control of one's own learning (Jing, 2006). To be able to control their own learning, students need self-directed learning skills which include 'acquiring skills in learning how to learn, skills in locating and evaluating resources, competence in applying the knowledge to professional problems and skills in self-evaluation' (Bridges & Hallinger, 1998, p.7-8).

It became apparent that during the learning process, all students learned to make choices and take responsibility in the learning process. Through actively engaging themselves in critical reflection during the analytical action learning journey, the students understood better 'what', 'why', 'how' and 'with what degree of success' they are learning.

The two learning curves mentioned above are good demonstrations of the students' self-control and self-assessment of learning which lead to the development of analysis and evaluation skills (Little, 1999). They have also showed that the students become more mindfulness. "Mindfulness is a state of alertness in which the mind does not get caught up in thoughts but lets them come and go. It is a means to quiet and shift the habitual chatter of the mind to cultivate a capacity for deepened awareness, concentration and insight" (Dumas, 2007, p.53). The mindfulness gave the students power to challenge their habits of mind and to notice unexpected insights by tolerating differences, which in turn increased their critical awareness of self-responsibility as learners. All those skills were realized and further developed through engaging themselves in critical reflection and all those skills made the students more autonomous in learning.

6. Conclusion

The changes in the students' actions during the action learning process benefit them in their personal capacity building. The understanding of research knowledge and skills that they obtained through the research project benefit them in academic capacity building. In an essence, engaging students in critical reflection in their enquiry of learning resulted in learning for capability rather

than learning for the sake of acquiring knowledge. While saying this, traditional content should not be overlooked, but it must be remembered that no course can hope to cover all of the knowledge required within an academic discipline. It may be argued that I did not completely follow what was set in the curriculum, however, through collaboration with their peers, the students refined and enlarged their knowledge in long-term memory.

The knowledge they gained through the alternative way of learning is deep, as they constructed it actively through developing arguments, using disciplined inquiry to construct meaning, make distinctions, and solve problems. It is evident that only when the students brought their ideas or problems to their consciousness could they evaluate them and begin to make choices about what they would and would not do. They used critical reflection as a form of response (Boud et al, 1985) to their new experience, thus making their new experience meaningful as well as maintaining control of their own learning.

References

- Boud et al, (1985), *Reflection: turning experience into learning*, Kogan Page, London
- Brookfield, S.D., (1986), *Understanding and Facilitating Adult Learning*, Jossey-Bass Publishers, London
- Bridges, E.M. & Hallinger, P. (1998), "Problem-based learning in medical and managerial education", in Robin Fogarty (ed), *Problem Based Learning, A Collection of Articles*, Hawker Brownlow, Australia, pp.3-15
- Dumas, C. (2007), "Cultivating mindfulness in management education", *International Journal of Learning*, Vol. 14 (4), pp.53-63
- Jing, H. (2006), "Fostering learner autonomy within constraint: negotiation and mediation in an atmosphere of collegiality", *Prospect*, Vol. 21 (3), pp.38-56
- Little, D. (1999), "Developing learner autonomy in the foreign language classroom: a social interactive view of learning and three fundamental pedagogical principles", *Revista Canaria De Estudios Ingleses*, April, 38, pp77-88
- Little, D. (2000), "Why focus on learning rather than teaching", in D. Little, L. Dam and L. Timmer (eds), *Focus On Learning Rather Than Teaching: Why and How?* Trinity College Dublin, pp.14-16
- McDaniel, M. & Flowers, R. (1995), "Adult education and Indigenous Australians", in Griff Foley (ed), *Understanding Adult Education and Training*, Allen and Unwin, NSW, Australia
- McNiff, (2002), "Action research for professional development", accessed online on 2 Feb, 2007 from www.jeanmcniff.com/booklet.html
- O'Brien, R. (2001), "an overview of the methodological approach of action research", in Roberto Richardson (ed.) *Theory and Practice of Action Research*, accessed online on 2 Feb. 2007 from www.web.ca/~robien/papers/arfinal.html
- Peters, M.A. (2005), "New approaches in the philosophy of learning", in *Educational Philosophy and Theory*, vol. 37 (5)

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