Graduate education in Canada and China: What enrolment data tells us

Shumei Li: Harbin University, China
Tony DiPetta: Brock University, Canada
Mary-Louise Vanderlee: Brock University, Canada

Abstract

China’s emergence as a global economic and political power is in part due to the country’s renewed involvement with, and commitment to, graduate higher education (Harris, 2005). Graduate education in China is viewed as the means of producing the essential scientists, engineers and skilled workforce needed to sustain the country’s rapid industrial growth and economic development. But how does China’s graduate education system compare with North American graduate higher education and what can each learn from the other?

This paper examines the trends and patterns in Master’s level graduate education programs in China and Canada based on enrolment data gathered from 1999 to 2005. Initial comparisons of the data find that Master’s level enrolments in China are growing faster than in Canada; enrolment pattern distributions for both countries are unbalanced geographically and from a disciplinary perspective the highest number of Master’s level enrolments in Canada were in the business and management disciplines while in China the greatest Master’s level enrolments were in engineering. The comparisons provided by this study help identify some of the trends and challenges of graduate education at both the national and the regional levels of both countries.
Introduction

Graduate higher education takes different forms from one country to the next but increasingly there are areas of commonality as well as difference (Altbach, 1991). With the current globalization of higher education, there has been a trend among countries to learn from each other in order to advance their own educational systems. China is no exception (Wu & Zhu, 2000). This article examines Master’s level enrolments in Canada and China from an international perspective and discusses the trends and challenges both nations face at national and regional levels, using comparative inquiry methodologies.

In general, comparative education has developed as a field devoted broadly to the study of education in other countries (Kelly, Altbach & Arnove, 1982). Comparative education draws upon multiple disciplines (i.e., sociology, political science, psychology, anthropology) to examine education in developed and developing countries (Kubow & Fossum, 2003). Comparative inquiry also encourages administrators and educators to question educational systems and the role that education plays in individual and national development (Kelly, Altbach, & Arnove, 1982).

In this article basic factual material such as enrolment and program distribution data and changes in these data are woven into an analysis of the conditions within the two nations that define their graduate education approaches or programs. As Altbach (1991) put it: “Facts do not speak for themselves; they need to be put into a context, to be explained.” The better we understand each other’s strengths and differences, the better chance we have to develop more vigorous graduate education systems that can adapt to the changing realities of a global, technologically infused and increasingly competitive marketplace for higher education.

Graduate Education in China: An overview

Compared with Western countries Chinese graduate education has had a convoluted and spotted history. During the period from 1935 to 1949 for example, there were no graduate degrees conferred across China and higher education for Chinese citizens took place largely through off shore institutes in Russia and Europe (Zhou, 2004). Moreover, after the People’s Republic of China was created in 1949, the government abolished the higher education degree system completely and it was not until 1978 that formal in-country graduate education was re-established (Zhou, 2004). Just over a decade later, in the early 1990’s, approximately 26 provinces and municipalities in China expressed their intentions to develop higher education institutes within their jurisdictions (Yang & Han, 2002) and less than two decades after that there are over 30 graduate institutes with degree granting powers distributed across the Chinese countryside.

Historical reviews of graduate education in China during the years of the Cultural Revolution suggest that the lack of graduate education programs and opportunities negatively effected the development of the skilled and educated people that China needed to support scientific and economic growth comparable to that in the West. It has been estimated that the lack of higher education programs set Chinese scientific and technological development back more than twenty years (Zhou, 2004). It was not until China’s political leaders moved to reform education in the early 1990’s that the outlook for graduate education improved and since that time enrollment in graduate programs has grown significantly (Yang, 2006). The pace of graduate education’s growth in China has
been accelerating since the turn of the century and it has been suggested that by the year 2010 China will produce as many science and engineering graduates and more PhD’s than the United States (Johnson, 2000; Wang, 2004).

The modern system of higher education in China, which is barely more than a hundred years old, involves a two-fold governance structure that puts the central government in direct charge of the administration of graduate programs, and empowers the provinces, autonomous regions and municipalities with the responsibility for the local operation and the day-to- day administration of universities and colleges. In both Canada and China high level administrators such as the president or vice president are in charge of graduate education in special graduate studies departments or units. Graduate schools in both countries are relatively independent administrative units responsible for graduate education across the institution. The following section compares the enrolment figures for Master’s level programs in Canada and China from 1999 through 2005 and presents findings drawn from an analysis of those data.

**Graduate Enrolment Patterns in Canada and China**

Figure 1 provides a graphic comparison of graduate level enrolments in Canada and China for the academic period from 1999 through 2005. It is clear in looking at the comparison that during the 5 year period in question enrolment in graduate education in China was much more explosive than enrolment growth in graduate studies in Canada.

Source: Canada’s National Statistical Agency (CNSA), *the Daily, Tuesday, November 7, 2006* and National Statistical Bureau of China (NSBC) from 1999 to 2005: [http://www.moe.edu.cn/edoas/website18/info20464.htm](http://www.moe.edu.cn/edoas/website18/info20464.htm)

*Figure 1. Graduate Enrolments Canada and China: 1999 to 2005*
Expanding on the enrolment data presented in Figure 1 for 2004/2005 reveals that graduate enrolments in Canadian universities totaled 148,800 or 14.7% of the postsecondary student population (CAGS, 2006). From this total 62% or more than 90,000 students were enrolled in Master’s level programs (CAGS, 2006). Master’s level program enrolments in Canada have increased approximately 33% since the early 1990’s with the ratio of Master’s to Doctoral degrees granted remaining relatively stable (CAGS, 2006). In comparison in the 2004/2005 academic year total enrolment in Chinese graduate education programs reached 364,800, which represented an increase of 11.8% from the previous year and a 60.4% increase from 1999. Enrolments in Master’s level programs in Chinese colleges and universities numbered 310,000 students which accounted for 85% of the total graduate student population (NSBC, 2005).

Analyzing these enrolment data reveals that in both China and Canada, Master’s level programs accounted for the lion’s share of graduate student enrolment. However, while the ratio of Master’s degrees to Doctoral degrees in Canada has remained relatively stable the ratio of Master’s degrees to Doctoral degrees in China has increased rapidly while enrolment in Master’s programs has remained relatively stable at approximately 32% of total graduate program enrolment (Li, 2006). These statistics indicate that while enrolment in Master’s programs is increasing in both Canada and China progression from the Master’s level to the Doctoral level of graduate education is not increasing at the same proportionate rate in China. There may be a variety of reasons for this but the most likely from a business and economic standpoint is that the Master’s degree is the better guarantee of professional or career advancement, at least as the economy of China continues to expand and grow. This also offers a possible explanation for why the ratio of enrolment in Master’s to Doctoral degree programs in Canada has remained relatively stable. Canada, as a more established industrial and resource based economy, with a longer history of higher graduate education programs aimed at business and industry professional preparation has reached a level of saturation for the kinds of professional or career opportunities that Master’s level programs benefit in the national marketplace. Moreover, examining the average salary earned by graduates of Canadian and Chinese universities, the return on investment for completing a Master’s degree is clear but the return on investment for a Doctoral degree is less obvious (CAGS, 2005).

The greatest increase in Master’s level enrolments in China occurred during the 2000 to 2005 period, with an average annual growth of more than 14% compared to 10% for the 1996-1999 periods (He, 2003). The enrolment data for both Canada and China during this period can be used to generate trend lines that suggest that there is likely to be between a 20% to 30% increase in total university enrolment in Canada by the year 2015 (AUCC, 2000) with relatively small gains in graduate education and possibly reduced demand in some discipline areas such as education. In China meanwhile the enrolment data trend line suggests that total university enrolments will grow by 30% annually with significant growth in graduate studies (CIICN, 2004; Wong, Shen & McGeorge, 2002). The main reason posited for the growth in graduate enrolments in both Canada and China has been the increasing market demand for retraining and professional higher education from students and employers across a variety of professional, business and arts disciplines. Moreover, in China there has been a concerted and focused political effort to improve the country’s global economic competitive preparedness through higher professional education.
Interestingly, the rapid enrolment growth in Masters’ level programs in both Canada and China has had unforeseen consequences for university administrations and faculty (CAGS, 2006; Li, 2006). University administrations and faculty have had to learn to adapt and react quickly to the changing institutional environments that the increased enrolments have contributed to. Classroom, laboratory and faculty or staff office or work spaces have become severely limited and faculty and administrator recruitment and retention have become a major issue for higher education in both jurisdictions. China, moreover, faces a variety of newly realized financial or funding issues that Canada has been dealing with for over a decade and which potentially limit the rate and breadth of graduate program enrolment and expansion (CDRS, 2003). In North America some of these finance and funding issues for graduate education have been addressed through the development of a variety of business/industry, university and provincial government linkages and funding initiatives; something which China is only now starting to explore (China Today, 2004).

Along with the growth issues previously mentioned an examination of the enrolment data for graduate Master’s level programs in Canada and China from the turn of the century until 2005 also highlights differences in the geographic distribution of graduate enrolments between the two countries and suggests how these distributions are reshaping the nature of graduate programs and education.

**Geographic Distribution of Graduate Enrolments**

The geographic distribution of graduate enrolments in most countries is largely a function of supply, demand and funding as much as it is about institutional location. Increasingly, however, as budgets grow and funding sources dwindle, institutional recruitment has become a major factor in determining where graduate students are likely to study. Recruitment for Canadian graduate programs is generally handled at the departmental level rather than through an institution-wide approach (CAUT, 2005). On a national basis every region in Canada can develop and institute individual and independent recruitment strategies depending on the number of universities in a province and other regional interests or agendas (CAGS, 2005). However, universities in two provinces, Ontario and Quebec make up approximately 70% of all enrolment in Canadian graduate programs in part because of location and reputation but also because of concerted and continuing recruitment activities for students and faculty. Non-centrally located higher education institutes such as those in the less populous areas of Northern Ontario and Northern British Columbia have had to come up with innovative recruitment and programming options in order to maintain their graduate enrolments at sustainable levels. For example a number of faculties of education associated with Northern Ontario universities have established remote campuses in the more populous southern part of the province to offer both undergraduate and graduate courses and programs in education. British Columbia is watching the progress of these southern campuses closely and considering similar options for their Northern universities (TILMA, 2006).

Figure 2 presents the geographic distribution of Master’s level enrolments in Canada and China. The charts reveal that in Canada the central provinces dominate the education scene while eastern and western provincial regions account for less than a third of graduate enrolment totals. Meanwhile in China only a few prestigious universities have been granted the institutional autonomy to develop their own recruitment strategies, or to modify curriculum and programs. All other Chinese higher education institutions
have to strictly follow the Central Policies for recruitment developed by the Ministry of Education (Yang & Han, 2002). This protocol proscribes what universities can and cannot do in terms of recruitment, curriculum and program offerings and thereby controls both the rate of enrolment increase and the programs that can be targeted for increase.


*Figure 2: Regional Graduate Enrolments for Canada and China*

An analysis of the provincial enrolment data for Canada offers an explanation for the geographic enrolment picture presented in Figure 2. Ontario and Quebec the most populous central Canadian provinces each accounted for over one-third of Canadian Masters’ level enrolments in 2004/2005, whereas British Columbia (12.3%) and Alberta (9.2%) accounted for approximately one-fifth of total enrolments in the same year (CAUT, 2005). Given the economic and demographic growth of these two western provinces since 2004 it is possible to speculate that enrolment rates will continue to grow as the population and the resource and energy wealth of the provinces grows. However it is important to note that the greatest growth areas for higher education still tend to be in large urban areas such as Vancouver, in British Columbia and the Greater Toronto Area (GTA) in Ontario. This urban trend may require government intervention or specialized funding in order to overcome the dominance of urban centres as graduate education centres and provide geographic representation and economic benefits to remote northern regions or less populous regional locations across the country.

Interestingly overall size, population density and economic health are not the only indicators of success in graduate program recruitment or graduation in Canada. For example while Nova Scotia, one of the smallest and poorest eastern zone provinces, accounted for only 4.2% of total graduate enrolment nationally it graduated the largest number of Master's students per capita 484 per 100,000 inhabitants in 2004/2005 (CAGS, 2006). This result distinguishes Nova Scotia from provinces comparable in economic
development and population such as Manitoba and Prince Edward Island which have the lowest ratio of graduate students per capita in Canada (CAGS, 2006). A closer inspection of the 2004/2005 statistics reveal that only 65% of the graduates from Nova Scotia Universities are residents of that province (CAUT, 2007). Understanding how a province that is less well positioned than many others is doing so well in recruiting and supporting graduate students is something that will benefit all regional institutions. Further research is needed to define and understand the conditions and processes that have contributed to Nova Scotia’s success in graduate program recruitment from other locations. Research is also needed to identify how graduate institutions and programs in smaller, less populous provinces cope with any significant number of out of province students.

The picture of China’s regional graduate enrolment compared with Canada reveals some similarities and some major differences. While the urban centres of the two central provinces in Canada account for the bulk of the country’s graduate education resources, in China these resources are predominantly in the urban centres of the eastern and middle provinces. However, wide variation exists between the cities of the coastal provinces, eastern cities and the middle and western provinces (Wang, 1999). Examining the enrolment data for Master’s programs in China’s various provinces and regions reveals that by the 2004/2005 academic year total enrolment for eastern China was 1.22 times that of the central provinces and 2.73 times the enrolment in the western provinces (CNSA, 2006). China’s eastern region accounted for 45.2% of total Master’s program enrolments and the central provinces accounted for 39.0% of enrolment, whereas the western regions accounted for only 15.8% of the total enrolments in Master’s programs. It is noteworthy that the Canada enrolment anomalies can also be found in China. For example graduate enrolment in Xinjiang, a sparsely populated autonomous region in China’s far west represents 4.9% of total Chinese graduate enrolment, a percentage higher than the total of enrolments in Qinghai province in the rich northeastern area of the country and the Ningxia autonomous region in the more culturally developed and populous central area of China (Wang, 2004).

When comparing the distribution of graduate student enrolment for Canada and China it is important to keep in mind the differences in population density and the number of universities within the two jurisdictions. Canada has a population of around 32 million but Canadian universities have a two centuries long record of providing accessible university education to students from across the country. Canada currently has 92 universities with 122 colleges distributed across ten provinces. In addition to universities and colleges, Canada’s postsecondary system includes more than 400 community colleges, responding to the training needs of business, industry and the public service, as well as the educational needs of vocationally oriented secondary school graduates (AUCC, 1998; Yang, 2005). In comparison China with a population of almost 1.3 billion has 1731 universities and colleges, 872 vocational colleges and 1187 private colleges. (NBSC, 2006). The difference is size and growth rate are important considerations but they are tempered somewhat by the fact that China’s history of higher education is less continuous and more idiosyncratic than Canada’s.

**Graduate Program Trends in Canada and China**

The enrolment data for graduate programs for both Canada and China suggest an attenuation trend in terms of time to completion in graduate programs. During the 2000 to 2005 time period of this study both jurisdictions viewed reducing time to completion
from the standard three to four years many students took as an important education sector goal. The possibility of shorter time to completion, especially in relation to professional Master’s and course-based Master’s programs, was something that both students and employers were interested in and advocated for, even in the “short-time” programs (CAGS, 2006; China Daily, 2006).

In response to the calls for reducing time to completion in graduate programs Canadian and Chinese institutions have tended to merge and combine some Master’s programs with Master’s level certificate programs and created new condensed or attenuated programs (CAUT, 2005; Liu & Liu, 2003). Even in more traditional Master’s programs departments are attempting to streamline programs so that students can graduate faster and administrators have greater control and flexibility in staffing and faculty program allocation. In some Canadian programs, the traditional thesis exit requirement is being replaced by an applied research paper or project that is shorter and more focused on practical professional issues or practices (Williams, 2005). Conversely, many programs that were originally course-based (or dissertation-based) are now offering students the option to do a thesis. Ultimately, universities hope that this will lead to the development of a research curriculum, and consequently, to new doctoral programs (CIICN, 2003).

The options available to graduate students to access higher level programs are a trending difference between Chinese and Canadian approaches to graduate education. Unlike Chinese universities, Canadian universities have been attempting to provide “indirect access” to PhD programs for students who have not formally completed a Master’s degree (CAGS, 2003-2004). Many Canadian universities have implemented this informal practice in the natural sciences area. In these cases, students may transfer to a doctoral program without completing a Master’s thesis, although they will have, at the very least, completed the required courses and formally presented their research interests (Williams, 2005). However, it has been noted that this kind of access is generally only available to exceptional students—those who have demonstrated great academic and research skills during the first year of their Master’s program. This practice, largely confined to the natural sciences, is viewed as a means of accelerating the training, time to completion and potential contribution of exceptional students (IAOU, 2004). China has not experimented with, nor even considered indirect access for students to higher graduate education. Given the ratio of Master’s to Doctoral students in China it may be something that will need to be considered in the future.

While access to a PhD program from a Master’s program without completing a thesis requirement is possible in Canada, the concept of “direct access” to a PhD program from a Bachelor’s degree program has not been well received in either Canada or China (CAGS, 2005; Li, 2006). Faculty members and university administrations appreciate the value of Master’s training, as it enables them to clearly evaluate the research potential of students (Kubow & Fossum, 2003). Moreover, Master’s programs are often viewed as a form of graduate field apprenticeship and as a means of initiating graduate students into the norms and practices of their particular academic field of study (UNESCO, 2005). The trend of increasing enrolment in Master’s programs, therefore, is not likely to slow in either jurisdiction.

**Master's programs and business and industry relations**

Another interesting difference between Canadian and Chinese Master’s programs is the relationship between Master’s programs and business and industry. In Canada, an
average of 10 new Master’s programs has been created by universities since the Millennium (CAGS, 2006). An important feature of many of these new programs is their flexibility in terms of completion requirements or pathways to completion. For example, in Dalhousie University’s Master of Health Informatics program, students can graduate by either writing a dissertation (known as the research-oriented route) or by interning in the data management department of a medical company or related organization (known as the professionally-oriented route). In 2003/2004 one third of the program’s students chose the research-oriented route while the remaining two-thirds opted to work as interns. (CAGS, 2003-2004). During the time that these new Master’s programs were being created a negligible number of programs have been discontinued. Programs were discontinued for reasons such as budget cuts, retirements, low student attraction rates and the withdrawal of funding from an essential funding partner (Jones, McCarney & Skolnik, 2005).

In 2004, the AUCC’s Directory of Canadian Universities compiled information on a total of 2,699 Master’s programs in 75 different universities and post-secondary institutions (AUCC, 2002b). In the same year, the National Bureau of Statistics of China reported a total of 10,989 Master’s programs in 769 different universities and colleges (NSBC, 2005). The distribution of these programs across Canadian and Chinese provinces and regions is relatively consistent with the number of universities per province or region (CAGS, 2003-2004). In Canada, however, changes to existing Master’s programs and the development of new programs have accelerated in response to perceived demand and calls for action from non-academic stakeholders from the business and industry sector. For example, the University of Alberta Strategic Research Plan (2003, 2006) notes that, the University partnered with non-university research institutions in a variety of areas including environmental research, functional foods, genomics and proteomics, information and communications technologies, and material sciences in order to provide its graduate students with the research opportunities and future jobs that they would need in the highly competitive global economy. Many of the changes affecting Master’s programs in Canada stem from emerging requirements in the private and public sectors, as well as societal needs (Jones, McCarney & Skolnik, 2002). The link between academic departments and the industrial and public sectors is stronger with respect to professionally-oriented Master’s programs than it is in other program types (Albano, Fitzgerald & Jayachandran, 1999). As a result, some programs have been created in direct response to specific demands from industry and government for specialized scientific and technological skills and knowledge (CAGS, 2006). In contrast, in China, a few provincial universities and colleges still embrace the educational model of the old planned economic system, which stressed student recruitment but neglected to consider the employment prospects for graduates of these programs. Thus, some of the programs and the curricula of universities and colleges can be viewed as distant from or irrelevant to the actual needs of society (CIICN, 2003). Programming ideas that increase the linkage of business and industry with graduate higher education such as co-operative education programs are only now starting in Chinese higher education. While the concept of the university as a separate and distant “Ivory Tower” is breaking down in North American institutions as more universities and graduate programs seek funding from and collaboration with business and industry, the concept is still quite real at many universities in China. One reason for this phenomenon is that both the Chinese economic
system and the higher education system used to be very highly centralized. Therefore, education was provided by the central and local governments respectively and directly under their administration (PRCY, 2001). Schools lacked the flexibility and autonomy to respond in any quick or meaningful way to the changing and developing needs of the society. Since central departments and local governments were providing education separately, the structure of education was highly bureaucratized, duplicated and segmented creating a system that was slow or unable to adjust to change and one that often seemed isolated and detached from the new social and economic realities of China (Beijing Review, 2004).

**Discipline and Subject Area comparisons**

Enrolment data for both Canada and China show a definite and growing trend in professionally-oriented, multidisciplinary Master’s programs that are terminal and course-based or of shorter-length than traditional Master’s degree programs. (CAGS, 2006; China Daily, 2004). The distribution of degrees among disciplines, however, is very different between Canada and China (Wang & Zhang, 2004). During the 2000 to 2005 academic period the highest number of degrees conferred among Canadian Master’s programs, was in the business and management disciplines, which accounted for almost 30% of all Master's-level graduates. Architecture, Social and Behavioral Science, Education follow with 13.53%, 12.71% and 11.74% of Master's graduates respectively. It is interesting to note that enrolment in graduate programs in education declined from 17.5% of total graduate enrolments in 1994 to 11.74% of total graduate enrolments in 2004 (CAUT, 2007) suggesting as Foot (2006) has observed career opportunities in education in Canada may be on the decline with the aging of the so-called boomer generation.

While the greatest number of Master’s program graduates in the 2004/2005 period for Canada came from the business and management fields the largest proportion of Chinese professionally-oriented Master’s graduates (37.7%) were from engineering programs. The next largest groups of Master’s graduates in China accounting for less than half of the enrolment in graduate engineering programs were management programs with 12.6% of total enrolment, science programs with 10.2% and medical programs with 9.7% of total Master’s enrolments (NBSC, 2005). It is interesting to note that the proportion of Master’s degrees associated with military programs and philosophy and history programs were in the 1% or lower range in both countries. The data on graduation rates from various disciplines may reflect the different perspectives and reactions to the growing economic and globalization focus of both countries and the desire of many students to find educational opportunities that link directly to employment or career opportunities.

Another difference in the type or character of Master’s programs between Canada and China is what is happening in terms of part-time enrolments. In Canadian universities part-time enrolment in Master’s programs generally has been declining since 1994. However, education and business programs, which have a strong tradition of part-time programming, have managed to maintain their level of part-time enrolments at or above the 50% range. Further research is indicated in order to understand the practices and policies that have helped these two disciplines maintain their levels of part-time enrolment in light of the general decline in enrolments in other program areas. In comparison, enrolments in part-time Master’s level programs in Chinese universities
have been increasing since 1998 (NBSC, 2005). The increased interest in graduate part-time programs in Chinese universities is the result of a number of economic and social changes in Chinese society since the start of the century. In 2000 Chinese universities began to develop graduate programs for people who wanted to change jobs or were interested in improving their skills and abilities for job advancement in their current work. The changing economic and market conditions in China were signaling that a Bachelor’s degree was no longer a guarantee of job security or promotion and that graduate degrees were becoming more important for career advancement (Fu & Chi, 2002). As a result enrolment in, and the development of, new graduate level programs, particularly professionally-oriented programs that offered specialized training grew significantly. Moreover, as increasing numbers of adult students began to return to universities and colleges after spending years in the workplace universities had to develop unconventional programs that fit with their new students’ professional orientation and needs (Li, 2006).

**Emerging challenges for graduate education**

Canadian and Chinese enrolment data for the 2000 to 2005 academic period indicate that Master's level education has undergone rapid growth in enrolment and number the number of programs available to graduate students. At the same time, however Master’s programs have had to cope with a tight budgetary environment and a variety of logistical problems associated with this rapid growth. Canadian and Chinese Master’s level programs are thus facing a variety of challenges that paradoxically stem from their success. One of the most important trends affecting Master’s programs in the two countries is the increased demand for and development professional degree programs and the design and tailoring of programs to meet the needs of the workplace. The Master’s level degree is becoming the minimum standard of education for entry into many high-level professional careers in Canada. Moreover, business and industry arguments for university based research that is less academic and more focused on generating immediate social and economic benefits for the nation are increasingly being adopted by university administrations as part of their core mission statements (OECD, 2004).

The alignment of Canadian industry and university administration interests and views on graduate professional education reflects a similar alignment between Chinese government interests and university administration views that have enabled Chinese graduate programs to grow. In recent years Chinese universities have been recruiting an increasing number of graduate students into professional programs but this expansion has also caused deeper problems (He, 2003). Many universities in China have expanded graduate enrolment and incurred massive debts to fund becoming larger regardless of the potential financial risks. It seems as Li (2006) has noted as if expansion is equated with academic success and administrative prestige (Li, 2006). Continued unabated expansion may adversely affect some of the graduate programs in China (China Daily, 2004; Beijing Review, 2004).

Another challenging trend for Canadian and Chinese universities is funding, in relation to both programs and students. In Canada, however, substantial changes in institutional funding policies and programs have been negotiated between federal, provincial and institutional interests. The federal government, which is responsible for national economic policy has strengthened the industry and economic focus of how
university research and graduate programs are funded and provincial governments have also specifically targeted funding to graduate programs as part of their regional economic development planning (Williams, 2005). Governmental focus on Master’s level programs seems to involve financial accountability, increasing the number of graduates and reducing the amount of time to completion in particular scientific and professional programs (CAGS, 2003-2004). University administrations have been quick to adapt to these governmental interests as a means of maintaining their institutional funding levels.

In China the key to solving graduate program funding issues is also seen as increased government investment. Graduate education may not be free any more in China, but the public tends to view higher education as a public welfare undertaking that should be fully funded by the government. However, given current economic circumstances worldwide expectations of full governmental funding for education appear unrealistic and so China, as Canada has been doing for over a decade, is starting to seek alternative financial channels for funding graduate education from corporate and individual investors (China Today, 2004). Moreover, as in Canada there is an increasing demand for and focus on accountability in university funding and programs which will shape the future of graduate programs in China in the near and long-term. This accountability focus is reflected in public calls for China’s central government to issue preferential policies such as tax exemptions and reductions to encourage industry and individual support of university programs that will benefit both the organizations and the universities (Beijing Review, 2004). In China, the colleges and universities have begun to adjust the structure of their program areas and specialties in response to market demands and changes as well as their own needs in order to enhance their adaptability in the context of economic development. For example due to the needs for workers in specialty services in China, most institutions have added such academic programs as tourist management, hotel management, and real estate management as a way of increasing enrolment and addressing the needs of the industry (Wang, 2004).

**Conclusion**

Comparing the enrolment data of Master’s level programs in Canada and China makes it possible to establish specific trends and patterns that are useful in understanding the particular issues and forces that graduate education in these two jurisdictions will have to deal with in the short and long term. The data from the 2000 to 2005 academic period in Canada and China reveal that while the enrolment rate for Master’s programs in China is growing faster than that of Canada the conditions and issues that both countries face are similar and overlap. Both countries demonstrate unbalanced geographic distributions in Master’s enrolments that seem at first glance to be the result of regional population size, density and economic prosperity but a closer examination reveals that recruitment policies and practices as well as graduate student support systems are important factors in where graduate students elect to study. Further research on these policies and practices is needed to establish how smaller institutions can maximize graduate student enrolment and retention.

The data also indicate that the highest number of Master’s degrees conferred in Canada was in the business and management disciplines, while in China the highest number of Master’s degrees was in the engineering field. The difference may well be a function of relative age and development of the economic systems of the two countries but there is also an element of political focus and direction involved. The Canadian
government is positioning graduate university education as a core component of a national knowledge economy focus for global competition and growth. China on the other hand views graduate education as a means of creating the skilled labour force sector it needs to establish itself as a manufacturing and industrial global powerhouse. In both situations university administrations have been put under tight financial constraints and accountability as a means of ensuring that graduate education is aligned with national government interests and directions.

The rapid growth of Master’s level enrolments must be viewed in light of the institutional and governmental focus on accountability, the tightening of funding programs and the increasing linking of graduate programs to business and industry needs and interests. It is clear that graduate education in both Canada and China is facing a number of growing pains and changes that will noticeably alter what programs are offered and the nature of how and where those programs are offered. As enrolment in Master’s level programs is increasingly tied to employment rates for graduates the importance of student recruitment practices, program modification and flexibility and alternative funding systems will increase in both countries. Further research in these areas is both indicated and necessary if graduate programs are to continue to adapt to the changing economic, political and social conditions that a result of a globalized and technologically interconnected marketplace for education. Universities in both Canada and China need to find ways to promote the recognition of their Master’s programs that generate national and international visibility as a way to sustain these programs in what can only be called interesting times for graduate education (AUCC, 2002a). Finally it is also important to remember that graduate education is not solely about preparing a technologically sophisticated professional class. Learning for the sake of learning as well as education to prepare future leaders, knowledge creators, and decision makers are important graduate education goals that should not be abandoned.
References


New Faculty Cross Borders Through Self-Study in Teacher Education: Global Horizons

Candace Figg: Brock University, Canada
Shelley Griffin: Brock University, Canada
Chunlei Lu: Brock University, Canada
Peter Vietgen: Brock University, Canada

Abstract
This paper outlines findings from a self-study group’s investigation of personal and professional experiences between four new education faculty members. Bringing diverse teacher education experiences from three different countries, the group is situated in a Canadian university undergoing a transition toward becoming a comprehensive institution in the competing global era. Three identified themes emerged: professional value, survival, and maintaining balance. Findings revealed that self-study allows participants to share information, identify issues, appreciate personal and professional life, enjoy being teacher educators, understand teacher education, console and support each other to survive in the initial years, and maintain a balanced professional life.

Introduction
Every fall, like clockwork, the recurring ritual of inducting new faculty into established academic programs takes place. The cycle of novice-to-expert begins again. Although varying from individual to individual and context to context, the anxious anticipation of a new journey in our professional lives, the uncertainty of our success in our new endeavour, and the overwhelming newness of becoming a part of a collegial community is an experience shared by all new faculty—an experience never forgotten. The first year is naturally a learning experiment regardless of the length of years served in academia, and the memories collected during our initiation are often later imparted to others in the form of advice, warning, and, at times, pure entertainment. The first year experience is truly an event to be celebrated and cherished, but also, to be survived.

Background
A unique challenge awaited new hires at Brock University in St. Catharines, Ontario. In the past five years, the university had undergone robust growth burgeoning from a campus of some 5,000–8,000 students to the present enrolment of approximately 17,000. Growing pains, such as lack of infrastructure to support students, change in university policies to accommodate a large student population, and addition of many new faculty members, were tension points felt throughout the university bureaucracy. Add university issues to a growing faculty emphasis on creating an identity as a learning faculty plus a departmental program review promising even more change to the situational context. The new hires in the Faculty of Education quickly became aware that they would be called upon to jump immediately into the necessary work rather than stepping in one toe at a time as recommended by our new faculty mentors. All members of the faculty were experiencing change—regardless of seniority.

We new hires were not hesitant. After all, we expected to carve out our own niche in the Pre-service Department so that our contributions could be valued while developing meaningful, satisfying, and successful careers. Achieving an objective such as this has never been simple.
How would we, as new faculty, develop this professional value within the evolving framework of a learning faculty?

Fortunately, there were a number of new tenure-track faculty members in the Faculty of Education who, by banding together, provided a voice to the concerns and issues. Through the use of self-study (Hamilton, LaBoskey, Loughran, & Russell, 1998; Loughran & Russell, 1997; Samaras, 2002) and a mutual sharing of personal experiences and challenges among eight of these newly-hired tenure-track faculty, four of us decided to hold additional meetings in order to explore the art of developing professional value within this evolving framework.

In this group, Peter, Candace, Shelley, and Chunlei were interested in discussing the topic of professional value and how that might be impacted by our various discipline specializations and our diverse, international backgrounds. At the time we began (2006), the senior member of the group was Peter, our specialist in Art Education methods. Peter had been teaching at Brock for 3 years and was additionally completing his doctoral dissertation. Chunlei and Candace were officially new hires as they accepted positions and arrived at the university the previous summer. Chunlei, one of our Health and Physical Education methods specialists, brought to the university a large research grant and several years of experience as an assistant professor at a research-intensive university. Candace, our Technology Integration specialist, was making the transition from her native Texas after several years of teaching at the university level in the southern United States. Shelley, also a new hire as one of our Music specialists, joined the group at mid-year after spending the fall crafting her dissertation to the polish and defend stage.

**Methods**

This study is situated within the self-study framework with the purpose of “developing a better understanding of particular pedagogical situations” (Hamilton et al., 1998). As each pedagogical situation is unique, full generalizability to other situations is not possible, nor expected; however, providing rich context descriptions by each participant researcher facilitates transferability (Lincoln & Guba, 1985).

Kirkwood-Tucker and Bleicher (2003) suggest following guidelines from Bullough and Pinnegar (2001) in which quality self-study research also exposes “enough of one’s experiences and beliefs to reveal the relationships, contradictions, and limits of the views presented to enable readers to make connections to their own practice” (p. 205).

Samaras and Freese (2006) define self-study as “teachers’ systematic and critical examination of their actions and their context as a path to develop a more consciously driven mode of professional activity” (p. 11) for three purposes, “first, personal growth and development; second, professional growth and development, and third, classroom and school improvement” (p. 15). To ensure rigor of the process, we incorporated four criteria outlined by LaBoskey (2004, as cited in Samaras and Freese, 2006, p. 59) as essential for the correct practice of self-study:

- Self study is self-initiated and focused on self. Its goal is self-improvement, and it “requires evidence of reframed thinking and transformed practice” (p. 859).
- Self-study is interactive and involves collaboration and interaction with colleagues, students, and the literature “to confirm or challenge our developing understandings” (p. 859).
- “Self-study employs multiple, primarily qualitative methods”... which “provide us with opportunities to gain different and thus more comprehensive perspectives on the educational processes under investigation” (p. 859).
• Self-study requires that we “formalize our work and make it available to our professional community for deliberation, further testing, and judgment.” “Self-study achieves validation through the construction, testing, sharing, and re-testing of exemplars of teaching practice” (p. 860).

**Data Collection**

For new faculty, the opportunity to meet once a month and discuss pressing personal struggles or issues with teaching, scholarship, and service was to serve as a means of working together to negotiate the “three core concerns of early-career faculty: lack of a comprehensible tenure system, lack of community, and a lack of integration of their academic and personal lives” (Cox, 2004, p. 17). Over the initial 9 months of our first term, we kept individual reflective journals, documentation regarding our emails to each other containing insights/concerns, article suggestions, and other resources of interest, as well as collected notes regarding our individual and serendipitous comments during other meetings and informal sessions. However, the heart of the data collected for this research came from the in-depth and lively discussions in our monthly meetings regarding professional value. Topics ranged from developing a definition of professional value of a faculty member according to the community culture at this university to adapting teaching strategies specifically for this population of students. We brought to the table any issue that was currently impacting our professional value. Using these multiple data sources allowed triangulation by comparing across a variety of data to make connections and observe patterns.

**Data Analysis**

Erlandson, Harris, Skipper, and Allen (1993) state that “in the collection and analysis of data, it is sometimes hard to distinguish between when the collecting ends and when the analysis begins, for gathering and analysis are complementary, ongoing, and often simultaneous processes” (p. 85). The researchers, or participant researchers as in this research, serve as human instruments through which data generation and analysis occur; therefore, the process of data analysis began with the first meeting of the participant researchers. Over the months of meetings, we informally noted the themes and patterns we saw emerging from our discussions together. For the purposes of this study, each participant reviewed the transcripts of our meetings, their own personal reflection documents, and documented email correspondence to construct their own personal narrative case study report. Case study reports allow the researchers to present the reader with a thick description of the context surrounding the investigation so that “a setting with its complex interrelationships and multiple realities [is revealed] to the intended audience in a way that enables and requires that audiences interact cognitively and emotionally with the setting” (Erlandson et al., 1993, p. 85) is communicated clearly. The reports, as well as the transcripts from meetings, email, and other collected artefacts, were analyzed using a constant comparative analysis process across cases, in which data was unitized and sorted into emergent categories by assigning codes to each of the unitized data. Themes emerged from analysis of the categories. These themes and the coding process were cross-checked with all participant researchers to ensure credibility and trustworthiness of findings (Lincoln & Guba, 1985).

**Case Studies**

The following four case studies, constructed from conversations, transcripts, reflection documents, and email correspondence, are shared here as a means to conceptualize our global perspectives within the context of the self-study group. Specific comments derived from these sources are embedded within the composed text.
Peter’s Story

Peter brings to our self study group a wealth of rich experiences in Art Education methods, focusing on teaching and learning in the area of Visual Arts. He also brings an inside, transparent view to knowing and understanding the cultural and institutional perspectives of Brock University as Peter was born and raised in the city of St. Catharines with which the university is situated. This knowledge helps the other members of the self-study group position their understandings of coming to Brock, bringing different personal and professional experiences from a variety of global perspectives.

Peter, unlike the other members of the self-study group, often speaks about the multiple layers of complexity in knowing a place as a young child, growing up in the Niagara region, attending Brock as an undergraduate student, and then moving to Toronto at 22 years of age to pursue his Bachelor of Education degree at the University of Toronto. Thereafter, for a total of 15 years (10 years of public school teaching and 5 years as an Arts consultant), Peter lived and worked in Toronto. After being in Toronto for 16 years, he engaged in doctoral studies in Montreal, Québec, which was followed by a return to his home city of St. Catharines to pursue academic teaching and scholarly endeavours as a professor at Brock University. These varied experiences have offered Peter a different type of global perspective, than the rest of the self-study group, as he has come full circle, back to his roots.

Looking back on these 18 years, away from St. Catharines, Peter talked about the need at that time, as well as currently, to be surrounded by a larger art community. Being raised in a small, conservative, primarily white, middle-class city, Peter was striving to have more diverse, global experiences, and thus sought out the opportunity to study and work in the nearby city of Toronto. He describes how he went to the exact opposite context, moving from a small city to what the United Nations declared as the most multicultural city in the world. Indeed, this was a huge change. He had many worthwhile experiences, teaching for a number of years, students primarily of Chinese and Vietnamese backgrounds, which expanded his perspectives. During the time of his experiences as an Arts consultant in Toronto, Peter shared with the self-study group that the province of Ontario underwent massive changes in public education, with amalgamations of school boards and huge cuts in education. He spoke of his despair in working at one time as part of a team of 12 consultants in the Arts from across the five Metro-Toronto school boards. The number of members on this team was literally cut down overnight from 12 to three in the newly amalgamated Toronto District School Board. It was at this point that Peter began to question his ability to be able to continue in such a role with integrity, honouring his own professional value. Thus, he applied to enrol in doctoral studies. This appeared to be a great reprieve for Peter, as Montreal was rich in offering many opportunities for Visual Arts, as well as a whole new culture. He noted that the city and its emphasis on education has, “almost a European sensibility and cultural background coming through all levels of their operation.”

After having completed his doctoral residency at Concordia University, Peter was offered the opportunity to return home to assume a university teaching position in the same city in which he was raised. Upon returning to his home being surrounded by family, Peter often spoke about the challenges of surviving as an academic, trying to balance the juggling act of teaching and scholarship with personal and professional commitments outside the university. These experiences are very real for Peter as he is in his 4th year at Brock, striving to complete his doctoral dissertation writing.

Peter explained that his first 3 years at Brock were divided both personally and professionally. He eloquently shared that his personal and professional realities were split into
the culture of family and culture of the workplace. It was upon his return to St. Catharines, that his father became ill and passed away with cancer within a short time period. He explained that the culture of his family exploded with this loss in his family. Accordingly, Peter felt both a desire, as well as an obligation to support his other family members. During this most challenging emotional time, he found it very difficult to survive in the culture of the workplace. As he began to try to navigate his way back into the workplace, he explained that the two cultures, family and workplace, were always interchangeable for him during his first 3 years as a professor. He explained that, “There is often an unspoken hidden curriculum in the Faculty of Education and that’s what one is trying to explore.”

Speaking to the self-study group during the middle of a 6-month sabbatical in the beginning of Peter’s 4th year, he expressed that it is only now that he is beginning to focus on the culture of the workplace, striving to lead a balanced life. While his primary goal was to see his doctoral dissertation to completion, he shared his need for taking some time to reflect on the personal and professional challenges he has experienced over the past 3 years. In this sense, the opportunity for sabbatical provided a much needed break for him as well. He thoughtfully articulated that it was a chance to reflect on his professional value when he explained that it was a time to:

re-establish himself and reassure myself that I am where I should be because I was beginning to doubt that because I didn’t have a chance to actually think and say, “Am I really where I should be?” And now I am thinking, “Yes!” because I had the luxury of time which is what one does not seem to have when one is new in a tenure-track position. With such reflections, Peter has been able to voice that the sabbatical opportunity has been profitable, both personally and professionally, leading him to continue to think about how to lead a balanced life, particularly in the areas of teaching, scholarship, and service within the university context.

Shelley’s Story

Shelley joined the self-study group mid-year, 2006–2007, as her appointment as an assistant professor began in January of 2007. Prior to moving to St. Catharines, Ontario, Shelley was working to complete her doctoral work at the University of Alberta in Edmonton. She joined Brock mid-year as her desire was to have a draft of her dissertation writing complete prior to commencing the appointment. She was happy to share that she was successful in doing so.

Shelley shared with the self-study group that although she is Canadian, she brings varied perspectives from different global regions within the country. It was a transition to grow up in a small, rural, fishing and farming community on the east coast of Prince Edward Island, complete a Bachelor of Music at the University of Prince Edward Island, become a public school teacher in a small city of about 12,000 people, and then 4 years later, move west across the country to Alberta to begin graduate studies in a city of approximately one million people. After having completed her Master of Education degree, she returned to her home province to teach another year with her school district before being seconded to the local university to teach for 1 year in the Department of Music. Upon her completion of this year, she shared with us that she thoroughly loved her experiences working with university students, so thus returned to Alberta to commence her PhD program, focusing in elementary music education.

During the year that Shelley returned to her classroom after her Master’s work, she explained that she was challenged to identify her own professional value. She felt a sense of frustration philosophically between how she was living out her reality as a teacher within the parameters of the classroom and her reflective practices as a previous graduate student. She
indicated that these two realities were not necessarily in line. She felt that it was challenging to talk with other teachers about some of the academic interests that she held. Thus, the opportunity to teach post-secondary was an exciting endeavour for Shelley. It was this opportunity that confirmed her desire to engage in doctoral studies.

In coming to Brock mid-year, Shelley explained that part of finding her own professional value was in trying to align her goals with other instructors who were teaching similar courses. There were routines and expectations in place by other part-time instructors and Shelley found herself reflecting on how to offer her own contributions within an existing, acceptable structure. She shared that these changes take time. One of her biggest challenges was being familiar with teaching Elementary Music Education methods, having approximately 40 hours of instruction in her teaching at the University of Prince Edward Island and the University of Alberta, and now coming to Brock and having 15 hours of instruction for her methods course. This was, and still is a huge conceptual change for her, which has challenged her to think about the professional value of the Arts within the larger program structure in the pre-service program. Shelley wonders, “How is post-secondary instruction in the Arts valued within this province and within this program?”

During her first 6 months of appointment, Shelley noted that an all consuming part of her time was in completing the final edits of her dissertation writing. In many ways, this can feel like a dark cloud hanging over one’s head. Although she felt accepted here within the Brock community, she noted that there is a subconscious acceptance into the life of academe when one is complete. She shared her enthusiasm of defending in August, 2007.

Speaking from her own experiences, she thoughtfully indicated that the notion of temporality helps to change our mode of survival as academics when we move to a new city, new province, and new place. Shelley expressed the challenges in moving somewhere new without any family or friends. As time passes, she shared that we somehow tend to continue to survive. There are many personal things to get in order when one moves. As these things began to fall in line for her, over time, she came to feel more comfortable. She explained to the group that a bright light for her being able to survive in this new academic context was the opportunities for collaboration. “This is a familiar culture to me,” Shelley articulated. In addition, however, she noted that, “Survival is a lifelong endeavour. I think in academia, we are always trying to keep surviving.” Because of the demands of our work, there is a constant attempt for this.

In trying to survive academically, it is a challenge to lead a balanced life, both personally and professionally. Professionally, Shelley talked about maintaining the balance of finishing the dissertation writing, while teaching, and attending to service expectations. She explained that we all could work 24 hours a day, 7 days a week. It’s important that Shelley makes regular time for fitness and for singing in a choir. These are ways that she attempts to maintain balance, outside of her academic life. Shelley further shared that now that she has completed the dissertation, she continues to think about how to maintain the balance between this piece of research and her larger research agenda. How does the subsequent writing and publication from the dissertation balance with other research interests?

In reflecting on the overall experiences Shelley has had thus far in the self-study group, she shared that it has been very rewarding and worthwhile for her. She noted that there are many rich perspectives within the faculty and working within the self-study group, she has been able to think more globally, as varied experiences are shared. Others in the group make her think about questions and possibilities that she might not have considered otherwise. Shelley talked of the
need for there to be opportunities for academics to talk openly about their feelings and experiences, allowing us to all acknowledge who we are, both personally and professionally. She shared that, “We need to have more space for those conversations which allow the honesty of who we are to come out.” Shelley also explained,

I think the self-study group has helped me to think about the importance of reflecting on our own practice and using that reflection to enhance our practice. I think it has also really helped me to continue to work with a collaborative community which is really important to me because academia can be really isolating and many of us are used to coming from cultures of schools where people work together and then you move into that position of writing on your own. . . I think for me, the collaborative work fuels me.

Chunlei’s Story

With two masters’ degrees, a PhD, and experiences working in seven different universities across China, Canada, and the US, Chunlei brings his rich expertise in combining health, culture, and education to the Brock Faculty of Education, and his experience with diverse cultural and educational philosophies to the self-study group. He (and his wife) joined the university community at the same time as Candace and three other new faculty members of the Pre-service Department, and has been participating in the self-study group as a means of situating himself within the workplace culture of Brock.

Chunlei speaks of his childhood in China before the Cultural Revolution. In his family, Chunlei was regarded as the child with the least potential; his oldest sister was recruited by universities because of her academic excellence; his other sister later became a university professor. Chunlei’s father encouraged him to attend professional technical school because sending all three children to university would be financially difficult for the family—the family had to care for grandparents as well as educate children! Fortunately, Chunlei did not pass the exam to enter technical school and was returned to the regular high school. At this point, Chunlei found news in a newspaper about what was required to attend graduate school in university. He cut out that piece and stored it in a safe place but was hesitant to mention his dream to his father. He wanted to be a researcher—even if it meant going to university. So, Chunlei made a plan! In his plan, he would fill every spare moment of those 4 years with study so that he would succeed. He was expected to take the national entrance exam in order to qualify to enter graduate studies, and he was the first student in the history of his university’s physical education department to pass the national exam and be accepted as a graduate! As Chunlei tells this part of the story, his face crinkles up into a broad smile and he chuckles as he says, “My father was so proud of me because at that time, it was rare to have that type of status.”

During his work in China, Chunlei received the Young Researcher Award of China and was honoured, along with his university president, at a ceremony in Beijing. It was at this time that Chunlei made a new plan—to experience the culture of overseas countries from the perspective of a professor. He travelled to the US where he began his career as a visiting professor and a graduate student all over again in a new culture. Four years later, he and his wife travelled to Canada where they began once more. Chunlei compares the professorial workplace culture of the three countries this way:

I did experience differences between East and West. Although it has changed in China now from what I experienced, my experiences as a Chinese professor meant that my duties were simply to teach. There was more time, and when we found that we had more time, we would do more. Here it was the opposite. Once I got to the [US] states, the working attitudes were different, more stressful, more competitive. Then, I moved to
Canada and found there were differences between the two countries—politically, economically, and culturally. In Canada, it is more relaxed, not too serious, very safe, and multicultural. I found all of these differences impacted my professorship.

Chunlei further explains that, because of his childhood experiences, he never imagined himself as being smart—there was so much more that he could learn. He describes professional value as the act of successfully completing a goal or learning challenge and the satisfaction that results from doing the job to the best of his ability. He speaks about the challenge that he and his wife undertook to move to the US and then again to Canada where they started at zero, cleared all the hurdles, and re-built. He feels as if they have successfully worked back to the standards they had previously established in China, so he is now ready for an additional challenge which he is currently finding in his research and working with the students. In fact, he glows as he talks about realizing that he enjoys teaching at the university level because of the personal satisfaction and value he feels when he observes his impact on the development of new teachers for our profession. One of the attractions of the pre-service program for Chunlei is the unique teaching environment that merges the subject matter knowledge of his discipline with the mentoring/apprenticeship relationship necessary to induct new teachers into teaching! He calls it “a beautiful act—that we can generate and share with future teachers.”

Appreciative is the term Chunlei uses to express how he feels about his experiences within the university setting that allow him to feel valued. However, the differences in the cultures have made it challenging. As he moved from the Eastern educational system to the Western system and then from the US to Canada, he survived by figuring out the language, how the system worked, the expectations, and appropriate procedures so that he could understand the type of effort needed for success; however, his own personal definition of success describes the professional world of academia in terms of being a learning process with teaching as a means of sharing that learning rather than as a competition to outperform others. Chunlei tells the story of the water and the wave as an example of how to survive successfully:

One day there are three waves—there are a lot of waves in the ocean and there is a little wave complaining, “I’m so tiny. I want to have a lot of money and a house but I’m too little.” Well, the tidal wave, who is pretty smart, says, “Hey, Little Wave, do you know who are you are?” “Well,” says Little Wave, “I’m a little wave.” “Ah, Little Wave. You are not a wave, you are water.” The moral is that you cannot just see only the shape or colour; you must see your nature. We should realize, we should remind each other all the time, that we are the same, big or small, so instead of competing, we are sharing.

Although survival and the search for professional value and performance have been huge concerns, of utmost importance to Chunlei is the maintenance of balance—the yin and the yang. He explains that in the Chinese culture, you are expected to take responsibility for your own health and well-being. In the Western culture, the pressure to perform is intense and personal well-being is often ignored. He seeks to constantly maintain this balance—between professional performance and his own health and relationships with his family, between eastern and western perspectives, and between the mixed feelings he has developed as a Chinese Canadian. To illustrate his point, he tells of a story from Buddhist philosophy where:

A man is being chased by a tiger who wishes to eat him! The man knows where a vine is that will help him climb up the cliff and away from the tiger. However, as he climbs, he realizes that there is also a rat chewing at the vine from the top of the cliff—certain impending peril! At that moment, the man sees a beautiful strawberry right next to him. He picks the strawberry and eats it, relishing in the juicy ripe taste! So that’s the end of
the story. This story tried to inform us to live in the moment. Don’t think about the past; don’t think about the future; think about the moment. The present moment, the mindfulness. . .

Chunlei makes it a point to negotiate the cultures in order to maintain balance so that he can feel professionally valued while satisfied personally. He further explains that the self-study group has been helpful because it has served as an opportunity for self-reflection and a safe place to confirm/disconfirm messages from the collective faculty. He states,

Without this space, you only hear occasional conversation and just little bits and angles of information. This never happened to me before, and I think it helps us feel and see more than ourselves—to help us organize as a whole, and it’s powerful because are able to create a collective community voice and enjoy each other at the same time.

He has valued the experience because he feels that, through his participation, he has quickly gained colleagues with whom he feels a deep connection and a personal relationship that he would not have otherwise.

**Candace’s Story**

Candace, a native Texan, came to Brock with 5 years of university teaching in her chosen field of educational technology and 20 plus years of teaching experiences in the Texas public schools as a librarian, music teacher, and K–6 classroom teacher. She teasingly describes her return to obtain her doctoral degree as her mid-life crisis, with her children growing up/leaving the nest and her husband approaching retirement, and as a rebellious form of sibling rivalry—all of her brothers are medical doctors and she tired of being the only one without a “Dr.” in front of her name. She admits that these were probably not the most rational of reasons for embarking upon such a drastic career adjustment, but she and her family undertook the adventure of *putting her through* anyway.

Having spent most of her teaching career in the public schools and several major universities in the southern United States, Candace felt confident that she could handle the typical differences in university and school cultures, but felt she would find cultural differences as major roadblocks. Imagine her surprise when she realized that there were few differences between the Canadian and US cultural or educational systems or basic school structures. Instead, she had two surprises in the actual university structures—a difference in governance and program philosophy about training teachers.

First, the workplace culture in the Brock Pre-service program worked through governance by committee! In the university structures in the South, the governance was handled by directives from administration with changes in your own area/program being handled through simple measures—not via committee, with approval from the full department. Methods for navigating the governmental committees in order to get things accomplished was an initial priority as the Educational Technology course that Candace was hired to teach had to be separated from the current Science methods class. Following proper protocol in a body so entrenched in protocol seemed, at first, slow and unresponsive; and yet, she felt that the participatory element of the process was more free and informative than the top-down administration to which she was accustomed! It was “simply a matter of learning the ropes and figuring out how to adjust them—something that would happen in time.”

The second surprise was the actual structure of the program. At Brock, the current philosophy that underscores program development is one in which training takes place in 8 months, with only 20 hours of instructional time per method course, after which students are introduced into the classroom for their practical experience. Candace had not participated in this
type of program before, even though she had taught technology workshops and courses to Alternate Certification programs—probably the most similar type of program in Texas for comparison purposes with the Brock Program. She had never participated in a program with such a short duration! Boiling down what would be of most importance to pre-service teachers about technology for use in their first practicum experiences was a monumental task. In her previous university courses that ran 60 hours, Candace had taken time to teach skills as well as integration uses of computer technology. A very different mindset would be needed to separate out the skill teaching from the integration teaching. Although surprising, Candace thoroughly enjoyed the process even though it was a challenging, time-consuming endeavour.

Therefore, survival in the first year became a matter for Candace of solving problems that impacted her teaching and the delivery of quality instruction to her students, while staying abreast of technological advances in her field so that instruction would be as current as possible. Finding satisfaction with teaching and service to the department were key components that Candace described as integral to her definition of professional value. However, she definitely felt a conflict between her definition and a new push from the university to become a research-intensive university. A solid plan for a program of research must be developed if tenure and promotion were to be obtained, and teaching and service would no longer be valued as highly from the tenure and promotion committee.

Candace explains that the self-study group became extremely important to her acculturation into Brock culture.

The consistent meetings allowed me to learn how to navigate the system, find out who to contact for answers, and provided a network of people to call if I had concerns. Without this support, it would have taken three times longer for me to feel comfortable working and collaborating here. The self-study group provided a safe space to ask questions, express opinions, talk about differences, and discuss methods for possible change. In addition, Candace credits the self-study group with helping her move towards a better system of balancing her professional needs and her personal life. The reinforcement from the self-study group focused on balance as essential to maintaining a “freshness in the work” and a healthy time for reflection. Candace felt it “was inspirational. I realize that the ideal situation would be to feel satisfied in my professional endeavours, but still have ‘me’ time, and I know from visiting with this group that these are common concerns. It’s informative just to hear how others manage this difficult juggling act.”

**Emerging Themes: Transformation as Evidence of Impact**

Answering the question, “What is professional value in this learning faculty?” is a task all new faculty members informally undertake. The difference for us, the four new members at Brock University who were participating in this small group, was the ability to meet together in a self-study group established specifically for the purpose of formally investigating this topic from our respective diverse, global perspectives.

Within the context of our global views, we began by constructing a definition of professional value at our new institution. We established the fact that professional value would need to be viewed from three perspectives: issues related to personal views of professionalism, issues related to departmental requirements for professionalism, and issues related to university-wide requirements for professionalism. Each of these three perspectives or levels needed to be addressed to compare and contrast our international backgrounds to find commonalities. With a clear understanding of the types of issues we would discuss, and to make sure there was rigor to our method, we documented how these discussions framed and reframed our thinking, or
transformed our thinking (Samaras & Freese, 2006) about our role as professors in an institute of higher learning. As we documented our transformation, we saw themes emerging that serve as evidence that the reflective process has impacted our skills and understandings.

**Professional Value**

We defined professional value as “creating an identity in a new position.” We recognized that this identity could vary from institution to institution, and we often found ourselves comparing procedures and policies here at Brock to those experiences with other universities. We have reframed our thinking from our previous experiences to align more closely to the expectations of the Brock University community. For Brock, we identified three components that would provide a sense of identity while satisfying the three perspectives or levels of professional value.

First, we all expressed the idea of a personal performance standard or set of benchmarks for performance. Peter described it as a form of integrity when he stated, I have to wake up every morning and feel good about what I do—what I share and what I give to my students, to my colleagues, even my contribution to you as part of this self study group. And, I want to do what I think is right. . . . personal integrity is very important for me.

Candace described the need to “be satisfied that I perform to that standard of professor that I have concocted for myself personally” and Chunlei added that his idea of professor included one who was “both educating teachers (teaching) and advancing knowledge or understanding of expertise areas (research).”

“Putting the situation into perspective” was the process Shelley described, so that, as Peter added, “we see ourselves fitting into the world we live in—among our families, among our colleagues.”

A component of satisfaction was also evident in our discussions. Being able to do our jobs well provided a sense of satisfaction, so the time to perform with integrity in the areas of teaching, research, and service must be available. In our discussions, Peter asked, How can we have integrity if we do not have a chance to reflect on what we are doing and how we are doing it? If we do not, we go through life with blinders on, only racing ahead, oblivious to the signs from those around us we love, who keep telling us that life is short.

Chunlei added, “You only have 24 hours a day. You are hired working 8 hours for 5 days in a week. You have no time to do research and writing for publication.” Each of the group members felt that time and satisfaction were closely intertwined. Candace called time “the enemy” and Shelley and Peter felt the pressure of carving out time specifically for writing time to finish their dissertations.

Setting performance standards that demonstrated integrity and finding satisfaction by having the time to perform to these standards were large pieces of professional value, but a final component of currency was evident. We all had chosen careers in higher education because of a driving need to stay on the cutting edge of the teaching profession. Candace referred to currency as possessing “21st century skills” that would “be a part of developing and improving our program.” We agreed that we were teachers, first and foremost, so the research issues and topics that appeal to us impact our own teaching and knowledge about best practices for teaching. Shelley observed that we sought to provide pre-service teachers with “meaningful . . . experiences that will lead them to feel competent and energized to then lead primary/junior children towards enhanced . . . understanding.” Only by working in higher education would we
have the opportunity to stay on that cutting edge and work with the novice members of our professional community. Chunlei added that he would not “work in an institution only requiring teaching or only requiring research. It had to be both . . . I see my status (e.g., social) reflecting my potential and expertise among our generation.”

**Survival as the New Member in a Learning Faculty**

Survival issues were uppermost in our initial meetings. Although we all discussed the overwhelming challenge facing new faculty moving to a new institution, Shelley wrote:

> Aside from the job role, there are so many things to get in order when one is moving to a new place. Trying to figure out where I wanted to live in an unknown city was somewhat of a challenge. I also felt overwhelmed when I thought about the research that I needed to do to find a doctor, dentist, chiropractor, massage therapist, and optometrist. I needed to apply for Ontario Health (OHIP), change my driver’s license, get new license plates—not to mention all the things I needed to do in Edmonton to get packed, arrange moving, and say my temporary good-byes. Again, the tasks were overwhelming. For me, when these personal concerns are not in order, it is difficult to be productive in a professional context. How is my professional value defined when I have so many tasks to focus upon? Where does my professional value fit? I had to consciously remind myself to breathe. It would fall in to place. I had to remind myself of the potential greatness of the opportunity that came my way.

With many of the personal issues resolved, next we were faced with other common challenges associated with being the new faculty member entering an established program. Chunlei listed the “immediate working factors (e.g., new courses, counselling group teaching, email system, administration, library)” that we commonly shared and then explained that working around the “strict rules regarding experience with supervising master’s level students before supervising graduate students” would be challenging for the continuance and success of the large research project he was implementing. Candace also had specific issues with being responsible for developing course materials and requirements so that consistency across the team of five technology teachers would be maintained, regardless of who was teaching. Shelley explained the process as one of wanting “to align my goals with those of other instructors so that consistency was maintained across various sections of the course [being] mindful of the routine that was previously established by other faculty members and instructors.”

We all shared the idea that there was too much content to fit into the short instructional time allotted; and yet, that was how the program had been successfully working for years. Together, we discussed different techniques and teaching strategies that allowed us to “renegotiate how to distribute the content in less time,” as Shelley noted. Peter summed it up for all group members when he stated, “I felt like I just got the ball rolling and they leave me!” Having Peter in the group with three years experience with the program was invaluable. He had already worked through reframing his thinking about content and prioritizing content to meet the time frame, and although he still felt that the time was too short, he could share his strategies and success stories with us.

Understanding the policies and procedures for performing successfully in this faculty was important for survival of our first year experiences. In fact, a unique factor influencing the dynamics of this Faculty of Education was the growth in size of the faculty. Peter tells the story this way:

> Four new faculty were hired in the pre-service department to start that year. Four new voices, four new perspectives on teacher education! We were up to eight new people in 2
years in the Pre-service department, and it was starting to show. At Pre-service department meetings, questions were being asked from every angle. Why is the format like this? Who designed that model? When was that developed? The presence of 13 new faculty members over a period of 3 years brought “a strong influx of cutting-edge ideas and unexplored possibilities waiting to be tapped” into the mix, as Candace explained. “The tension between the push to improve and change brought in by new faculty and the homage paid to traditional, historical methods” changed relationships with others and how we sought professional value. Another challenge that would need to be survived! Peter commented that the “majority of my colleagues had been there for many years. They were proud of what they had worked hard at to establish—a reputable pre-service program with very high standards.” Together, we identified practical ways to combine our voices in order to be heard, which meant that we worked to reframe our questions and suggestions so that we presented ideas in a more respectful manner, always mindful of the work and improvements that had preceded ours, identified senior faculty to approach for support, and began planning collaborative projects/student assignments that could be duplicated by others wishing to do so. Understanding how to successfully work in this new context became easier simply because we used each other as a sounding board to work out ideas for best ways to work within the existing structure.

Living a Balanced Life

A final theme that emerged from our stories, reflections, and discussions was the need to live a balanced life while maintaining professional value. Together we discussed techniques for controlling the juggling act between our personal and professional lives. From things as simple as how to manage email effectively so that it does not take over one’s life to the more complex issues of advising graduate students or appropriate committee participation for tenure and promotion, we voiced our concerns related to exactly how balance could be obtained! Explaining the need for balance while living in the world of academia is difficult to those not directly involved in academia. Peter states:

When I look back, my job is consuming me. I try to make a conscious effort to find some sense of balance, but I always hear my family and friends say, “Peter, you better slow down!” I tell them I am trying but they just don’t understand my reality. No one in my family is or has ever been in academia, let alone teaching. I find it frustrating at times trying to have them understand the pressures I am under as a new, tenure-track professor, juggling many different coloured balls all at once. It is difficult for them to see what I see.

Therefore, achieving that balance was critical in order to live satisfying and productive personal and professional lives!

Very early in our discussions, we started listing the tensions in our professional lives that could easily fall out of balance. Chunlei compiled a list of challenges that we deal with on a daily basis in the professional world of Brock University, including the following balances:

- One’s personal life and professional life
- Expectations of teaching, research, and service
- Changing focus of the new and old mission of Brock (change in university from a focus on undergraduate teaching to that of a comprehensive research focus)
- Tensions between new faculty (hired with a focus on research) and veteran faculty (hired into a system with a teaching focus)
• Tensions between the Primary/Junior/Intermediate program groups and the Intermediate/Senior program groups
• Tension between the two departments in the Faculty of Education (e.g., graduate program, research culture of the grad/undergrad program and the counselling/teaching as scholarship focus of pre-service department)

How would we deal with balancing all of these needs? Peter expressed it for all of us when he remarked, “I need time to look back and think about what has happened. I think in our busy lives, we don’t do that enough. Balance is what is needed.” We agreed that the self-study group allowed the opportunity to explore ways to achieve this balance. Candace explained:

I truly was able to create a sense of balance between living my personal life and being that professor of high quality. Have I completed all of my goals? No, not yet, but I know where to go to get the information I need. With the help of the self-study group, I have identified appropriate methods for successfully working in this faculty. Plus, I have an idea of how I can set up support for new faculty who follow me and work to build a learning faculty!

Even Shelley who had only been in academia half-time the first year feels confident that her participation in the self-study group has given her “an opening to share my voice and acknowledge my professional value.”

Conclusions: Crossing Borders to Global Horizons

According to Fuller’s seminal work (1969), novice teachers share a common set of concerns that can be expressed in a series of developmental stages. For example, during the first phase of development, concerns are related to self—the self’s ability to perform as a teacher. Much energy and attention is expended at this stage on developing identity as a teacher, pleasing supervisors, and acquiring necessary information to survive in the community context. With experience, teacher concerns move from self to those related to teaching tasks, such as implementing appropriate curriculum, providing adequate student feedback and assessment, or participating in committee work. Finally, after additional experiences, novice teachers move into a phase of concern that addresses the business of education—focusing on students and their learning needs as outcomes of teaching tasks (Fuller, 1969; Fuller & Brown, 1975). The participants in this study were already skilled teachers with many years of public and university teaching in their backgrounds, therefore, the development of teaching skills was not a focus; yet, we experienced similar Stages of Concern (Hall, 1976; Hall, Wallace, & Dossett, 1973). An initial stage was felt by these participants related to issues of self or identity. Survival needs were our first priority as we struggled with handling the issues related to working in higher education, such as understanding parameters of university expectations and adjusting to requirements of a new faculty position. These concerns were juggled on top of the adjustments for moving into a new province, area, and country. Merely dealing with the paperwork from becoming a new citizen and a new faculty member was overwhelming.

We moved into a second stage of concerns related to the tasks we needed to perform to become a great teacher, scholar, and collaborative partner as required by our department, faculty, and university. Concerns led to our examination of issues related to the delivery of content in the short time frame of the program as well as how to accomplish curriculum or program improvement. The feedback and support received in the self-study group became invaluable during this time. Trowler and Knight (2000) assert that “induction [programs provided by the universities] of NAAs [new academic appointees] is far less significant than what happens in
New Faculty Cross Borders Through Self-Study in Teacher Education  C. Figg, S. Griffin, et al.

activity systems and in the cultures created in communities of practice” (p. 28). We found this to be true in our situation. Even though we were all relatively new faculty, Peter had been a part of the system for 3 years and could give information and advice as needed. In addition, the larger self-study group contributed to our learning needs as we had an informal group of mentors who were available and helpful. Then, as new issues arose, the members of the self-study group could advise and direct us. We quickly found ourselves deliberating the issues related to a third stage of concerns—feeling the confidence and skills to focus on the delicate balancing act that faculty members perform as they move between the roles and tasks related to the niche or identity that we establish for ourselves in the academic community. McGill and Beaty (2001) describe efforts in a faculty learning community as “a continuous process of learning and reflection, supported by colleagues, with an intention of getting things done” (p. 11). Within the safe and confidential forum of this learning community, the participants in this study were able to “get things done,” or build the understandings of personal and professional identity necessary to move quickly from the initial stages of addressing survival needs to the real work of academia (teaching, scholarship, and service).

Navigating the path from survival to new horizons can be a lengthy, frustrating, arduous, yet rewarding endeavour. As Chunlei states, working with others:

seems to create a space to express ourselves as new faculty, discuss issues that concern us, help each other to understand the new environment, console each other, release each other’s stress, share information, identify certain common problems, enjoy being around with each other…We seem to feel safe, empathy, supported. Despite time-consuming, this self-study group becomes a truly collective community. It significantly helps us survive in the difficult initial years, and provides strength ready for the years to come.

Educational Significance

Self-study has great potential to advance personal practice and transform overall teacher education practices. In our particular self-study group, the four of us had the opportunity to reconstruct and examine our own personalized professional practice, comparing it to the practices of others in the group. As a collective, we feel that studying our own teacher education practices, through the lens of our international viewpoints, has helped us understand more clearly the complexities of teacher education, especially as they related to teaching, research, and service at our university. In addition, engaging in self-study has provided us with a forum for contemplating, discussing, and later, actively participating in educational changes.

While there is an ever-increasing literature on collaborative self-study, few involve new faculty. This study is unique due to an absence of a body of literature regarding research of a cross-cultural group of newly hired faculty engaged in self-study practices. This research contributes by illustrating the collaborative voice of new faculty from an international perspective. The four of us brought our diverse international experiences, beliefs about teaching and life, and cultural backgrounds together to forge strong collaborative relationships, build understandings of our new university’s culture, and support each other in our search for professional value.

It is our hope that the sharing of such experiences will influence others to contemplate the importance of representing various, diverse global perspectives within self-study groups engaged in teacher education practices. Accordingly, such richness
represented through our personal and professional experiences may encourage others with similar interests to investigate and honour their own professional value.
References


Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique

Véronique Jobin & Clermont Gauthier
Faculté des sciences de l'éducation, Université Laval, Canada

Abstract
Dans plusieurs pays développés, le thème de la pédagogie différenciée est fréquemment abordé dans les discours pédagogiques. Étant donné la popularité du concept et même la recommandation de l’implantation de cette pratique pédagogique, nous avons tenté d’en comprendre la nature et de vérifier si l’efficacité de ce type de pédagogie a été démontrée par la recherche sur le terrain. Parmi cent quatre-vingt-neuf documents (n = 189) analysés, treize recherches empiriques ont été identifiées. Huit d’entre elles ne présentent aucune preuve d’efficacité. Ces résultats nous ont amenés à conclure que peu d’effets de la pédagogie différenciée sur la réussite des élèves ont été démontrés empiriquement et que la prescription de cette pratique pédagogique repose sur des preuves d’efficacité fort limitées.

Introduction
Les classes d’aujourd’hui sont hétérogènes. Que ce soit sur le plan cognitif, social, culturel ou affectif, les élèves faisant partie d’un même groupe présentent des différences sans doute plus importantes que ceux d’autrefois. Dans ce contexte, les responsables des systèmes d’éducation de plusieurs régions du monde se demandent quelles pratiques pédagogiques mettre en place pour favoriser la réussite scolaire de tous. La pédagogie différenciée apparaît aux yeux de bon nombre d’entre eux comme une solution voire une nécessité pour faire face à la diversité des élèves dans les écoles. Nous pensons, à l’instar d’Ellis (2001), qu’avant de généraliser une pratique pédagogique, il faut s’assurer que l’efficacité de cette dernière a été démontrée par la recherche empirique. Qu’en est-il de la pédagogie différenciée? La première section de cet article contient une description de la nature de cette pratique pédagogique. Dans la seconde partie, nous présentons une analyse des recherches portant sur l’efficacité de ce type de pédagogie.

1. Nature de la pédagogie différenciée
Les écrits sur la pédagogie différenciée se retrouvent en abondance dans les milieux de l’éducation et les perspectives des auteurs sont nombreuses. Il peut donc être difficile de s’y retrouver. Qu’est-ce que la pédagogie différenciée? Pour répondre à cette question, nous avons étudié deux aspects de cette pratique pédagogique, soit ses définitions et les idées-clés figurant dans les écrits à son sujet.

1.1 Définitions
Selon Forsten et collab. (2002), différencier la pédagogie, c’est connaître une variété de stratégies d’enseignement et savoir quand et avec qui les utiliser. Partageant cet avis, Heacox (2002, p.1) définit la pédagogie différenciée comme « a collection of strategies that help you better address and manage the variety of learning needs in your classroom ». Elle explique que ce sont les besoins et les caractéristiques individuelles des élèves qui guident le choix des différentes stratégies d’enseignement. Cette idée nous
Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique

V. Jorbin, C. Gauthier

conduit à la définition de Fresne (1994, p.4) pour qui ce type de pédagogie correspond à « une pratique d’enseignement qui consent aux différences inter-individus et qui tente d’organiser les apprentissages en tenant compte de chacun ». 

Przesmycki (2004, p.10) précise que la pédagogie différenciée s’inscrit « dans une démarche collective d’enseignement des savoirs et savoir-faire communs exigés ». Vecchi (2000, p.178) écrit qu’elle « permet à chacun d’atteindre les mêmes objectifs (ou un certain nombre d’objectifs communs) ». Les propos de ces auteurs sont bien synthétisés par Perraudau (1997, p.112-113) qui conçoit la différenciation pédagogique comme une « diversification des supports et des modes d’apprentissage pour un groupe d’apprenants aux besoins hétérogènes mais aux objectifs communs ».

Perrenoud (1995, p.29) considère ce type de pédagogie comme une façon d’organiser « les interactions et les activités, de sorte que chaque élève soit constamment ou du moins très souvent confronté aux situations didactiques les plus fécondes pour lui ». Il semble que l’enseignant qui différencie sa pédagogie cherche à maximiser le talent de chaque élève. Du moins, c’est dans cette optique que Convery et Coyle (1993, p.1) proposent la définition suivante de la pédagogie différenciée : « Differentiation is the process by which teachers provide opportunities for pupils to achieve their potential, working at their own pace through a variety of relevant learning activities ».

Pour sa part, Tomlinson (2004) perçoit la différenciation pédagogique comme une façon de penser, une philosophie, qui sous-entend l’adoption de certaines valeurs et attitudes. Cette manière particulière de concevoir la pédagogie différenciée est aussi présente chez d’autres auteurs. Caron (2003, p.80), par exemple, définit ce type de pédagogie comme « une façon d’appréhender les différences, de vivre avec elles, de les exploiter et d’en tirer parti » et Prud’homme (2004, p.189), comme une « façon de penser l’enseignement et l’apprentissage dans un groupe qui consiste essentiellement à construire, élèves et enseignants ensemble, des situations qui deviennent des passerelles de différentes formes donnant accès au monde de l’apprentissage, de la participation et de l’autonomie ».

À la lumière des définitions présentées, nous pouvons dire qu’il est possible de Reconnaître la pédagogie différenciée par la présence de différentes caractéristiques, à savoir l’enseignant a recours à une variété de stratégies d’enseignement, il reconnaît les caractéristiques individuelles des élèves, il fait face à un groupe d’élèves aux besoins hétérogènes mais aux objectifs communs, il cherche à maximiser le talent de chacun et il adopte une philosophie particulière pour enseigner. Maintenant, il convient d’aller plus loin dans notre étude du concept de la pédagogie différenciée en faisant ressortir les traits de cette pratique pédagogique qui nous apparaissent les plus dominants. Nous les appelons « les idées-clés figurant dans les écrits ».

1.2 Idées-clés figurant dans les écrits

La pédagogie différenciée s’organise à partir de l’hétérogénéité des élèves. Cependant, Astolfi (2004) souligne que pratiquer la différenciation pédagogique n’implique ni l’idée de préparer des activités d’apprentissage différentes pour chacun des trente élèves du groupe ni l’idée d’identifier, avec certitude, à chaque instant, la solution unique optimale pour permettre à un apprenant d’acquérir une connaissance donnée. Meirieu (2002, p.42) dirait que l’enseignant doit chercher « un point d’appui dans le sujet, même tenu, un point où articuler un apport, où placer un levier pour aider le sujet à grandir ». Il s’agit donc d’essayer à la fois de respecter les différences des élèves et de permettre leur dépassement.
Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique

V. Jorbin, C. Gauthier

« There is no recipe for differentiation. » (Tomlinson, 2001, p.27.) Plusieurs théories ont été développées pour aider les enseignants à prendre en compte la diversité dans les classes. La pédagogie différenciée apparaît comme un concept parapluie qui permet de rassembler toutes les théories développées pour répondre aux différences entre les élèves (Callahan, 1999). Perrenoud (1992, p.50) affirme que cette pratique pédagogique « doit rester un paradigme général, détaché de telle ou telle modalité de réalisation ». Il prétend qu’elle peut être rendue possible autant par l’utilisation de moyens qui relèvent de la pédagogie par objectifs que de l’école active.


Différencier la pédagogie suppose que l’élève soit actif. À ce propos, n’y a-t-il pas une contradiction entre un climat de classe centré sur la différenciation des apprentissages et le fait que l’enseignant doive suivre le programme scolaire? Selon Tomlinson (2000, p.8), non car : « Curriculum tells us what to teach : Differentiation tells us how. ». D’après Gregory et Chapman (2002), c’est une question d’équilibre entre le devoir de travailler en fonction des objectifs communs du programme scolaire et la réalité hétérogène du groupe d’élèves auquel on enseigne.


Ces idées-clés nous permettent de tracer une bonne esquisse de ce qu’est la pédagogie différenciée. Il s’agit d’une pratique pédagogique qui s’organise à partir de l’hétérogénéité des élèves, qui se pratique de différentes manières, qui constitue un processus dynamique d’adaptation, qui est centrée sur l’apprentissage et qui peut sembler une tâche lourde.

2. Analyse des recherches portant sur l’efficacité de la pédagogie différenciée

En étudiant la nature de la pédagogie différenciée sur le plan de ses définitions et des idées-clés figurant dans les écrits à son sujet, nous avons réussi à mieux comprendre en quoi elle consiste. Cependant, le sens général de ce concept nous échappe encore et ses modalités d’application également. « I think it’s a term that, I suppose like a bar of soap really, you try and graps it and suddenly it shoots out of your hand. » (Kershner et Miles, 1996, p.17.) Notre vision de ce type de pédagogie est donc accompagnée d’un flou. Mais peu importe la conception adoptée, la pédagogie différenciée bénéficie-t-elle d’un appui du côté de la recherche? Cette question est au cœur de la présente recherche.
Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique

V. Jorbin, C. Gauthier

2.1 Problématique

Comme l’expliquent Tomlinson et Demirsky Allan (2000), étant donné que la pédagogie différenciée constitue un amalgame de croyances, de théories et de pratiques, les recherches qui appuient ce type de pédagogie proviennent de diverses sources. Souvent, elles portent sur une partie du modèle uniquement (sur les profils d’apprentissage par exemple). Néanmoins, ces auteurs soulignent qu’il est possible de trouver des rapports anecdotiques très prometteurs écrits par des enseignants et portant sur l’utilisation du modèle en entier. Par contre, comme elles le font remarquer elles-mêmes : « These reports, while encouraging, are not the carefully designed studies that are necessary to understand both positive and negative features of applying the whole model of differentiated instruction. » (Tomlinson et Demirsky Allan, 2000, p.30). Il est important de vérifier si l’efficacité de la pédagogie différenciée a été démontrée car c’est la réussite scolaire des élèves qui est en jeu. Dans cette recherche, notre objectif est de vérifier si l’efficacité de ce type de pédagogie a été mesurée empiriquement. Plus précisément, nous cherchons à identifier les effets de cette pratique pédagogique sur la réussite des élèves.

2.2 Cadre d’analyse

Une grille d’analyse en deux volets a été utilisée pour analyser les documents. D’une part, le modèle des trois niveaux de recherche en éducation proposé par Ellis (2001) et, d’autre part, les critères d’analyse des recherches proposés par le U.S. Department of Education (2003). Le premier nous a permis de déterminer le seuil de validité offert par les différentes études recensées; le deuxième, qui comporte des critères d’évaluation encore plus spécifiques, nous a permis d’examiner leur efficacité démontrée. Ellis (2001, p.20) suggère que « it is helpful to conceptualize educational research by thinking of a model of research with three levels, each of which has different, but related, implications for educational innovation ». Les recherches de niveau 1, ou recherches de base, sont généralement de type descriptif. Il peut s’agir d’enquêtes, d’études de cas ou de recherches réalisées en laboratoire. Les chercheurs qui mènent des recherches de niveau 2 tentent de vérifier l’efficacité de théories données à petite échelle. La présence d’un groupe témoin et d’un ou plusieurs groupes expérimentaux est essentielle. Les recherches de niveau 3 sont conçues pour vérifier l’efficacité de théories données à grande échelle. L’échantillon est constitué de plusieurs écoles ou d’une commission scolaire en entier. Le niveau des recherches en éducation détermine leur seuil de validité. Ce sont les recherches de niveau 2 et 3 qui offrent le plus haut seuil de validité parce qu’elles se déroulent de manière plus systématique.

La procédure du U.S. Department of Education (2003) pour évaluer la rigueur de la démonstration d’efficacité d’une pratique pédagogique se déroule en trois temps. Premièrement, il s’agit de vérifier si la pratique pédagogique est appuyée par une preuve d’efficacité forte; deuxièmement, si elle est appuyée par une preuve d’efficacité possible; et troisièmement, dans le cas où la réponse aux deux interrogations précédentes est négative, on conclut que la pratique pédagogique ne présente aucune preuve d’efficacité significative. Une pratique pédagogique qui est appuyée par une preuve d’efficacité forte a été expérimentée dans le cadre d’une recherche qui remplit trois conditions : (1) on a eu recours à l’assignation aléatoire; (2) elle a eu lieu dans au moins deux écoles ou deux classes; et (3) elle a eu lieu dans un milieu similaire aux écoles ou classes dans lesquelles
Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique

V. Jorbin, C. Gauthier

on pense appliquer la pratique pédagogique. Si l’une de ces conditions n’est pas remplie, la pratique pédagogique peut être appuyée par une preuve d’efficacité possible.

2.3 Recension des études


<table>
<thead>
<tr>
<th></th>
<th>Banque de données ERIC</th>
<th>Banque de données PsycINFO</th>
<th>Banque de données FRANCIS</th>
<th>Autres</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articles de périodique</td>
<td>77</td>
<td>16</td>
<td>6</td>
<td>57</td>
<td>156</td>
</tr>
<tr>
<td>Dissertations</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Rapports de recherche et analyses</td>
<td>10</td>
<td>2</td>
<td>-</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Documents sélectionnés</td>
<td>89</td>
<td>18</td>
<td>6</td>
<td>76</td>
<td>189</td>
</tr>
</tbody>
</table>

Tableau 1 : Quantité totale (Q) de documents sélectionnés

2.4 Seuil de validité des études

Les cent quatre-vingt-neuf documents (n = 189) sélectionnés ont été répartis de la manière suivante : cent soixante et onze essais (réflexions, modèles théoriques, etc.); cinq documents inaccessibles; huit recherches de niveau 1; une recherche de niveau 2; et quatre recherches de niveau 3. Nous avons donc trouvé treize recherches (n = 13) de niveau 1, 2 et 3. Une description de ces dernières figure dans le tableau 2.

<table>
<thead>
<tr>
<th>Auteur, année et niveau de la recherche</th>
<th>Échantillon</th>
<th>Groupe de comparaison</th>
<th>Résultats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baumgartner et collab. (2003) Recherche de niveau 1</td>
<td>Sujets : classe hétérogène Matière : lecture Niveaux scolaires : 2e, 3e et 7e primaire Nb. élèves : 77 Nb. classes : 3</td>
<td>Gr. de comparaison : non Assignation aléatoire : non applicable (n/a) Soigneusement</td>
<td>À la suite de l’implantation d’un programme contenant diverses stratégies pour différencier la pédagogie, une amélioration des performances des élèves ainsi que de leurs attitudes</td>
</tr>
<tr>
<td>Références</td>
<td>Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique</td>
<td>Sujets</td>
<td>Matières</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Niveau</td>
<td>Niveau scolaire : début de scolarité</td>
<td>Assignation aléatoire : n/a</td>
<td>le mode d’apprentissage utilisé (visuel, auditif ou kinesthésique par exemple) ne semble pas faciliter la réussite des élèves qui débutent en lecture.</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------------</td>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Matière : technologie</td>
<td>Assignation aléatoire : n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Niveaux scolaires : 4ᵉ et 6ᵉ au collège (France)</td>
<td>Soigneusement pairé : n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. élèves : non mentionné</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. classes : 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. écoles : 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matières : diverses</td>
<td>Assignation aléatoire : n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Niveaux scolaires : 4ᵉ, 5ᵉ et 6ᵉ primaire</td>
<td>Soigneusement pairé : n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. élèves : 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. classes : non mentionné</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. écoles : non mentionné</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matière : sciences</td>
<td>Assignation aléatoire : non</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Niveau scolaire : 3ᵉ secondaire</td>
<td>Soigneusement pairé : oui</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. élèves : non mentionné</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. classes : 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. écoles : 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matière : lecture</td>
<td>Assignation aléatoire : non</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Niveau scolaire : 1ᵉ primaire</td>
<td>Soigneusement pairé : oui</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. élèves : non mentionné</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nb. classes : 19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.5 Efficacité démontrée par les recherches de niveau 1, 2 et 3

Nous avons approfondi l’étude des caractéristiques des treize recherches de niveau 1, 2 et 3 trouvées en examinant l’efficacité qu’elles démontrent selon les critères du U.S. Department of Education (2003). Huit d’entre elles ont été classées dans la catégorie « Recherche ne présentant aucune preuve d’efficacité significative »; quatre, dans la catégorie « Recherche présentant une preuve d’efficacité possible »; et une seule, dans la
Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique

V. Jorbin, C. Gauthier


Conclusion

Au terme de la présente étude, nous sommes en mesure de conclure, qu’étant donné la petite quantité de recherches de niveau 1, 2 et 3 trouvées (n = 13), force est de constater que peu de recherches empiriques ont été effectuées au sujet des effets de la pédagogie différenciée sur la réussite des élèves. De plus, vu la petite quantité de recherches de niveau 2 (n = 1) et 3 (n = 4) répertoriées, soit cinq recherches au total, force est aussi de constater que peu d’effets de la pédagogie différenciée sur la réussite des élèves ont été démontrés. Enfin, bien que cinq recherches présentant une preuve d’efficacité possible ou forte aient été identifiées, il faut savoir que, si on prend en compte certaines de leurs caractéristiques,
Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique

V. Jorbin, C. Gauthier

comme le type d’élève auquel les chercheurs se sont intéressés, la matière, le niveau scolaire et, dans certains cas, le moyen en particulier mis en place pour différencier la pédagogie, les preuves d’efficacité présentées par ces dernières s’en trouvent affaiblies. Par conséquent, il nous est possible d’affirmer que, selon les résultats de notre étude, la pédagogie différenciée bénéficie actuellement de peu ou pas d’appui du côté de la recherche et que prescrire cette modalité pédagogique à grande échelle comme c’est le cas en ce moment repose sur des preuves d’efficacité fort limitées.
Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique

V. Jorbin, C. Gauthier

Références bibliographiques


Nature de la pédagogie différenciée et analyse des recherches portant sur l’efficacité de cette pratique pédagogique

V. Jorbin, C. Gauthier


*Note : Pour plus de détails à propos des références relatives aux études présentées dans cet article, veuillez consulter le mémoire de l’auteur (2007).
Quality Education and the Marketplace: 
An Exploration of Neoliberalism and its Impact on Higher Education

Mandy Frake: York University, Canada

Abstract

This paper is an in attempt to open discussion about the impact of globalization and theories of neoliberalism on higher education. More specifically, viewing higher education institutions as a market place, where the more a product costs, the greater supply and quality of the product should be received; the quality of education received by university students should also reflect this. Considering the conflict between teaching and research in higher education, quality of education becomes questionable. This paper explores issues of neoliberalism resulting in a greater demand for the completion of research in higher education institutions. Furthermore, the imperialism of higher education leading towards the demand for more research, the teaching versus research nexus within universities, and discussion of how these theories impact international students will be examined throughout this paper.

Introduction

It is widely recognized that there are competing and conflicting competencies within higher education institutions. Acknowledging the gap between those who want to teach and those who want to complete research, the quality of education being taught can therefore be questioned (Pocklington and Tupper, 2002). Furthermore, as it becomes increasingly more difficult to enter university, academically speaking, so does it financially (Little 1997; McMullen 2004; Frenette 2005). Liberalist perspectives focus on economy and the marketplace and having an understanding of the “dynamics of marketization as it operates within capitalism is therefore key to understanding the changes taking place in education and their effects” (Raduntz 2005, 238). Scholte (2005) explains that a “[liberalist] approach is generally taken by people who are interested in maximizing human progress through the pursuit of currently dominant models of ‘development’, with an emphasis on economic growth and liberal democracy” (124).

Neoliberalist theories and practices are defined by Bourdieu (1998) as being a program fully able to annihilate any configuration attempting to oppose the logic of the ‘pure market’. This statement is one that I am forced to ponder as I continue to read literature and formulate my own theories and practices within an educational context.

There is a divide between those who view the primary role of the university as a teaching institution and those who perceive the university as a primary place to complete research. This pedagogical divide brings into question the quality of education students receive (Pocklington and Tupper 2002). Specifically, what is the impact on students if within the institution, teaching is a part of a faculty member’s workload, but research is their primary focus? Higher education

---

1 Although this research primarily focuses on the university, by higher education institutions I may also refer to colleges and other post-secondary education institutions.

2 My practices as an educator in higher education are constantly in flux between teaching and research.

3 Workload is variable amongst universities, so for the purposes of this paper I define workload as 40% teaching, 40% research, and 20% service.
originated with the intent to teach, thus an exploration of how research came to be such a powerful skill and tool within higher education is necessary. Perkin (1984) suggests the role of the university must be contextualized in order to determine what it should be in terms of research, teaching, service to the community, and knowledge production.

In this paper I argue that as a consumer-supplier relationship exists within the marketplace; higher education being the market in this milieu, then as the price continues to rise, so too should the quality of education accessible. Therefore, by taking a neoliberalist approach whereby the more a product costs, the better quality the product should be; the more education costs students, the better quality education should be received by students. I am prompted to question the validity of this theory, cognizant that teaching versus research conflicts within higher education institutions exist.

The purpose of this paper is to investigate the relationship between the teaching versus research tension and neoliberalism and the marketplace. I draw upon Noble (2002) who addresses the marketization of education. Noble (2002) questions the “…departure from the promise of affordable quality education for everyone who wants it, within a communal and collaborative setting dedicated to the free exchange of ideas to understanding the world, and to transmitting and thinking critically about the received wisdom of participants’ cultures” (xii). The focus will be on theories of neoliberalism and the marketplace and their impact on higher education; the imperialism of higher education leading to the conflict between teaching and research; and lastly, how these theories can impact international students in higher education.

Theoretical Framework

As a university instructor and teaching assistant in higher education, I bring forth the perspective that teaching is an essential part of higher education in that I am part of the teaching and learning process of future generations. I have no control over tuition fees; however, I do have the ability to create lesson plans to reflect curriculum. I believe that it is my job, and furthermore my responsibility, to ensure that students receive the best quality education of which I am capable. As someone who is pursuing a career in higher education, I am forced to reflect upon Pocklington and Tupper (2002) who state “…all university professors must be teachers and researchers, and good research is essential to good teaching” (6). Furthermore, I am made aware of the challenges the lie ahead of me, and all faculties, to publish and achieve promotion and tenure.

Bringing forth this lens, I use a constructivist approach as my theoretical framework. Scholte (2005) explains this perspective more clearly. “…constructivism concentrates on the ways that social actors ‘construct’ their world: both within their own minds and through intersubjective communication with others” (131). Furthermore, a constructivist framework observes how this communication can produce widespread “…understandings of reality, shared norms for social behaviour, and notions of group identity and solidarity. Conversation and symbolic exchanges lead people to construct ideas of the world, rules for social interaction, and ways of being and belonging in that world” (Scholte 2005, 131). Viewing institutions of higher education as a marketplace where the cost of tuition is high, quality education should be received by all students.

When considering methodology underpinning this framework it becomes an intricate and challenging task to implement. “Methodology refers to the manners in which knowledge is

---

4 In this context I use methodology to refer to more than just a science of completing research. I also take up this term within my role teaching my students and aspiring professional within the pre-service program.
Quality Education and the Marketplace

built: that is, the ways that questions are asked; and the principles and procedures of inquiry that are now used to answer the questions posed” (Scholte 2005, 269). Furthermore, “Methodology involves issues both of general approach to knowledge construction and of specific research tools” (269). In considering this methodology within an educational environment, it is possible to envision this methodology as a shift to becoming more critical and analytical, which purposes can be two-fold: students can be taught more holistically and with learning becoming deeper and more meaningful; and for the ability to write and produce better and more research.

Through this framework, I would assert that a quality education can be received by students, with a focus on teaching students to be reflective, critical, and analytical through communication, social interaction, and conversations. How this can be implemented into curriculum, is at the hand of the professor, instructor, and teaching assistant.

Neoliberalism and the Marketplace

It is widely recognized that there is no one or true definition of globalization and many contradicting theories surrounding concerning issues. Raduntz (2005) recognizes that globalization:

…has come to express the phenomenon of the capitalist market economy’s expansion worldwide and its penetration into almost all aspects of social life. The momentum and the changes as a result have caused advocates of neoliberal globalism to interpret globalization in terms of a fundamentally new age in human progress (233).

Concurrently, research recognizes that “globalization has two complementary dynamics: economic globalization through a neoliberal development model that emphasizes the market and a technological revolution that has increased the ubiquity and speed of production and information technologies” (Stromquist 2002, 6). It must then be acknowledged that neoliberalist tendencies reach far beyond the borders of a consumer-supplier relationship, to that of technological advancement. However, considering the scope of this paper, more emphasis will be placed on the market and neoliberalist theories and practices regarding education.

A neoliberalist ideology supports notions of “individualism, consumerism, competition, and minimal governmental interference, which, it is claimed, will induce self-reliance, initiative, and creativity, attributes a marketized education system would promote” (Raduntz 2005, 234). Furthermore, neoliberalism contends that the greater the cost of a product, the greater the value and quality of the product should be consumed5. Raduntz (2005) offers an abstract definition where “…market exchange is conceived as a transaction in which buyers and sellers enter freely into a relationship for the purpose of exchanging useful objects of equal value” (238). More poignantly stated by Olssen et al (2004) “The market ensures rapid response to changes in the allocation of resources and, in turn, the production of goods is responsive to the market demands” (140). Placing this concept within a higher education context serves to broaden the understanding of higher education institutions as a marketplace. Olssen et al (2004) identify the market as “…the central and guiding mechanism which all commercial and interpersonal transactions should be conducted…Such transactions are based on price mechanisms which are seen to contribute to the social order (because they provide a value derived from demand and supply)” (140). This concept applies to a consumer-supplier relationship in that students paying to attend higher institutions are also consumers. Raduntz (2005) suggests that “…globalization and the marketization of education are both interrelated contemporary outcomes of capitalism’s expansionary tendencies, driven by the need to maintain economic growth based on the

5 (Bourdieu 1998; Stromquist 2002; Olssen, Codd and O’Neill 2004; Scholte, 2005)
accumulation and expansion of private capital wealth” (232). This perspective offers little hope to students entering higher education to receive a quality education. While acknowledging “…the capitalist form of the market exchange in its mediating role cannot deal with quality education nor with social, ethical, or equity concerns” (Raduntz 2005, 242), it is my hope as an educator in higher education that students can be taught and receive a better quality education in spite of the capital exchange.

The expectation of students entering and attending university is that students will be taught by knowledgeable professors, so that they may continue in higher education with the desire of achieving a degree. Raduntz (2005) states that “…in the marketization process educators have been marginalized in favour of trainers and business managers” (242). With a deeper understanding that professors may be employed by higher education institutions for their abilities to conduct comprehensive research and not necessarily their abilities to teach, or train, gives new light to the fact that students pay thousands of dollars annually to be taught and receive degrees. This becomes a moot point as many university students are taught by teaching assistants, instructors and sessional instructors (Pocklington and Tupper 2002). This is not to suggest that these particular educators are unqualified or incapable, it goes to support the argument that higher education students are not receiving the quality of education that they have paid for as they are not even being taught by those who are considered specialists and experts within their field.

**Imperialism of Higher Education**

I venture that the teaching versus research nexus between faculties and professors exist from an imperial following of higher education institutions and government, in the struggle to be considered comprehensive. McCulloch (1997) articulates that “the nature of the historical images of schooling has changed. Dominant imagery of education as being ‘safe, domesticated, and progressive’ (that is, as leading towards progress and social/personal improvement) has shifted to become ‘threatening, estranged, and regressive’” (80). The imperialism of this higher education trend can be witnessed on a global level. Altbach (2006) highlights that academe around the globe is greatly affected, and affected differently by these trends. Furthermore that “All the contemporary pressures on higher education, from massification to the growth of the private sector, are characterized as resulting from globalization” (121).

Historically, the status of a university was not solely accredited by the students and professors in attendance. Geiger (2000) observes that engaging in research granted prestige and influential status. The completion of research was becoming an inherent part of higher learning. The belief in the rationality of science had developed specific criterion in selecting what constituted, and furthermore what did not constitute as valid knowledge (Weiler 2001). A system was formulated within the institution in order to monitor publications and research funding. This was in opposition to the early foundations of the university where knowledge and learning was to seek what was already known. The idea that knowledge was something to be ‘produced’ (Weiler 2001; Noble 2002; Pocklington and Tupper 2002) was becoming influential and thus helped to promote the movement of research in universities.

The notion of research spread, from Germany to Britain and was modified to suit the needs of those who used it. Tapper and Salter (2003) in examining the pursuit of scholarship and research, contend that historically research was most strongly embedded in German and

---

6 This statement serves to disrupt the taken-for-granted knowledges of those attending institutions of higher education in that those teaching within higher education, more often than not, have not received teacher training.
Quality Education and the Marketplace

M. Frake

American models of higher education. The German model was also used by reformers like the Oxford and Cambridge administrators of the 1850s to promote a strong professoriate. Their purpose was to support a strong university as a balance to the divisive colleges (Perkin 1984). The British system of higher education, although partially adopting the German model, did not fully acclimatize to the notion of a holistic research-oriented program. Teaching was still valued as an important component of the university within the British model of higher education. Woodside (1958) details that British systems of higher education were in strong opposition to the introduction of organized research and graduate schools into their institutions, on the basis that it would upset teaching. A university could not be a place disseminating knowledge without a teaching component.

The emergence of research can be traced from Germany to Britain and then to the United States. American scholars travelling and studying in Western Europe were adopted in the research-oriented ideal before introducing it to North America. “Aspiring Americans who visited Germany and returned with the phrase ‘scientific research’ on their lips compounded this phrase from elements of German theory and practice which had very different contexts in their habitat” (Vesey 1970, 127). Similar to Britain and Japan, the Americans synthesized what they saw and modified it to fit the needs of American society. Vesey (1970) states that the German notion of ‘pure learning’ became what the Americans referred to as ‘pure science’. This notion had also assumed methodological implications which the German model had often lacked. Thus the notion of scientific research and inquiry became the basis for research in American institutions. The German model was greatly respected by the Americans; however could not be further from the state-controlled and well financed university in Germany than higher education in the United States in the nineteenth century (Perkin 1984). Perkin (1984) furthermore, notes that Americans even down to the interwar period had self-doubts about their higher education when comparing it to the European and German systems in particular.

More specifically, Canadian universities must maintain status for research, publications and government funding. They have been swayed by “…practices and philosophy of higher education in England, Germany, Scotland, and the United States. They have also been shaped by changing democratic ideals, by the imperatives off an expanding economy, and by the forces of bureaucracy and urbanization” (Pocklington and Tupper 2002, 19). Whether this is purely a result marketization of higher education institutions remains questionable, however, its relationship to this process certainly cannot be denied. Furthermore, the effects of globalization on the imperialism of higher education become even more evident. What is interesting is that Canadian universities were shaped by the beliefs of Oxford and Cambridge, which in the nineteenth century did not view research as a university priority. However, Canadian universities were also shaped by American institutions that were charged with doing practical research (Apple 2001; Pocklington and Tupper 2002). Thus with Canada’s physical proximity to the United States, many of their ideals were adopted.

As research became more important to universities on a global level, so too became the quality of research conducted by faculty and students which led to an increase in enrolment. As the need for higher education continued to grow:

…government-funded expansion of education began to occupy a sizeable slice of national budgets, which substantially raised education’s potential exchange value if education systems were to be marketized along the lines of private enterprise. However, the marketization of education was not seriously implemented at national levels until the late 1960s… (Raduntz 2005, 237).
Furthermore, “The conditions favouring the marketization of education have their genesis in the current era…” (Raduntz 2005, 236). The latter part of the 20th century has witnessed a major transformation of the “prevailing order of knowledge production” (Weiler 2001, 25). Weiler states that:

Both the criteria by which we judge the validity and adequacy of knowledge (the philosophical or epistemological construction of knowledge) and the structural arrangements under which knowledge is being produced (the social and institutional construction of knowledge) have been and continue to be profoundly challenged in our time (25).

This trend which has travelled from England, Germany, the United States and finally to Canada, has made such an impact that it has remained current to this day. Money and university status come from research and government funding. Teaching does not appear to fit into this equation. "Teaching and Research in Higher Education"

The role and responsibilities of academics remains questionable. Professors “…are mostly called upon to transmit the received wisdom’ and tend to acquire a vested interest in mainstream interpretations of a given reality” (Appelbaum and Robinson 2005, xiv). However, research is the up and coming phenomenon in higher education and furthermore, what helps to secure promotion and tenure. Pocklington and Tupper (2002) state that “University research, a broad and complex phenomenon, is now said to be the university’s lifeblood, it’s strength, and the basis of its prestige” (79). Where does teaching fit in to this equation? Scholte (2005) writes that “With regard to methodology, the spread of globality has helped to promote new fields of study, new approaches to education, new literacies, and new kinds of scientific evidence” (257). This scientific evidence is aiding in promoting universities, helping them make the link to being comprehensive, and assuring government funding. Furthermore, universities are beginning to house independent research centres that have no link to teaching (Pocklington and Tupper 2002; Olssen et al 2004). I, therefore, question how higher education students are being taught and how they are learning.

The effects of globalization are massive in terms of their impact on higher education. “In the past two decades, globalization has come to be seen as a central force for both society and higher education. Some have argued that globalization, broadly defined as largely inevitable global economic and technological factors affecting every nation, will liberate higher education and foster needed change” (Altbach 2006, 121). I postulate that with this liberation there will be a shift from the rigid belief that higher education is for publication opportunities, to a focus on students and the production and creation of knowledge. Stromquist (2002) declares that “Globalization takes educational systems out of the state of monopoly and into the marketplace. It reorders fields of study according to the needs of the market, increasingly substituting those needs for the traditional search for truth” (15). Moreover that:

While much of the globalization discourse refers to the ‘market’, in reality the market takes on concrete forms as business firms on the supply side and diffuse clients on the demand side. And although the discipline of economics makes a stark distinction between who sells and who buys, often those who sell also shape the mentality of those who buy” (10).

This statement can be used to represent the student body as those who are consumers of higher education. “Academic and professional requirements for graduates increasingly reflect the demands of the globalization of societies, economy and labour markets and thus higher education must provide an adequate preparation for that” (Zha 2003, 248). Olssen et al (2004) interestingly
highlight that education as a private good is seen to be a “tradable commodity in the marketplace for money and status, and hence is seen as used for the advancement of the individual where returns accrue to that individual” (148). These returns are also accrued by higher institutions. Research within itself is a business that brings forth bursaries, government funding, and grants to universities, thus increasing the status of a higher education institution.

The ‘production of knowledge’ has become revolutionary in that the massification of universities and higher education seemingly promote the ideal that because they complete research and receive governmental grants and funding, that this then equates to quality education, and that education is a separate entity from politics and policy. Weiler (2001) states:

A final aspect of the contemporary political economy of knowledge production has to do with the growing commercialization of knowledge in the modern world…This has something to do with the increasing cost of knowledge production and, hence, the dependence of knowledge producers on external financial sponsorship…the support and the production of nature of modern economic activity has become so massively dependent on the up-to-date knowledge constantly increasing scope and complexity that the linkage between knowledge and both productivity and profitability has become inescapable (36).

What becomes clear through this statement is that the ‘production of knowledge’ and the ‘dependence’ upon up-to-date knowledge is only beneficial to the completion of research that of which is meant to bring in more government funding and thus increase the commercialization of the institution itself.

What must be acknowledged moreover is the pressure and competition to research and publish by faculty. The more one publishes the more money and funding one brings to the institution itself. “The level of specialization in research and the size of the investments that are indispensable to certain fields of research and development require collaborative efforts and intensive international cooperation” (Zha 2003, 248). More specifically, the more specialized and publicly acclaimed, the more focus and attention are dedicated to the institution and to the researchers themselves. This is critical to securing promotion and tenure within universities and thus, more incentive to focus on research and publication as opposed to teaching.

…it is the evaluation of scholars, students, research proposals, manuscripts, and publications that determines the principal rewards of academic life; peer recognition, institutional standing and influence, research grants and, most importantly publication…the institution reality of evaluating the quality of scholarship has tended to become a force of retardation and hindrance in the quest for new and better forms of knowledge production (Weiler 2001, 42).

It becomes a question of job security and how it can be achieved is through publication and the building of curriculum vitae. However, with this supposed ‘quest for better forms of knowledge production’, I maintain that knowledge dissemination (teaching) should be a starting block.

**International Students in Higher Education**

The marketplace of higher education has extended beyond the borders of North America. It is estimated that the average full-time international student spends $10,000 to $15,000 per annum on tuition alone (Holyroyd 2006). This being the case, according to theories of marketization, international students should be receiving a higher quality education than their peers as they expend almost twice as much in tuition. This section will briefly explore international students in higher education, trans-border education, and moreover, the notion of internationalization.
Research is a key aspect of an academic’s workload. “Given the centrality of the knowledge economy to 21st century development, higher education has assumed a higher profile both within countries and internationally because of its roles in educating people for the new economy and in creating new knowledge” (Altbach 2006, 122). Knight (1993) poses a very interesting argument in relation to faculty workload and internationalization. He depicts the internationalization of higher education as “the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institution” (21). Scholte (2005) concurs that “A great deal of globality is manifested through communications, that is, exchanges of ideas, information, images, signals, sounds and text” (67). What becomes apparent through these statements is the accessibility of information and furthermore, with this integration of international/intercultural dimensions, the quality of the information being collected is richer and in-depth. This quality of information is what should be taught and passed onto students of higher education, not just for the sole purposes of conducting more research.

It is acknowledged that globalization is continuously growing. “It obligates us to consider institutions that operate beyond national borders…” (Stromquist 2002, 5). “Not since the medieval period have such a large proportion of the world’s students been studying outside their home countries – more than 1.5 million students at any one time” (Altbach 2006, 128). What is extremely interesting to note “…school boards, colleges and universities, strapped for cash and often experiencing strong enrolment pressures, realized that many international students were willing to pay the full cost of their education” (Holyroyd 2006, 2). Furthermore, “As the number of Canadian students at the elementary, secondary and university levels is expected to decline sharply in several provinces over the next few years, universities and school boards are realizing the economic importance of recruiting more international students” (Holyroyd 2006, 1). In preparation of this decline, higher education institutions must market themselves appealingly in hopes of attracting international students. Interestingly, “Most international students pay for their own studies, producing significant income for the host countries…” (Altbach 2006, 128). The notion that education, particularly higher education, is an economic marketplace where students invest their capital in hopes of receiving quality education is reinforced.

Discussion and Conclusion

Much change has been witnessed over the last century regarding higher education. From an era that focussed on teaching to one that views university as a marketplace and a growing economic opportunity, there has been much debate on whether or not university students are being educated or becoming mere agents of research studies and grants. Apple (2001) advises:

In a time of radical social and educational change, it is crucial to document the processes and effects of the various and sometimes contradictory elements of what might best be called ‘conservative modernization and of the ways in which they are mediated, compromised with, accepted, used in different ways by different groups for their own purposes, and/or struggled over in the policies and practices of people’s daily educational lives (411).

Globalization has had a large impact on how and what is mandated in university curriculum, and even how it is delivered by university educators and professors. Stromquist (2002) suggests that globalization should search for an understanding of “…the forces that produce the dynamics and interrelated effects of globalization, and then assess its outcomes not merely on economic productivity and the accumulation of wealth but especially on social outcomes, specifically, who benefits and who does not” (1). I remain questioning if students in higher education are
benefiting from their university experiences, and not just aiding in the ‘economic productivity’ of a university.

What cannot be denied is the consumer-supplier relationship that has become an inevitability of attending a higher education institution. “As a private good, education is seen to be a tradable commodity in the marketplace for money and status, and hence is seen as used for the advancement of the individual where returns accrue to that individual” (Olssen et al 2004, 148). In order for this statement to be true, students in higher education would be receiving the quality of education that they are paying for. What are they accruing besides being ‘producers of knowledge’ they are being trained to be by professional researchers who are labelled ‘higher education professors’? As Altbach (2006) declares:

The powerful universities and academic systems – the centres – have always dominated the production and distribution of knowledge. Smaller and weaker institutions and systems with fewer resources and often lower academic standards – the peripheries – have tended to be dependant on them. Academic centres provide leadership in science and scholarship and in research and teaching. They are the leaders with regard to organizational structure and mission of universities, and in knowledge dissemination (124).

If funding is available to a student wanting to attend higher education, the quality of education from these universities should also be available. However, I find it interesting, that it is these universities that are also the leaders in the completion of research and government funding. I question how students are receiving quality education for their dollars when teaching is secondary to research.

It is much easier to criticize and analyze than it is to come up with reasonable answers in attempt to create solutions to these issues. “We are told by neo-liberals that only by turning our schools, teachers, and children over to the competitive market will we find a solution. We are told by neo-conservatives that the only way out is to return to ‘real knowledge’” (Apple 2001, 409). In reflecting upon the current educational conundrum, I find myself asking more questions and finding fewer answers. Altbach (2006) states that:

We are now in a new era of power and influence. Politics and ideology have taken a subordinate role to profits and market-driven policies. Now, multinational corporations, media conglomerates, and even a few leading universities can be as seen as the new neocolonists – seeking to dominate not for ideological or political reasons but rather for commercial gain (126).

More than anything else, those in higher education need to take a critical look at the current status of the quality of education being delivered. Aside from the high cost of tuition fees, with the globe at our finger tips, students deserve the best quality of education possible so that they can take on the next level of globalization and see to it that this process evolves in a positive, yet very powerful way. Although research is a crucial element, for many reasons, to higher education, it must not continue to be the main objective. Education can no longer be viewed as a market place; instead it should be one of higher learning.
References


Pocklington, T. & Tupper, A. (2002). *No place to learn: Why universities aren’t working*. 55
Vancouver, BC: UBC Press.


Overcoming The Obstacles: Postsecondary Education and Aboriginal Peoples

Jane P. Preston: University of Saskatchewan, Canada

Abstract

For many Aboriginal peoples, trying to acquire a postsecondary education denotes overcoming a multitude of formidable barriers. Within this paper, I discuss the nature of these obstacles, which I classify as: (a) historical; (b) educational; (c) social, economic, and geographical; (d) cultural and pedagogical; and (e) financial. Also within this article, I offer suggestions of how to surmount each of these grave challenges.

Introduction

There are a multitude of obstacles that Aboriginal peoples must overcome if they are to acquire postsecondary qualification. I classify the nature of these obstacles as: (a) historical; (b) educational; (c) social, economic, and geographical; (d) cultural and pedagogical; and (e) financial. Although overcoming these formidable barriers may seem like a daunting task, progress is being made. Advancement in postsecondary programs for Aboriginal peoples in Canada is reflected by the increasing number of Aboriginal peoples who are currently attending and completing postsecondary programs. Within this paper, I discuss the aforementioned obstacles associated with Aboriginal postsecondary education, and I describe various means for overcoming these grave challenges. A thought-provoking point to bear in mind while reading this article is although the following pages specifically address the topic of postsecondary education, much of the information and many of the suggestions are easily transferable to an array of Aboriginal educational landscapes. Within Canadian elementary schools, high schools, trade schools, colleges, and universities, a more enticing, successful learning environment can be offered to Aboriginal peoples by reflecting upon and responding to the key messages portrayed throughout this synopsis of postsecondary education for Aboriginal peoples.

Historical Obstacles

Prior to the 1960s, postsecondary education for Aboriginal peoples was almost nonexistent and, therefore, rarely discussed. Among Aboriginal peoples, the unpopularity of higher education was largely due to the fact that, historically, governmental policies used education as a way to aggressively assimilate Aboriginal peoples into mainstream Eurocentric society (Canada Millennium Scholarship Foundation, 2004; Vickers, 2002). The Royal Commission on Aboriginal Peoples (1996) acknowledged that many of the social problems presently affecting Aboriginal communities can be traced back to the debilitative experience that Aboriginal students faced while in residential schools. From mandatory religious training, to rules which forbade the use of Indigenous languages and cultures, residential schools and their oppressive form of education had devastating effects upon the Aboriginal peoples (Grant, 2004). Even today, many Aboriginal peoples regard postsecondary education as an assimilative-type of coercion; one which forces Aboriginal peoples to fit into a dominant Eurocentric culture (Friesen & Friesen, 2005; Holmes, 2006; Royal Commission on Aboriginal Peoples, 1996).

Overcoming historical obstacles is about self-government. The Royal Commission on Aboriginal Peoples (1996) stated that where Aboriginal peoples have exercised control over their
own education, success rates have improved. Inuit Tapiriit Kanatami (2007) concurred postsecondary programs “…must be bold, innovative, generous and all-encompassing with a focus on successful student learning rather than on the perpetuation of colonial and sometimes rigid institutionalized systems” (p. 3). A number of reports (e.g. Canada Millennium Scholarship Foundation, 2004; Holmes, 2006) confirmed that when Aboriginal peoples self-manage and develop their own Indigenous-focused curricula, enrollment numbers, retention rates, and overall student satisfaction within these programs increase.

To empower the autonomy and voice of Aboriginal peoples, postsecondary educational policies need to welcome Aboriginal leaders, Elders, instructors, staff, students, and community members as integral members of governing, planning, and decision-making committees. On behalf of the Inuit culture, Inuit Tapiriit Kanatami (2007) stipulated that programs need to be developed, delivered, and administered within Inuit communities by Inuit educators. There are additional means of promoting Aboriginal self-determination within postsecondary programs. The availability of Aboriginal counselors help students cope with the constant discrimination and marginalization faced by many Aboriginal people. The presence of resident Elders assists in bringing Aboriginal philosophy and traditional values to the institution. Adequate library resources focusing on Aboriginal issues promote the academic and cultural needs of Aboriginal peoples. Aboriginal gathering centers, which honor guest speakers, social celebrations, and Aboriginal ceremonies need to be readily available for instructors, students, and the school-community.

**Educational Obstacles**

In order for Aboriginal people to enroll in postsecondary programs, they need to complete high school. Of First Nations and Inuit peoples between the ages of 15 and 24, 72.4% of males and 66.5% of females have less than a high school certificate (Hull, 2005). Many Aboriginal children live in small remote communities where the quality of education is often below that received within larger communities. Numerous studies have indicated that the education Aboriginal peoples received in elementary and high schools did not adequately prepare them for a future in postsecondary education (Hull, Phillips, Polyzoi, 1995; Hull, 2000; Nora & Cabera, 1996; Wells, 1997). Lack of study skills, program requirements, and academic knowledge, especially in the areas of Mathematics and Science, also prevent students from entering postsecondary education (Hardes, 2006).

Lack of career counseling and educational role models are other barriers to Aboriginal postsecondary education. Many of the Aboriginal students attending postsecondary institutes are among the first in their families to leave their homes in pursuit of higher education. Often these first-generation, postsecondary students lack mentors to help them with postsecondary educational transitions (Hardes, 2006). Within many remote Aboriginal communities, postsecondary career promotion and information is practically nonexistent (Holmes, 2006). Across Canada, there is a substantial need for more Aboriginal instructors and staff to be employed by universities, colleges, and other postsecondary institutions (Hardes, 2006). In the same realm, Aboriginal faculty members are under-represented in high-profile administrative jobs (Holmes, 2006).

One way to surmount these educational barriers is to acknowledge the diverse knowledge many Aboriginal peoples have and, accordingly, adjust postsecondary requirements. Typically, the acceptance of a student into a postsecondary program is largely dependent upon his/her high school marks (Kvale, 2007). While selection by grade percentages might appear to be neutral in regards to social class discrimination, it is not. The mainstream educational system is built...
around White-dominated, middle-class values and beliefs (Goodman, 2001), and marks attained from participation in school-related activities and assessment procedures are only one dimension of learning. For this reason, admission policies within Aboriginal postsecondary institutions need to be reconsidered to incorporate the life experiences of Aboriginal peoples. As many Aboriginal peoples are experienced in the areas of hunting, fishing, and trapping (Nadasdy, 2001), the collective knowledge they may have accumulated in regards to the contour of the land, the elements of water, and the characteristics and behaviors of birds, plants, animals, and fish, for example, is not something that can be represented within the futile boundaries of a number or mark. Postsecondary acceptance which is wholly dependent upon a grade-point average captures neither the intellect nor the experience of many Aboriginal students.

A simple, but relevant, response to the White-dominated enrollment policies of many postsecondary institutions is to adjust admission requirements such that admission credentials include variegated aspects of Aboriginal knowledge. In turn, for Aboriginal students who are accepted into postsecondary programs, academic supports must be available, if and when needed. For instance, transition-year programs would assist Aboriginal peoples who may not meet general admission standards (Association of Universities and Colleges of Canada, n.d.). The provision of tutors and supplementary workshops after classes facilitate comprehension of content material. Reorganizing the length of programs is another way of dealing with the high academic pressure of postsecondary education. In such a case, a two-year program would be extended over three years (Holmes, 2006).

In an effort to address lack of career direction, postsecondary programs and recruitment efforts for Aboriginal peoples need to have a greater presence within elementary and high schools. In addition, when Aboriginal students arrive at postsecondary institutions, mentoring programs need to be in place to assist new Aboriginal students during their transition into this novel and often intimidating environment (Hardes, 2006). Through a variety of institutionally-sponsored activities, new students can be paired with returning students. As well, as expressed above, it is equally important that postsecondary institutions welcome Elders and other Aboriginal community members to their campuses to serve as student advisors, counselors, guest lectures, and resource personnel (Holmes, 2006). Increasing the number of Aboriginal instructors needs to be a top priority among most postsecondary institutions across Canada.

Social, Economic, and Geographic Obstacles

Aboriginal peoples have long endured a host of unfair social, economic, and geographical barriers, all of which have had traumatic effects upon Aboriginal peoples and their families. Within many Aboriginal communities, housing conditions are sub-standard (Holmes, 2006), and compared to the rest of the nation, infant mortality is double (Friesen & Friesen, 2005). Suicide rates are five to seven times higher for First Nations youth as compared to non-Aboriginal youth; among Inuit youth, suicide rates are 11 times the national average (Johal, 2007). Poverty, unemployment, poor health conditions are stark realities for many Aboriginal peoples (Friesen & Friesen, 2005). As if these horrific manifestations of inequality and discrimination are not detrimental enough to postsecondary success rates, in an attempt to access higher education, many Aboriginal peoples are forced to migrate to urban areas. When arriving in cities, Aboriginal peoples are faced with a myriad of additional challenges including housing shortages and lack of quality childcare (Friesen & Friesen, 2005; Prokop & MacDonald, 2004). As indicated by Holmes (2006), Aboriginal students are more likely than non-Aboriginal students to have dependent children. Obviously, being a student at college or university is far more difficult when simultaneously assuming the full-time responsibility of raising children. Bearing this point
in mind, it is not surprising Aboriginal students who do not complete postsecondary programs state family duties and financial insecurity as the two most powerful deterrents of their success (Statistics Canada, 2007).

One way to deal with the social, economic, and geographic challenges of postsecondary education is by bringing postsecondary education to Aboriginal peoples within their communities. Human Resources and Social Development Canada (2006) explained that community-based programs, synonymous with outreach programs, have the advantage of allowing students to remain in their home communities, while simultaneously maintaining family ties and community support. Inuit Tapiriit Kanatami (2007) acknowledged the many benefits of community-based programs. For example, community-based programs: (a) increase the accessibility of postsecondary education for Aboriginal adults who have extensive family and community commitments, (b) place higher emphasis on the inclusion of cultural knowledge, (c) eliminate cultural shock often associated with moving to urban areas, (d) provide authentic work experiences, and (e) contribute to improved retention rates. A variety of colleges and universities have linked community-based programs with increased enrollments and improved completion rates for Aboriginal peoples (Friesen & Friesen, 2005).

Undeniably, there are many challenges associated with community-based programs. For example, students enrolled in these programs have limited access to primary learner resources and have a more-limited number of course choices. Both of these challenges may easily extend a program’s completion time. Increment weather and harsh roads conditions sometimes cause barriers to the delivery of face-to-face instruction, especially in northern regions of Canada. Furthermore, traveling time of college or university educators raises concerns when determining the overall workload of instructors (Human Resources and Social Development Canada, 2006). Due to such realities, wherever possible, it is important that various community-based courses be collaboratively offered by a variety of postsecondary institutions, and that credits for these courses are transferable across various institutional domains. Wherever possible, Aboriginal educators from local communities can assist in the instruction and delivery of the program. In addition, allowing free use of community facilities for the delivery of instruction is accommodating for community-based programs (Human Resources and Social Development Canada, 2006).

For Aboriginal students who are forced to move to larger areas to acquire their postsecondary education, the provision of family housing, daycare on campus, and transportation for any dependents attending elementary and high school would assist in alleviating some of the problems associated with migrating from rural and remote areas (Hardes, 2006; Prokop & MacDonald, 2004). As well, counseling facilities, offices for Elders, and meeting rooms for Elders, guest speakers and students address some of the cultural and social needs of Aboriginal students who leave their homes in search of higher education (Association of Universities and Colleges of Canada, n.d.).

**Cultural and Pedagogical Obstacles**

The language, learning styles, teaching styles, communication modes, and cultural patterns that are reflected within most postsecondary institutions differ greatly from the traditional pedagogy of Aboriginal peoples. For many Aboriginal peoples, English is not their first language. In 2006, 50% of the Inuit population reported Inuktittuk as their mother tongue, while 51% of First Nations people living on a reserve conversed in their Indigenous language (Fitzpatrick, 2008). Few postsecondary institutes provide instruction in an Indigenous language (Hardes, 2006). In addition, the mainstream educational practices of many colleges and
universities epitomize learning as an experience largely involving competitiveness, individuality, status projection, and judgment (Gorman, 1999). Conversely, Aboriginal pedagogy prioritizes learning that is acquired through cooperation, storytelling, group discussion, demonstration, modeling, and observation (Gorman, 1999; Hardes, 2006). The holistic style of Aboriginal education incorporates practical, spiritual, physical, and emotion knowledge, passed on from the Elders to the rest of the community (Hardes, 2006; Inuit Tapiriit Kanatami, 2007). The concept of assessment is also viewed differently within Western cultures as compared to Aboriginal cultures. Formative test-taking measures and teacher-focused feedback are often the predominant types of assessment strategies utilized within mainstream postsecondary education (Kvale, 2007). Conversely, as explained by Louise Legare, an instructor at the Indian Teacher Education Program at the University of Saskatchewan, the assessment of Aboriginal students incorporates a dimension of self-reflection and self-growth, which is an extremely personalized process, manifested within the spiritual, emotional, intellectual, and physical realms of each student (L. Legare, personal communication, February 4, 2008).

To overcome the cultural and pedagogical obstacles of postsecondary education for Aboriginal peoples means that Aboriginal culture, values, and educational pedagogy needs to be incorporated into program content and delivery. Successful programs are those which build upon the needs of Aboriginal peoples and their communities, and, therefore, whenever possible, course content should be connected to relevant issues reflected within local Aboriginal communities (Friesen & Friesen, 2005). Non-Aboriginal instructors must be cognizant of the pedagogy of Aboriginal education and utilize a variety of student-focused, cooperative teaching strategies such as learning circles, storytelling, journaling, field trips, and peer tutoring (Friesen & Friesen, 2005). Wherever possible, student participation should be voluntary (Friesen & Friesen, 2005; Hardes, 2006). Postsecondary Aboriginal programs need to emphasize experiential learning as reflected with practicum, cooperative, or work-place experiences. Such opportunities promote hands-on learning, the practicality of learning, and the applicability of knowledge, all of which are valued by Aboriginal peoples (Hardes, 2006). As well, when trying to overcome cultural and pedagogical obstacles of First Nation and Inuit postsecondary education, the participation and presence of Elders cannot be overestimated. Elders add a rich dimension of cultural, emotional, and spiritual wisdom to any postsecondary program (Inuit Tapiriit Kanatami, 2007).

Financial Obstacles

Attending university is expensive. Despite costs, approximately 50% of all Canadian postsecondary students go through school without accumulating a significant debt (Holmes, 2006). This point is largely due to the fact that many students assume part- or full-time employment, have scholarships, and/or rely on the financial support of their families. The other half of postsecondary students who do incur debt, take out various types of loans and/or are employed (Holmes, 2006). Specifically, many Aboriginal postsecondary students encounter higher costs while assuming postsecondary education. For example, many of the Aboriginal students who move to the cities for their higher education face additional costs associated with travel, accommodation, and childcare (Holmes, 2006). Compounding these personal difficulties, many Aboriginal students do not rely on financial support from families. Although Aboriginal peoples are eligible to receive federal funding from the Post-Secondary Student Support Program (PSSSP), a number of issues must be addressed by these aspiring students before funding is secured. First, to receive this financial assistance (which is granted by Indian and Northern Affairs Canada), a prospective student must be a registered member of a band. Funding is then subject to band council approval (Indian and Northern Affairs Canada, 2000). Because of
location, individuals living off-reserve often have additional challenges when securing finances (Holmes, 2006). Furthermore, a student who receives government support from his/her band is generally ineligible for any other federal and provincial loans (Holmes, 2006).

To make matters worse, although the number of Aboriginal students attending postsecondary institution is increasing, the number of Aboriginal students being funded is decreasing. In 1995-96, 27,183 students were funded by Indian and Northern Affairs Canada, as compared to around 25,000 in 2000-01 (Holmes, 2006). The Assembly of First Nations estimated that more than 8,000 eligible students did not get any funding during the 2000-01 school year (Holmes, 2006). For the 2007-2008 school year, the Ontario Native Education Counselling Association (2007) stated that close to 3,000 Aboriginal students were denied funding for postsecondary education. Lyle Whitefish, Vice Chief of the Federation of Saskatchewan Indian Nations, commented, “There is a wait list on every reserve of students wanting to continue on past grade 12 and [due to lack of funding] we can’t accommodate them all” (Warnyca, 2008, p. 10).

In addition to the lack of available funding for students, most of the Aboriginal institutes, themselves, are insufficiently funded (Human Resources and Social Development Canada, 2006). Why is this the case? First, understanding which level of government has jurisdiction and responsibility for funding Aboriginal postsecondary education is not a clear-cut endeavor. The federal government claims that postsecondary education clearly falls under the auspices of the provincial government; the provincial government views funding arrangements as a responsibility secured within federal realms (Stonechild, 2006). As a result, many First Nation postsecondary programs are either funded inadequately or are not funded at all. In Ontario during the 2007-2008 school year, Aboriginal postsecondary institutions received as little as $1,527 per student, as compared to an average of $9,669 per student in mainstream colleges and universities (Ontario Native Education Counselling Association, 2007). Exacerbating these challenges, the cost of classes for Aboriginal students as compared to mainstream classes is often higher (Human Resources and Social Development Canada, 2006). The higher expenditure associated with Aboriginal classes is, in part, due to lack of Aboriginal resources and lack of infrastructure (Associate Universities and Colleges of Canada, n.d.)

To successfully address these financial obstacles, the federal and provincial governments must ensure sufficient finances are available to all Aboriginal students who wish to receive postsecondary certification. As well, in an effort to meet program goals, federal and provincial governments need to provide adequate funding to Aboriginal postsecondary institutions. In order for postsecondary institutions to fully meet the specialized needs of Aboriginal students, the operational capacity of Aboriginal institutes needs to be improved. For example, increasing library resources, improving and developing infrastructure, and creating additional Aboriginal-focused curricula (Associate Universities and Colleges of Canada, n.d.) are imperative to improve the quality and success of postsecondary programs. In addition, application and funding procedures for postsecondary education are often a tedious bureaucratic task, involving layers of federal and provincial/territorial governance departments. This administrative burden must be eased for Aboriginal peoples (Assembly of First Nations, 2005). Increasing the quality and quantity of various scholarships, bursaries, and other financial aids sponsored by governments, postsecondary institutions, and community organizations can also make a huge difference to those Aboriginal students in need of extra finances.

**Concluding Remarks**
Between 1996 and 2006, the Aboriginal population within Canada grew six times faster than the non-Aboriginal population (Statistics Canada, 2008). While the number of Aboriginal peoples with postsecondary qualifications has increased over the past decade, the attention, energy, and finances devoted to improving postsecondary education for Aboriginal peoples need to be ranked as a higher priority among Canadian leaders. The urgency of and the benefits from endorsing postsecondary education for Aboriginal peoples is supported by additional statistical information. As compared to non-Aboriginal people, Aboriginal peoples have lower levels of postsecondary certification (Hull, 2005), higher rates of unemployment (Statistics Canada, 2005), and below average incomes (Indian and Northern Affairs Canada, 2004). Advocating increased postsecondary education for Aboriginal peoples is advocating an invigorating, fortifying future for Aboriginal peoples, their families, and their communities.

The promotion of the spiritual, emotional, physical, and academic well-being of Aboriginal peoples in Canada requires vast improvements to postsecondary education. In order for Aboriginal peoples to be able to overcome a multitude of obstacles which weaken prospects of educational success, the programs, themselves, must be specialized to conscientiously meet the needs of Aboriginal peoples. Postsecondary education and training programs need to be innovative, supportive, and empowering for Aboriginal peoples. Aboriginal self-governance in postsecondary institutes is an important component which contributes to the success of postsecondary education for Aboriginal peoples. Fortunately, progress is being made in this area as Indigenous governments and leaders continue to assert autonomy within postsecondary education. Such advancement, however, is often hampered by lack of recognized self-governance from federal/provincial organizations and by lack of adequate funding, both of which are critical for the promotion and sustainability of Aboriginal educational systems.

Aboriginal students who aspire to succeed in postsecondary institutes must be supported by a variety of initiatives. For example, career advice in middle school and high school, transitional supports in postsecondary institutes, the presence of Elders, Aboriginal resources, Aboriginal instructors and staff members, community-based programs, and curricula and pedagogy reflective of Aboriginal cultural beliefs and values must be prioritized initiatives within Aboriginal postsecondary education. In order to achieve these results, once again, it is vital that adequate finances be supplied to and ease of access to funding be improved for Aboriginal students and postsecondary institutes. Generous investments of time, money, and effort need to be continually and increasingly devoted to existing and new Aboriginal postsecondary programs, thereby improving the wellness and prosperity of our entire nation.

Author Note
Acknowledgement is warmly extended to the Saskatchewan Ministry of Education and the Canadian Council on Learning’s Aboriginal Knowledge Center for providing support to write this article.

References
Overcoming The Obstacles


Overcoming The Obstacles


Martial Arts, Violence, and Public Schools

Chunlei Lu: Brock University, Canada

Abstract

Martial arts have become one of the most popular physical activities amongst children and youth worldwide; however, there are concerns among Western parents and school administrators that including these activities in school programs may lead to incidents of violence. Others, however, maintain that this is a concern caused by the false image of martial arts (as propagated in entertainment and pop culture), and stemming from an ignorance of the true values promoted by legitimate Asian martial arts practitioners. This paper explores the philosophical and theoretical concepts upon which Asian martial arts disciplines are founded, and provides ample research to reveal that martial arts as practiced in Eastern tradition de-emphasize violence, competition, and combat. Further, this paper illustrates that practicing martial arts in line with Eastern precepts of martial virtue, promotes a healthy active lifestyle, and can in fact discourage, rather than encourage, incidents of violence at schools.

Introduction

While martial arts have become one of the most popular physical activities amongst millions of children and youth around the world (De Knop, Engstrom, Skirstad, & Weiss, 1996), there have been concerns among Western parents, teachers, and school administrators that violence could potentially arise in schools and communities as a result of teaching martial arts in school programs (Lu, 2004). The *Journal of Physical Education, Recreation, and Dance (JOPERD)* (an influential journal in the Western physical education field) discussed the question “Should martial arts be taught in physical education classes?” in its November/December 2000 issue. Illustrating the prevalence of this controversy, the forum was eagerly taken up by critics who expressed serious concerns regarding potential violence or discipline problems associated with introducing martial arts to schools; these concerns were just as readily contradicted by proponents of martial arts who had research evidence to support their arguments that violence and martial arts do not commonly go hand in hand. In contrast, martial arts in the East, whence they originated, have long been a required component in physical education curricula in, for example, China and Japan; and millions of people of all ages always practice martial arts on a regular basis (Lu, 2004; Sasaki, 2006). This paper will examine the reasons for perceived violence associated with martial arts, the theoretical foundation of martial arts, and the function of martial arts in reduction of violence. The purpose of the paper is to equip school educators (e.g., health and physical educators) with legitimacies to integrate martial arts into their programs in order to assist children and youth to reduce violence, enhance moral development, and foster a healthy active lifestyle.

What are martial arts?

Generally speaking, martial arts are a system of codified combative movements intended to defeat an opponent or to defend oneself from physical threat. While there are many types of martial arts practiced world-wide, Eastern or Asian martial arts are
regarded as the most influential, in particular, the Chinese, Korean, and Japanese martial arts (e.g., judo, karate, taekwondo, taijiquan, wushu) that distinguish themselves with their theoretical foundation of Eastern philosophies. Most Eastern martial arts originated in China (Theeboom & De Knop, 1999) and draw heavily upon Chinese philosophy (Johnson & Brown, 2000; Kauz, 1977). Not to be confused with what in the West may be perceived as “physical” activities, Eastern martial arts are instead “philosophical” and “mindful” activities, and are regarded as moving philosophies. In the contemporary world, these Eastern martial arts are the predominant forms in commercial and public school martial arts programs.

**Why are martial arts associated with violence**

There are two potential reasons behind the concern that teaching martial arts fosters violence: ignorance, resulting from the lack of knowledge of the nature of martial arts; and misunderstanding, due to misleading representations of the Westernized martial arts through commercialized media. For instance, movies and television have been accused of disseminating the negative, violent image of martial arts, while simultaneously being credited for popularizing them. Commercialization paved the way for martial arts to take their featured place in show business, but has brutalized and distorted their image in the process (Cox, 1993). Full-contact Karate is a perfect example (Forster, 1986), and the transition of the martial arts to martial “sport” adds another negative impact (see more information in the section of “Modern Westernized Eastern martial arts” below). In addition, the very words “martial arts,” to many people, literally translate as “fighting skills” (the word “martial” derives from the name of Mars, the Roman god of war). As early as the 1970s, Min points out that the initial popularity of martial arts is perhaps not hard to account for since the blatant commercialization of these arts by magazines and the movie industry has had the effect of a massive advertising campaign. The resulting popular image of the martial arts, besides being ridiculously inaccurate, tends to appeal to people’s violent and egotistical impulses. The martial arts expert is pictured in the mass media as a sort of superman who breaks bones with the greatest of ease and who is continually confronted with situations in which it is (or so the entertainment industry would have us believe) morally right to do so. The martial artist depicted in films, however, belongs to fantasy rather than reality. (1979, p. 101-102)

In contrast, martial arts in the East are not seen as a potentially violent pursuit but rather as a philosophical one. Some influential branches of martial arts have specific rules concerning which body parts can or cannot be attacked, and actual combat is the very last choice. When combat must regrettablly occur, martial artists should choose to retreat, or to simply subdue the opponent, avoiding harm or fatality. These codes and virtues illustrate clearly that, in the East, martial arts are not learned for the purpose of fighting. For Easterners, these formulae are clear and familiar truths; for many Westerners, however, they are unfamiliar and bewildering (Herrigel, 1989).

**Theoretical foundations of Eastern martial arts**

Although the styles, branches, and forms might differ, the intrinsic values, ethics, and virtues for all traditional Eastern martial arts are the same (Levine, 1984; Schmidt, 1986). Eastern martial arts are rooted in the Eastern philosophies, mainly Daoism.
Martial Arts, Violence, and Public Schools

C. Lu

(Taoism in English), Confucianism, and Buddhism (Xu, et al., 1996). In order to truly understand martial arts and their application to physical education, one must be aware of the philosophical principles upon which they are based. The main ones are: Dao, Ren, Li, He, universe-human oneness, and martial virtue. In what follows, each of them will be explained briefly.

**Dao (道)**

Many readers may be familiar with Eastern martial arts that end with the Chinese suffix, “dao” (or “do”), (e.g., Japanese “judo” and Korean “taekwondo”). “Dao” in Chinese literally means way, path, road, regulation, or law. In traditional Eastern culture, what really matters is the “way” (process) of achieving a goal and not the goal itself—“One is a martial artist only to the extent that one is always striving to become a better martial artist” (Monahan, 2007, p. 49). As such, Dao, as a “way” to truth, is a fundamental concept in Eastern philosophies and frequently used in Daoism (or Taoism), Confucianism, and Buddhism. Eastern martial arts also employ Dao as a “path” toward enlightenment and finding truth (Brown & Johnson, 2000; Lu, 2006).

As Lao Zi explains, the “Dao” gives birth to Yin-Yang and eventually to everything in the universe. To Lao Zi, “Dao” is the “oneness” (Lao, 1994) and appears in the form of Qi. Everything in the universe originates from Qi (also called Yin-Yang Qi), and is the product of the change of Qi. In traditional Chinese philosophy, humans and nature are ingredients of an integral wholeness, which is regarded as the “human-nature integral view” (see more details in the section, “universe-human oneness” below). Fundamentally, everything in the universe—including human life—derives and evolves from the same root: Dao. Therefore, Dao is “one” that cannot be separated. (Martial Arts Administration Center, 1998)

Independent of human will, Dao exists in the universe as well as in every human being. As Cohn (1993) observes, the pursuit of traditional Eastern physical activities (e.g., martial arts) is an active step taken toward the Dao. These activities aim to:

- make the body healthy, to extend its life span, and to open it up to the free flow of Tao. The Tao in its tangible form on earth is cosmic energy or Qi (Chi), a term hard to define and for which ‘energy’ is no more than a crude approximation. Qi is the vital power of the Tao at work in the world in nature, in society, in the human body. (p. 133)

According to traditional Chinese medicine, the fundamental cause of disease is violation of the Dao. Therefore, the treatment requires one to conform him/herself to the Dao and balance his/her Yin Qi and Yang Qi. The role of traditional martial arts is precisely to circularize, adjust, and balance Yin Qi and Yang Qi, and to eventually direct practitioners to a simple, natural, and healthy way of life—a oneness and harmony among all Yin-Yang relations (Lu, 2006).

**“Ren” (仁), “Li” (礼), and “He” (和)**

Due to its great influence on Eastern society, Confucianism is central to Eastern martial arts in terms of value orientation and ethical judgment. The core of Confucianism is “Ren,” which becomes the central spirituality of “martial virtues” or “martial morals.” “Ren” can be interpreted as benevolence, humanity, or kindheartedness—a principle
which suggests handling all human relationships using honesty, tolerance, respect, friendliness, sincerity, and love (Xu, et al., 1996).

“Ren” is emphasized and promoted within the constitutions and regulations in martial arts schools. Masters of Eastern martial arts follow the saying “there are no martial arts without virtues” (艺无德不立 in Chinese) (Jiang, Chen, Chen, Li, Sun, & Qin, 1995, p. 64). It is a common practice for masters to focus on the enhancement of students’ virtue and to pass on the finest and rarest knowledge and skills to the selected disciple who best demonstrates these virtues in daily life. Masters would rather let their superior martial arts become extinct than promote students with poor virtues (which is called 宁可失传, 不可轻传 in Chinese). Hence, in the practice of martial arts, “Ren” must always come first.

When Confucian thought departs from “Ren” and branches into combat and competition, “Li” (i.e., a conceptual system of courtesy, etiquette, and norms) must be applied. Confucius himself, in fact, discouraged competitions; however, when a competition must occur, it should be normalized by “Li” along with the principles of “Ren” (Xu, et al., 1996). Let us recall that the “Ren” ethic in Eastern martial arts is the manifestation of the pan-harmonious ethical thought, which refers to the value judgment which should ideally consider the concerns of the universe, nature, and humans on an equal basis (Xu, et al., 1996, p. 93). In fact, harmony in Chinese is directly associated with the concept of morals. Moreover, the core of the value judgment is “He” (harmony), and it is always the principal consideration because, as Lao Zi (sometimes written as Lao Tzu or Lao Tse), the founder of Daoist philosophy, claims: “All things bear the negative represented by Yin and face the positive represented by Yang; these two mingled in balance and created harmony” (Yang, 1987, p. 105). Confucianism regards “harmony” as the root of creation, and the prime element for the development of everything in nature.

In contrast to Western physical activities and sports that emphasize competition and seek personal value and identity through comparison, Eastern martial artists pursue harmony in the self between parts of the body, between breath and movement, and between body and mind. Harmony between the self and others, on the one hand, and between the self and the universe (including nature), on the other hand, is also highly valued (Lu & Yuan, 1991). Moreover, martial arts instruct that harmony within the self is Zhen (truth), harmony between the self and others is Shan (benevolence), and harmony between the self and the universe is Mei (beauty). As it is of universal importance, the concept of “harmony” is the highest principle in ethical framework of martial arts (Xu, et al., 1996).

**Universe-human oneness (天人合一)**

“Universe-human oneness” is believed to be the lofty realm referred to in Chinese philosophies to which all students of the Dao aspire. This concept teaches first that the universe and human beings are originally one and the same thing. Second, it instructs that the ideal or ultimate goal for humans is to consciously reach that “universe-human oneness” state where there is no difference between the self and anything else, and no separation between the inside and outside self (Jiang, et al., 1995). For martial arts practitioners, attaining the “universe-human oneness” is to access the oneness of Dao, harmony, and one’s own heart and true self (Jiang, et al., 1995). For this, there seem to be two stages that secular practitioners must experience: from big self (i.e., self identity) to
small self (i.e., the self as a diminutive part of nature as a whole); and from the small self to no self (i.e., the self as nature, and nature as self). This is why it is essential to practice martial arts outdoors, exposed to nature’s changing seasons and various weather conditions.

As pointed out by Abernathy (1995), ancient Eastern cultures view nature as a source of inspiration or a model of being. In this, it becomes important to strengthen one’s internal Qi (air and energy) by exchanging Qi inside and outside the body by developing the self-to-nature relationship. As a matter of fact, this is considered to be more critical to learning martial arts than merely developing the external techniques. Martial artists are not considered fully disciplined until their internal, external, body-mind and martial virtues and skills are developed. “Ren”, “Li”, and “harmony” are all conceptual means to assist practitioners to find Dao toward this ‘universe-human oneness’.

**Martial virtue (武德)**

Another principle in martial arts training is called, “內 (inside) 外 (outside) 兼 (both) 修 (cultivating)”. “Inside” refers to morals, mind, or spirit; “outside” refers to physical strength or skills (Xu, et al., 1996). In Eastern martial arts, the external forms and skills can be taught; the artistic conception, however—the spirit, and the essence or the true meaning of the Dao in Eastern martial arts—can only be perceived from within (Xu, et al., 1996). Therefore, although it is essential to master the appropriate physical movements and martial skills, it is also crucial to train the mind or spirit by cultivating Qi. Without the “inside” training, the physical movement becomes futile. That is why martial arts practitioners are able to demonstrate morals such as respect, self-control, and self-discipline. Good morals stabilize one’s emotions which, in turn, greatly benefit one’s physical abilities and enhance one’s overall martial arts learning. This integration of physical strength, Qi, mind, and spirit is a highly unique approach among physical activities and sports (Jiang, et al., 1995; Xu, et al., 1996).

What emphatically sets Eastern martial arts apart from Western physical sports is that the emphasis is placed on “martial virtues” rather than martial technical skills and abilities. In the East, practitioners are compelled to cultivate both internal morals and external physical strength and martial skills (Lu & Yuan, 1991), and martial arts are considered to be an essential method of improving moral character. The ethical concept of Eastern martial arts is employed to regulate martial artists’ actions and behavior in all aspects of life, and students’ moral qualities are considered as a prerequisite for learning martial arts (Xu, et al., 1996). In this regard, many martial arts schools have explicit regulations about not accepting students who have certain undesirable moral problems (e.g., a desire for social destruction, aggressiveness, addiction to alcohol, boastfulness, financial greed, lack of diligence, a deficiency in loyalty or filial piety). Students in martial arts schools are guided to be respectful, self-controlled, self-responsible, and modest, and must live a simple and frugal life (Kauz, 1977). Therefore, being “engaged in martial arts promotes good moral character, promotes nonviolent attitudes and behavior, and leads to enlightenment” (Back & Kim, 1979, p. 19).

In addition to the influence of Confucianism and Daoism, Buddhist principles—such as respecting the liberty of all living things, and having a merciful and benevolent spirit—also have considerable impact on Eastern martial arts. The Shao Lin Buddhist
temple, for example, has become synonymous with one of the most influential martial arts in the world. Representing the Ren thought in martial virtues, many Shao Lin martial arts masters stress employing virtues, rather than combative techniques or skills, to overpower and persuade an opponent (“大义服人,以德感人,先礼后兵” in Chinese). This parallels the teachings of Sun Zi, founder of the military school of philosophy, who advises that the highest level in combat is attained by overpowering one’s opponents without fighting (Xu, et al., 1996).

When fighting is unavoidable, the non-violent disposition of Eastern martial arts dictates that an opponent’s attack should not be resisted, but rather tactically re-maneuvered in order to induce the attacker to lose his or her balance—a technical defeat. Further, this should be done with such finesse and delicacy that the attacker does not feel humiliated. The martial artist should not focus on being a winner, but show sincere courtesy and help the attacker get back on his or her feet. This scenario precisely demonstrates the virtues of “Ren”, “Li”, and “He” that a true martial artist possesses.

Martial arts are also considered as “a philosophy based on the belief that a sound mind is achieved through the development of a virtuous character” (Cerny, 1981, p. 49), and a high code of honor must be upheld at all times. As Schnurnberger (1987) reveals, there is a recognizable cultural philosophy that is a part of martial arts. It is impossible to be deeply involved in martial arts and not be affected by the philosophy of nonviolence, of respect for your self and your opponent and the emphasis of becoming all you are capable of being” (p. 152).

Kauz (1977) also identifies the following components in Eastern martial arts virtue: 1) respect for life and nature, 2) Wu Wei (non-action), 3) moderation and balance, 4) education for training of one’s character, 5) filial piety and conformity to the social order, 6) and transcendental spirit and enlightenment. Therefore, Eastern martial arts are a means to foster peace and moral education (Brawdy, 2001)—purposes which are quite the opposite of the way these arts are frequently portrayed in Western media. In fact, when examining the objectives and benefits listed in legitimate martial arts schools, it is apparent that their programs teach virtues such as respect, self-control, self-discipline, courage, caring, fidelity, integrity, and prudence through the training of self-defense (as well as other by-products such as concentration, fitness, relaxation, self-esteem, positive attitude, and stress management).

**Modern Westernized Eastern martial arts and deemphasized moral education**

Unfortunately, many modern martial arts, as practiced in the West, focus upon the Western value of physical competitiveness, with little or no emphasis on Eastern philosophy, meditation, mental discipline, or character development (Konzak & Klavora, 1980). Back and Kim (1984) point out that Eastern martial arts are taught differently in the East and the West: elements indigenous to Eastern martial arts, such as spiritual development, are ignored by many Western practitioners and replaced with full contact training and a focal point of “winning”—a misled application of true Eastern martial arts. This is evidenced in the Yellow Pages advertisements of many commercial martial arts schools, which emphasize how many champions they have produced in various competitions.

Of course, this tendency to apply the “champion” mindset to one’s pursuits is common practice in the West and there is plenty of sports dogma to back it up. In fact, a
widely-quoted sports adage attributed to the American football coach Vince Lombardi holds that “winning isn’t everything, it’s the only thing”—a sentiment which succinctly captures the status that product holds over process in Western culture. Whereas victory is easily measurable when there is a medal or trophy attached to it, virtue as it is perceived by Eastern martial artists is more abstract, and may be more difficult for Western students to identify as an attainable goal.

The fact that many martial arts instructors do not support the addition of Eastern martial arts as Olympic sports is an example of their attempts to resist Western influences on the Eastern arts. These instructors feel that the Eastern martial arts should be practiced as a way to develop self-discipline, virtue, and health, so as to attain enlightenment and spiritual goals. Combative is only a means, not the goal itself. From this perspective, therefore, it appears absurd to try to achieve a real martial arts master’s level using the Western concepts of “black belt” winners or combat champions.

These instructors’ concerns are valid, because the format of competitive Eastern martial arts has in fact been substantially sportized. For example, Judo, Karate, Kung Fu (Wushu), Taekwondo, and many other martial arts have been redesigned to conform to Olympic “ideals.” As a result, many of today’s martial artists are similar to gymnasts, searching for an aesthetic in public exhibition and hunting for medals. Needless to say, this is a complete departure from the philosophical root of these arts which promotes self-enlightenment and a progression towards the Dao.

**Martial arts as a way to reduce violence in public schools**

Current physical education curricula are moving toward the development of students’ necessary knowledge, skills, and attitudes that will lead to an active healthy lifestyle. A healthy lifestyle, furthermore, implies non-violence. Integrating martial arts with an Eastern philosophy into physical education programs may have several benefits. In addition to adding new vocabularies and broadening the spectrum of activities in school, martial arts incorporate knowledge and skills that can be integrated into one’s lifelong repertoire and can help students become more mindful, reflective, deliberate, thoughtful, and disciplined.

In response, scholars and other educational professionals have proposed the inclusion of self-defense in Western school curricula (Carleton & Chen, 1999; Lu, 2006; Reilly & Friesen, 2001; Taylor, 1997). Carleton and Chen (1999) argue that “the unique contributions of physical and motor skill development within the school curriculum provided by physical education identifies these classes as the logical place for developing and teaching a self-defense unit” (p. 33). Currently, a self-defense unit usually integrates a variety of applied martial arts that provide multiple benefits: in addition to learning self-defense skills and strategies, students learn to foster better health, tranquility, cultural awareness, self-esteem, self-control, fitness, self-confidence, concentration, and gender equity (Kwak, 1997; Lu, 2004; Reilly & Friesen, 2001).

Also, I would be remiss were I not to mention the reality of school violence. A recent study by the National Center for Education Statistics (2006) of the United States Department of Education indicates that the percentage of public schools in the United States experiencing one or more violent incidents increased from 71% to 81% between the 1999-2000 and 2003-04 school years. In 2003-2004, roughly 88% of public schools reported a total of 2.1 million crimes—a rate of 46 crimes per 1,000 students enrolled in 2003-2004. More than a quarter of the student population aged 12 to 18 years old (28 %)
reported being bullied at school during the six months prior to this study. In Canada, the youth crime rate increased 3% in 2006 (Statistics Canada, 2007) and more than 40% of school boys and 20% of school girls reported that they had bullied others in the two months preceding a study by Pepler, Craig, Connolly, Yuile, McMaster, and Jiang (2005). Evidently, dealing with violence has become a serious issue in schools and in our society. Contrary to what may be thought, martial arts can be employed as a self-defense, as the mere fact of knowing martial arts may deter both the martial artist (the student, in this case) and possible attackers from engaging in a fight; in the case of the former, because he or she may feel more secure and know what to do to avoid the fight; in the case of the latter, because the mere knowledge that their “prey” knows martial arts may make them think twice about instigating a confrontation.

In other words, learning martial arts also helps at-risk children and youth through the core virtues of Eastern martial arts and martial education—a claim that has been supported by a number of studies (Blowers, 2007; Berry, 1991; Demoulin, 1987; Edelman, 1994; Glanz, 1994; Hellison, 1978; Mendenhall, 2006; Twemlow & Sacco, 1998). Coincidentally, children and youth who planned to acquire martial arts training as a means of learning fighting techniques changed their attitudes because “the first thing which a student who seriously studies the martial arts discovers is that they involve an enormous amount of discipline and hard work” and “the second thing that is discovered is that far from turning one into an engine of destruction, oriental combative sports/arts develop self-control” (Min, 1979, p. 102). It has also been observed that students who studied martial arts did not get bullied anymore, not necessarily because they used martial arts to protect themselves or to frighten bullies, but because they transformed themselves in terms of enhancing their self-esteem, confidence, and demeanor through learning martial arts (Cox, 1993; Lu, 2004).

Conclusion

In the introduction to Herrigel’s Zen: In the art of archery, Suzuki suggests that Eastern martial arts “are not intended to be for utilitarian purposes only or for pure aesthetic enjoyment, but are meant to train the mind; indeed, to bring it into contact with the ultimate reality…The mind has first to be attuned to be the Unconscious…One has to transcend technique so that the art becomes an ‘artless art’ growing out of the unconscious” (Herrigel, 1989, p. vii). Learning and practicing martial arts will not increase the aggression of violence; rather, it will enhance one’s awareness of violence prevention and allow one to react calmly and without panic. This is evidenced in numerous empirical studies and, more importantly, anchored in the theoretical foundations of Eastern martial arts. Eastern martial arts represent the Eastern philosophy of Dao that strives for the harmony of self with the universe as an ultimate goal. This is in complete opposition to comparison or competition for the sake of self-realization or self-identity. Martial virtues, primarily rooted in three schools of thought (Buddhism, Confucianism, and Daoism), allow practitioners to develop as true human beings with love, sincerity, and self-discipline. Thus, Eastern martial arts are a powerful pedagogical means to strengthen social harmony and simultaneously enhance the virtue of people and their understanding of nature, the self, and life. As such, martial arts may be an invaluable useful resource in public schools.
References


National Center for Education Statistics. (2006). Indicators of school crime and safety:


**Table: Terms in Chinese characters and translation used in the article**

<table>
<thead>
<tr>
<th>Terminology</th>
<th>Chinese Characters</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dao (aka, Tao)</td>
<td>道</td>
<td>• the “way” or “path”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• law or regulation of the universe</td>
</tr>
<tr>
<td>He</td>
<td>和</td>
<td>• harmony</td>
</tr>
<tr>
<td>Li</td>
<td>礼</td>
<td>• system of courtesy, etiquette and norms</td>
</tr>
<tr>
<td>Mei</td>
<td>美</td>
<td>• beauty</td>
</tr>
<tr>
<td>Qi (aka, Chi)</td>
<td>气</td>
<td>• energy, life force, air</td>
</tr>
<tr>
<td>Ren</td>
<td>仁</td>
<td>• virtues, morals (e.g., humanity, kindheartedness)</td>
</tr>
<tr>
<td>Shan</td>
<td>善</td>
<td>• benevolence</td>
</tr>
<tr>
<td>Wu Wei</td>
<td>无为</td>
<td>• non-action, action without action;</td>
</tr>
<tr>
<td>Yin-Yang</td>
<td>阴阳</td>
<td>• two mutually interdependent opposites (e.g., moon/sun, female/male, cold/warm)</td>
</tr>
<tr>
<td>Zhen</td>
<td>真</td>
<td>• truth</td>
</tr>
</tbody>
</table>
Aboriginal epistemologies and new teacher induction: The context of a bi-epistemic research endeavour

Lorenzo Cherubini: Brock University, Canada
Julian Kitchen: Brock University, Canada
John Hodson: Brock University, Canada

Abstract

Teacher preparation and induction have been the subject of much scholarly investigation in the mainstream, however, relatively little research has focused on Aboriginal epistemologies and new teacher experiences. From a bi-epistemic perspective, this research project attends precisely to this void in the scholarship. The project represents an innovative partnership between an Aboriginal research centre, an esteemed elder, university scholars, graduate students, and Aboriginal educators in Ontario. Furthermore, it calls attention to the successes of new Aboriginal teachers and the dedication they exemplify to advance Aboriginal epistemologies and student learning from culturally-sensitive perspectives.

Introduction

There is an extensive body of research on teacher induction. The mainstream literature accounts for the perils of insufficiently supporting new teachers in managing the wide array of responsibilities of their professional roles (Alliance of Excellence in Education, 2004; Danielson, 2002). It has been well-documented that effective induction programs assist in retaining those already in the profession (Darling-Hammond, 2003; Ingersoll & Smith, 2003). Induction programs that are responsive to teachers’ backgrounds and consider their understandings of what it means to teach are particularly successful (Olebe, 2005; Smith & Ingersoll, 2004; Williams, 2003). Bartell (2005) stated that induction programs are well served to address beginning teachers’ “instructional, professional, cultural, and political needs” (p. 116) and are best delivered in the context of reflective practice (see as well Portner, 2002; Tushnet, Briggs, Elliot, Esch, Haviland, & Humphry, 2002).

While it is true that teacher preparation, induction, and new teacher perceptions have been the subject of much scholarly investigation in the mainstream, relatively little research has focused on Aboriginal epistemologies and new teacher experiences. Aboriginal knowledge and epistemologies, considered to be dynamic and fluid entities, are taught and learned predominantly by active participation and relationship in Aboriginal communities (Brayboy, 2005; Cajete, 1999). The preservation of the historical, linguistic, and spiritual traditions unique to these cultures necessitates the engagement of Aboriginal teachers and researchers who are intimately familiar with them (Battiste, 2002; Country Roads, 2000). The literature about new Aboriginal teachers’ experiences in the classroom, the challenges they encounter in the first years of teaching, and the impact of their teacher education programs on their practice is, however, virtually silent (Author). From a bi-epistemic perspective, this research project attends precisely to this void in the scholarship. Of further import, it calls attention to the successes of new
Aboriginal teachers and the dedication they exemplify to advance Aboriginal epistemologies and student learning from culturally-sensitive perspectives.

**Conceptual Framework**

**Aboriginal epistemologies**

Indigenous epistemologies have “fared spectacularly badly” in university settings and as a consequence “resistance and refusal have been felt within school systems that take their cues and key features of their curricula from their educational ‘betters’ within mainstream knowledge hierarchies” (Battiste, Bell, Findlay, Findlay, & Henderson, 2005). Aboriginal knowledge orientations are not necessarily evident in mainstream research and scholarship that are more reflective of Eurocentric paradigms (Iseke-Barnes, 2002; see also, Cajete, 1994; Castellano, 1997; Die et al., 2000; Tedla, 1992). In fact, Aboriginal scholars advocate for a distinct intellectual niche to distinguish themselves from colonial educational paradigms (Battiste, 2002; Hill, 2000; Kawagley, 1995; Womack, 1999). It must be understood that Aboriginal knowledge is considered specific to people and place and is transmitted cross-generationally:

- In forcing assimilation and acculturation to Eurocentric knowledge, modern governments and educational systems have displaced Indigenous knowledge. It is clear, however, that the exclusive use of Eurocentric knowledge in education has failed First Nations children. (Battiste, 2002, p.9; see also Ascher, 1991; Schissel & Wotherspoon, 2003)

The Ontario Aboriginal Policy Framework document (2007) recommends that faculties of education in Ontario prepare more Aboriginal teachers who are culturally-knowledgeable (Aboriginal Education Office, 2007). Aboriginal epistemologies focus on pedagogy that teaches through culture and fosters student awareness about the intricate connections they share with others and the natural environment (Barnhardt, 2005). Aboriginal educators have an instrumental role in preserving Aboriginal languages and cultures to further the self-determination of Aboriginal students.

**The Ontario Context**

The legislation in Ontario requires that all new teachers successfully complete the New Teacher Induction Program (NTIP). School boards are responsible for providing various systemic and mentoring support networks for new teachers. Aboriginal communities, however, are faced with the challenge of coping with the limited number of new Aboriginal teachers who are qualified to address the unique cultural, linguistic, and learning preferences that are crucial to the academic success of Aboriginal children (Sawyer, 1991). At present, many Aboriginal elementary teachers in Ontario are not officially certified according to the Ontario College of Teachers, the self-regulatory body of the province’s teachers. Consider too the unprecedented increase in the numbers of Aboriginal children who will contribute to a shortage of Aboriginal elementary teachers in Ontario, especially in remote communities such as those that are part of the Nishnawbe-Aski First Nations in northwestern Ontario.

For Aboriginal peoples the learning of language implies a tacit relationship to traditional knowledge and communication systems that sustain Aboriginal culture and tradition (Battiste, 2008). Currently Ontario has the lowest ratio of Aboriginal population and teacher representation in Canada (3.6% of Aboriginal peoples between 1 – 14 years are represented by 0.5% of Aboriginal teachers’ share of employment (Our Children:
Aboriginal epistemologies and new teacher induction  L. Cherubini, J. Kitchen, J. Hodson

Keepers of the Knowledge, 2002). This often translates into Aboriginal teachers having to function in what they perceive to be racist and discriminatory school cultures (Archibald et al., 2002; McNinch, 1994). Further, First Nations communities have on more than one occasion identified the impediments in hiring and retaining Aboriginal teachers to transfer traditional language and knowledge to Aboriginal students (Morgan, 2002; Intellectual Property for Aboriginal People, 1999).

**Context of Study**

The project employed the Wildfire Gathering (WG) (Author) and included a sample of new Aboriginal teachers across Ontario that included Anishinabe, Hotinonshó:ni, Nishnawbe-Aski, and Métis teachers. The WRM provides a communal and sacred research environment that respects the traditional and cultural beliefs of Aboriginal people (Author). This is consistent with Cajete’s (2008) observation that “Indigenous educational research is best performed when an Indigenous view and purpose are represented in the conceptualization, development, and implementation of research” (Cajete, 2008, p. 204).

The project represents an innovative partnership between an Aboriginal research centre, an esteemed elder, university scholars, graduate students, and Aboriginal educators in Ontario. The bi-epistemic research team acknowledged and respected both Aboriginal and mainstream knowledge traditions in order to garner more profound understandings of Aboriginal epistemologies and new teacher experiences.

**Participants**

The sample of the study included six new teachers from the four dominant Aboriginal groups in Ontario. Two participants were male, one was Mohawk and the other was an Anishinabe-Odawa man. Both males have one year of experience working in publicly funded schools. Of the female participants, two were from the Anishinabek Nation; the other two female participants were from the Métis and Mohawk Nations. All participants were between thirty and forty-five years of age. Three of the females teach in On-Reserve schools and the other in a publicly funded school. Two of the female teachers have five years teaching practice while the other two are professionals with one or two years. Participants attended the Wildfire Gathering over the course of 3-days in December 2007, at a location that had symbolic and spiritual significance.

**Data analysis**

The research team borrowed tenants of grounded theory to provide “a procedure for developing categories of information, interconnecting the categories, building a “story” that connects the categories, and ending with a discursive set of theoretical propositions” (Strauss & Corbin, 1990, as cited in Creswell, 1998, p. 150). The individual responses were considered “textual wholes, not as reflecting some reality outside the spoken words,” and thus themes were coded to identify emerging patterns in the data (Hilden & Honkasalo, 2006, p. 44). Codes and categories were juxtaposed and discussed. The relationships among these themes were inductively derived in the process of constant comparison (Author; Glaser & Strauss, 1967).

**Reflections**
Engaging in research from a bi-epistemic perspective presents various challenges (Author). Implied in such an endeavour is a mutual respect and recognition for each other’s epistemology and understandings of outcomes grounded in the data and subsequently contextualized from culturally-rich perspectives. From both paradigms it was concluded that the WG established a professional community of new Aboriginal teachers that was conducive to candid dialogue (Hargreaves & Fink, 2003). This is reminiscent of Smith and Ingersoll (2004) who identified new teachers’ participation in collegial networks of teachers as an important component of teacher induction (see also, Hirsch, 2006). It also resulted in a synergy between participants that lent emotional support for their experiences as new teachers (see, for example, Wilkins & Clift, 2007, p. 31).

Teacher preparation (Avila de Lima, 2003; Hobson, Malderez, Tracey, & Kerr, 2005), induction (Guarino, Santibanez, & Daley, 2006; Rippon & Martin, 2006), and new teacher beliefs in mainstream education (Luft, 2005; Younger, Brindley, Peddar, & Hagger, 2004) are topics that have enjoyed widespread publication. The same cannot be said for Aboriginal attitudes and perceptions of their professional education preparation and induction. Aboriginal teachers are motivated to enhance student success, yet the literature is seemingly unresponsive to new Aboriginal teachers’ experiences, concerns, and successes (Archibald et al., 2002; Goldsmith, 1993).

**Participants’ Voices**

The bi-epistemic research endeavour under discussion is in response to this neglect. Our research honours the voices of the participants – the new Aboriginal teachers themselves. In many instances the participants echoed the literature in their candid expressions of struggle and sacrifice during their induction into teaching. New teacher participants shared their stories of isolation. One participant shared their initial experiences in a mainstream school by stating, “the only one that would greet me in the morning and say hi was the custodian….I would walk into the staff room [and] everybody would go quiet.” All participants related to some experience of being assigned classrooms “at the other end of the [school] building and feeling very isolated.” One new teacher described being treated, “like you’re not a real teacher.” This prompted another to lament, “there is no training on how to work with [mainstream] colleagues.”

Participants also discussed the lack of support during their first years of teaching. One new teacher stated, “I didn’t have any paperwork [curriculum resources] – nothing. Whatever materials they had at the school were not coinciding with the expectations of the provincial guidelines.” This lack of curriculum-related resources, combined with Aboriginal language classes consisting of over thirty students was quite understandably considered to be “overwhelming” to the new teacher participants. These challenges only compounded new teachers’ anxiety when dealing with students with special needs. Participants shared their frustrations with having educational assistants assigned to their students who “have never been in the classroom” because of a lack of federal-funding (from Indian and Northern Affairs Canada). They commented on the futility of having one educational assistant tending to the multiple and varied needs of two classrooms of students. As one individual described, “there’s just way too many students who are special needs.” Consider as well participants’ perceptions that the curriculum itself is disconnected from students’ experience. New teachers were forthright in suggesting that “there’s something wrong with the curriculum if these students are not retaining any of
that language their learning.” As a result participants empathized with one another’s claims that, as one new teacher concluded, “One of the biggest challenges I face in my job is how to get kids engaged who don’t see any reason whatsoever for education,” and who, as another participant noted, “are not living the language.” These notions support the continuing decline in key indicators of Aboriginal cultural health that includes the disappearance of 50 of 53 languages (Fishman, 2001; Lafrance, 2000). The collective resolve of these new Aboriginal teachers was effectively summarized by one participant who stressed the importance of “building our own curriculum. Waiting for somebody else to come along or waiting for somebody else to make it may never happen.”

Despite their cultural, historic and geographic diversity, participants perceive learning as a holistic and lifelong process for the betterment of their community (as discussed in Canadian Council on Learning, 2007). The participants’ resolve in the face of these challenges brings to light the resurgence of Aboriginal self-determination whereby new pedagogies and methodologies are being developed to decolonize their students and schools (Grande, 2004; Lomawaima & McCarty, 2006; Smith, 1999).

Further, and of particular importance to this research, is the attention it brings to what has not been documented in the mainstream literature; namely, the successes of new Aboriginal teachers and their commitment to sustain Aboriginal epistemologies and student learning from culturally-sensitive paradigms. The new teacher participants were well-aware of the impact schools have in terms of reproducing asymmetrical power relations among cultures (Giroux, 1992; Freire, 1985). Yet, they expressed a commitment to educate mainstream teachers about what one individual described as their “very rich culture and background [that] has nothing to do with money.” Participants commented on their intent to “educate the non-Native educators to see that our culture is equal and valuable…and not try to equate or compare our culture and values with their white values.” New Aboriginal teachers framed their commitment around student welfare and success. Common references throughout the 3-day Wildfire Gathering sessions included participants’ sensitivity to students’ “self-esteem” as being integral to their sense of belonging in schools. The new teacher participants aligned their own “passion for the language” to serving what another individual described as, “that role model and that connection that the students had to make [to] feel more at home at school.”

On many occasions participants reiterated the interconnections between language, culture and epistemologies and how these have contemporary implications on their practice and on their personal lives. As this individual shared, “I’ve been taking back my language…doing everything I can to educate our youth…changing the cycle is tough.” Despite the difficulties, isolation, and lack of support during their induction participants’ voices left a clear impression of an unwavering belief that “those little brown faces…are going somewhere. I believe that part of my goal is to give them that hope for something better in their future.” Typical of other comments, another individual stated, “I feel that somebody has got to be there believing in the kids, believing in their ability to be there [school], to be proud, to be hard-working…we owe it to our elders who have fought so hard.”
Summary

There has been an inequitable focus on Aboriginal education and Aboriginal teachers’ perspectives and experiences (Moyle, 2005; Orr & Friesen, 1999) despite the pressing need to prepare Aboriginal educators to teach Aboriginal students and in doing so to preserve their passing cultural and linguistic traditions (Neegan, 2005). Aboriginal education and epistemology entails a social capital that includes sustaining a sense of community built on relationships and a profound respect for nature and the land (Moody & Cordua-vonSpecht, 2005). Our research into their experiences within their communities aims to contribute to the understanding of the community they serve and, particularly, how Aboriginal teachers can best be supported as they work to renew their languages and cultures through education.

Acknowledgement

This research is supported by a 2-year Social Science and Humanities Research Council (SSHRC) grant from the Canadian federal government.
References


Moyle, D. (2005). Quality educators produce quality outcomes: Some thoughts on what this means in the context of teaching Aboriginal and Torres Strait Islander students in Australia’s public education system. Primary and Middle Years Educator, 3(2), 11-15.


Trends in Canadian faculties of education: An overview of graduate programs, curricular offerings, exit requirements, and modes of delivery

Jason Brent Ellis: University of Windsor, Canada
Jonathan G. Bayley: University of Windsor, Canada
Carla Abreu Ellis: University of Windsor, Canada

Abstract

This research investigated universities registered with the Association of Universities and Colleges of Canada (AUCC) whose primary instructional language was English. A content analysis was performed on university web pages related to the following content: (a) frequency of graduate programs being offered, (b) types of degrees being offered, (c) frequency and variation of program of study offerings, (d) variation of exit requirements, and (e) modalities of course delivery. This research provides an overview and analysis of graduate level programs, more precisely Masters and Doctorate degrees, offered through faculties of education in Canada. An understanding of the findings of this research may benefit Canadian university administrative bodies in providing a source in which they may compare findings with their current offerings and programming. Prospective students of graduate programs in education may also benefit from the information provided in this study when choosing a program of study by ameliorating their knowledge of current programs, curriculum offerings, and modes of course delivery being offered by faculties of education in Canada.

Literature Review

There has been a significant increase in demand for access to higher education in Canada within the last decade. According to Giroux (2004), enrolment growth in the first few years of the new millennium “outstrips growth in the Canadian population” (p. 85). Giroux further clarifies that “Provinces with the largest population growth over the past few years have seen enrolment increases, but even provinces that are experiencing population declines are witnessing strong enrolment growth” (p. 85). He notes that this growth is principally due to the fact that more high school students are opting to matriculate in university than ever before as a result of a variety of factors including parental pressure to seek a university education and decreased drop-out rates in K-12 education.

Universities have traditionally catered to societal needs, although reluctance to institutional change is often noted. Societal changes, both directly and indirectly, affect institutions that “hate to be hurried into change, even though their connection to change (in the form of progress, growth, and prosperity) is one of the most important bases of their self-esteem and public appeal” (Findlay, 2006, p. 415). The Association of Universities and Colleges of Canada (n.d.) states that Canadian universities that are a part of this association are committed to, “the importance of higher education for the individual and for the economic, social and cultural development of society” (¶ 4). This commitment, required by the AUCC, illustrates the importance placed not solely on the betterment of the individual through the process of higher education but also the condition of fulfilling societal needs in terms of the economic and cultural development of Canada. British Columbia’s Ministry of Advanced Education (n. d.) makes this...
dual mission of individual growth and meeting provincial needs through higher education implicit in stating that:

The Ministry's mission for the post-secondary education and training system is to provide leadership and support for a top-notch advanced education and training system that provides all British Columbians with opportunities to develop the skills and knowledge to live productive and fulfilling lives and to contribute to the economic, social and cultural life of the province. (¶ 1)

Marshall (2004) notes that as a result of increased enrolment in Canadian universities in recent years undoubtedly provinces will “continue to approve an array of new degrees and degree-granting institutions to respond to this demand” (p. 91).

This idea of institutions meeting societal needs demands an analysis of who decides on what gets taught and changed, in terms of programming in Canadian higher education. Marshall (2004) notes that there is no federal management to education in Canada and therefore “each of the ten provinces and three territories established their own methods to manage and control the credentials offered by post-secondary institutions” (p. 71). Marshall further observes, in terms of the consistency of quality of education between institutions, that if an institution was approved by the representative provincial government, “it was deemed to be accredited. Since only recognized public universities were traditionally provided the legislation to offer degrees, the quality of the Canadian degree was consistent (and of generally high quality) from coast to coast” (p. 72).

Marshall (2004) also draws attention to the fact that Provincial accreditation bodies also control label usage in higher education as to what institutions can offer degrees and constitute universities. In recent years the Association of Universities and Colleges of Canada has taken a much larger role in the accreditation process in that,

In Canada, which does not have a national system of institutional accreditation and where education . . . falls within the jurisdiction of the provincial governments, membership in the Association, coupled with the appropriate provincial legislation, is generally accepted in lieu of institutional accreditation. (AUCC, n.d., ¶ 2)

This means that the AUCC has become, as Marshall (2004) coins it, the de facto body for accrediting new degree granting institutions in Canada.

In terms of who decides program offerings within universities, and how instruction is designed and delivered, Buchbinder and Rajagopal (1996) note that Canadian universities have “exclusive jurisdiction over admission standards, curricula and the granting of degrees” (p. 283).

In a keynote address at the 2004 Asian Development Bank Conference on University Governance in Indonesia, Dr. Michael Stevenson (2004), President and Vice-Chancellor of Simon Fraser University, identified the process ensuring autonomy in the Canadian academy:

In Canada, the Acts under which our universities are established entrench the bicameral powers of university Senates and grant them more or less complete control over academic policy. That is to say: what shall be taught, who shall teach it, and how it shall be taught. In British Columbia these fundamental powers of university autonomy reside in the Senate elected entirely by the university itself. No outside appointees or outside positions have authority over academic policy. (¶ 20).

Stevenson further notes that because of the bicameral nature of university governance in Canada it “creates a climate in which government respects university autonomy because it is embedded in legislation that in turn sets limits to what government, and even the executive or the Board appointed by the government, can do with respect to universities” (¶ 22).
The literature would indicate that Canadian universities are being called to fulfill the societal demand of increased access to higher education. Institutions of higher education will attempt to meet these needs through offering new programs and wider access by working within the parameters set forth by accrediting bodies. It is important to note that curricular and program offerings in Canadian universities are decided autonomously by the institutions themselves.

**Methodology**

A content analysis was performed in the 2005/2006 academic year of Graduate College and Faculty of Education web pages for all universities registered with the Association of Colleges and Universities of Canada whose primary language of instruction was English. Patton (1990) defines content analysis as “the process of identifying, coding, and categorizing the primary patterns in the data” (p. 381). In this manner, researchers in this study looked at the data displayed online by universities and identified “themes that seem meaningful to the producers of each message” (Berg, 2004, p. 272). Units and categories were constructed and evolved over the course of the analysis. Berg (2004) clarifies this process in stating that, “Content analysis involves the interaction of two processes: specification of the content characteristics . . . being examined and explicit rules for identifying and recording these characteristics” (p. 275). Thus, content characteristics that were identified for this research involved the following themes: (a) graduate programs being offered by faculties of education; (b) types of degrees being offered; (c) program offerings; (d) types of exit requirements, and; (e) modalities of course delivery. A data set was constructed using an inductive process of analysis, as discussed by Berg (2004), from information available online. Where information was ambiguous or incomplete, institutional representatives were contacted in order to gather further information and create a complete picture of graduate studies.

**Findings**

**Graduate Program Offerings in Canada**

Of the 92 universities registered with the Association of Colleges and Universities of Canada at the time this research was performed, 72 (78.3%) were identified as having their instructional language primarily being English. Less than half, or 33 (45.8%) of these 72 universities were identified as offering graduate programs in education.

**Degrees Offered**

An analysis of the data revealed a considerable variation in the types of degrees being awarded by graduate programs in Canadian faculties of education. The most frequent type of Masters level degree being awarded was that of the Masters of Education (M.Ed.) awarded by 30 (90.9%) universities surveyed. The following breakdown provides an overview of additional degree types offered by Canadian institutions: Masters of Arts (M.A.), in education, were offered by 10 (30.3%) institutions, Masters of Science (M.Sc.) were offered by three (9.1%) institutions, Masters of Counselling (M.C.) were offered by three (9.1%) institutions, Masters of Adult Education (M.A.E.) were offered by two (6.1%) institutions, Masters of Human Resource Development (M.H.R.D) were offered by one (3.0%) institution, Masters of Educational Technology (M.E.T.) were offered by one (3.0%) institution, Masters of Library and Information Sciences were offered by one (3.0%) institution, and Masters of Distance Education (M.D.E.) were offered by one (3.0%) institution. At a doctorate level, 20 (60.6%) institutions currently offer Doctoral of Philosophy (Ph.D.) degrees and 4 (12.1%) offer Education Doctorate (Ed.D.) degrees.
**Programs Offered**

The variation in programs of study being offered through faculties of education was quite extensive; 37 curriculum categories were identified as being offered by institutions. Broader subject categories were constructed from grouping frequencies for curricular subject; 11 distinct subject areas were defined. These 11 curriculum subject areas were identified as program offering in: Arts in Education, Human Services in Education, Exceptionality, Specific Populations in Education, Foundation Areas of Education, Curriculum and Instruction, Human Sports and Kinetics, Language Arts, Leadership and Governance, Specific Curriculum Areas, and Educational Support Services. Please see table 1.1 for a complete breakdown of frequencies of programs of study.

Table 1.1

<table>
<thead>
<tr>
<th>Programs of study</th>
<th>( f )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts in Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts Education</td>
<td>7</td>
<td>21.2</td>
</tr>
<tr>
<td>Music Education</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>Human Services in Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counselling</td>
<td>17</td>
<td>51.5</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>11</td>
<td>33.3</td>
</tr>
<tr>
<td>Rehabilitation Counselling</td>
<td>2</td>
<td>6.1</td>
</tr>
<tr>
<td>Human Resource Development</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Exceptionality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Education</td>
<td>6</td>
<td>18.2</td>
</tr>
<tr>
<td>Gifted Education</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>School Psychology</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>Specific Populations in Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Education</td>
<td>7</td>
<td>21.2</td>
</tr>
<tr>
<td>Higher Education</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td>Distance Education</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>Early Childhood</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>Indigenous Education</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>Foundation Areas of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Studies</td>
<td>14</td>
<td>42.4</td>
</tr>
<tr>
<td>Society, Culture and Politics</td>
<td>11</td>
<td>33.3</td>
</tr>
<tr>
<td>Measurement and Research</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td>Philosophy of Education</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>History of Education</td>
<td>2</td>
<td>6.1</td>
</tr>
<tr>
<td>Curriculum and Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum</td>
<td>19</td>
<td>57.6</td>
</tr>
<tr>
<td>Instruction</td>
<td>9</td>
<td>27.3</td>
</tr>
<tr>
<td>Development, Learning &amp; Cognition</td>
<td>6</td>
<td>18.2</td>
</tr>
<tr>
<td>Human Sports and Kinetics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Kinetics</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>Health Professional Education</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Language Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Literacy</td>
<td>8</td>
<td>24.2</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td>5</td>
<td>15.2</td>
</tr>
</tbody>
</table>
Modern Language Education 2  6.1
Leadership and Governance
  Leadership and Policy Studies 16  48.5
  Educational Administration 11  33.3
Additional Curriculum Areas
  Math Education 6  18.2
  Science Education 5  15.2
  Social Studies Education 3  9.1
  English Language Arts 2  6.1
  Home Economics 2  6.1
Educational Support Services
  Educational Technology 10  30.3
  Librarianship 3  9.1

Programs of Study by Subject Area in Frequencies and Percentages

Exit Requirements

Exit requirements were looked at exclusively for the Masters-level of graduate studies due to the fact that less standardization of exit requirements occurred than at a doctorate level. For the purpose of this paper exit requirements were defined as any culminating activity, capstone or otherwise that was designated by either the Graduate College or the Faculty of Education as being necessary to fulfill the degree requirement. The exit requirement as a culminating activity was seen to have the intentionality of placing onus on the student to demonstrate a synthesis of all knowledge acquired during the duration of graduate studies (such as cumulative examinations), prove adequacy of research skills (such as theses and research projects), show competency in academic writing (such as the major paper), or; perhaps demonstrate a combination of several of the activities listed (such as a Portfolio). Categories were constructed for the types of exit requirements in place in Canadian institutions which included the production and defence of a thesis, portfolio, project or paper, and; the writing of comprehensive examinations. Thirty-two of the 33 universities surveyed provided access to exit requirement criteria online; analysis indicated that 32 (97%) institutions offered a thesis option as an exit requirement; 22 (66.7%) offered the possibility of a project or major paper based exit option, 10 (30.3%) offered the possibility of a comprehensive exam and, five (15.2%) institutions offered the possibility of completing a portfolio as the exit requirement. It was observed that 12 (36.4%) institutions currently offered a course-based option with an exiting capstone activity (non-thesis) as an option towards achieving a Masters degree.

Delivery Methods

Thirty-one of the 33 universities surveyed provided access to information regarding mode of course delivery online. Delivery methods of course materials in Master’s programs of graduate education varied; it was observed that no (0%) universities chose a delivery method that was entirely web base (online), whereas 20 (64.5%) institutions offered a traditional (classroom, onsite and off-site) form to delivering instruction and 11 (35.5%) universities had instituted a “mixed method” of instructional delivery, incorporating both web-based and traditional instruction.

Discussion

When attempting to answer the question, what is being offered at the graduate level in Canadian Faculties of Education, the simple answer would be a great deal. Current trends
would lead one to believe that Faculties of Education are taking an “everything goes” stance on what can be contained under the blanket of education and instruction. According to Buchbinder and Rajagopal (1996), universities in Canada are “governed by provincial statutes and are funded by federal and provincial governments, as well as by student fees” (p. 283). They further state that Canadian universities have “exclusive jurisdiction over admission standards, curricula, and the granting of degrees” (p. 283), but qualify that, “even though they are autonomous, they are influenced to act in the interest of Canadian society through the use of buffer bodies (between governments and universities) and Boards of Governors” (p. 283). Having established that Canadian universities have the autonomy to offer what they want within the context of societal needs as a whole, the curriculum found in the universities surveyed ranged from a spectrum of traditional foundations of theory (e.g. Philosophy of Education and History of Education) to new areas of curriculum such as Health Professional Education, Human Resource Development, and Human Kinetics. Perhaps this range is a reflection of the ideas noted by Buchbinder and Rajagopal (1996), in that Canadian universities are offering programs that meet local societal demand in the workforce.

Types of degrees being offered across Canada at a Masters level also appear to be expanding; offerings seem to bridge across a much wider range such as the Masters of Human Resource Development (M.H.R.D.), Masters of Educational Technology (M.E.T.), and Masters of Distance Education (M.D.E.) providing additional options to the traditional Masters of Education and Masters of Arts awards. Marshall (2004) has indicated that the proliferation of new degree offerings is symptomatic of the increasing demand for higher education in the marketplace. He notes that because of this, there has been a noted increase in non-university delivered degrees, and disparity in the fact that “the provincial-level degree accreditation processes and the university-level degree granting standards, as represented in the membership criteria for AUCC, are no longer aligned” (p. 69). Marshall’s concern rests in the premise that because of this lack of provincial and federal alignment of the granting of awards there is a certain danger to consumers in that “different degree accreditation processes have led to different degrees with different meaning and value to the student” (p. 70) and thus the connotation of caveat emptor (buyer beware) has become a forewarning for prospective students shopping for an education.

But perhaps the question is not one of how institutions can offer different awards but more a question of why. Smith (2005) recently found that, in the Province of Manitoba, meeting societal need in “programming has been the more favoured category [in program approval], leading to a greater focus on labour market orientation in new university programming” (p. 111). Levin (1999) furthers this argument by observing that, in an effort to sustain themselves financially, colleges and universities in Canada “have turned to the marketplace, and in Canada this means the private and the public sector, for resources, for models of management and work, and for programming direction and instructional content” (p. 397). This has direct implications on the nature of community and higher education institutions as being a highly symbiotic, reciprocal relationship.

The notion of innovations of new specialty degree types contrasts with this paper’s findings that methods of delivery appear to still be mostly focused on traditional classroom instruction, although there does appear to be a movement towards a mixed methods of instructional delivery. Pan (2003) discussed the various advantages of online (web-based) learning as having the potential to reach a wider range of students in terms of convenience, feedback, learner control, contact, interactivity, and accessibility. However, Pan (2003) identified several instructional pitfalls through this delivery mode related to issues of rights and copywrite,
requisite technology abilities of the instructors, quality of design of e-lectures, and the challenge of designing an effective outcome assessment of e-learning. Perhaps these confounding factors of web-based learning are why traditional classroom instruction in Canadian universities is highly embraced.

Conclusion

It appears that a great deal of diversity exists in programs being offered by faculties of education in Canadian universities. This diversity could be seen as a direct reflection of local community and societal needs being met by higher education institutions. This could be further emphasised in drawing attention to the fact that universities have had to enter into reciprocal relationships with communities in order to secure funding to be sustainable educational environments. This expansion of program and degree offerings contrasts with the finding that delivery methods of instruction most often take the form of tradition classroom learning, rather than online (web-based) instructional methods. The reasons for this phenomenon could stem from the inability of institutions to procure instructors with technology skill requisite to implement such an instructional method as well as other confounding qualities such as copywrite and design issues.
References


Are Ontario Teachers Paid More Equitably?  
Do Local Variables Matter?  

Xiaobin Li: Brock University, Canada

Abstract

This study investigated whether Ontario’s education funding reform of 1998 made teacher salaries more equitable. It also examined whether selected local variables had the same influence on teacher salaries in 2001-02 as they did in 1995-96 before the reform. Average teacher salaries before the reform in 1995-96 and after the reform in 2001-02 among school boards and among census divisions were compared to see whether the variation in teacher salaries increased or decreased. A partial correlation analysis was conducted to examine the influence on teacher salaries from local variables, which were derived from a literature review. This study finds that (a) teachers are paid more equitably today than before the reform, and (b) local variables no longer really matter, as a result of the changed provincial funding formula.

Introduction

The question of how to pay teachers appropriately has long been debated in Ontario and elsewhere. In rejecting an offer of a 2 percent salary increase from the provincial government, the president of the Ontario Secondary School Teachers’ Federation said in March 2005 that an increase of almost $1 billion in education spending was needed if the government wanted to avoid teachers’ strikes and fix the schools (Brown, 2005). Contracts were signed only after the government increased funding and teachers’ unions retreated from their original salary increase demands.

In 1997 the Conservative government in Ontario launched a comprehensive reform in education, specified in “Education Quality and Improvement Act”, commonly known as Bill 160. The government cut overall funding for education, merged school boards, reduced the honoraria for board trustees, and took away the boards’ power to set local tax rates for education purposes. The government also changed the funding formula, making funding more centralized at the provincial level. Having lost the power to set tax rates, school boards no longer had the authority to determine how much they could spend.

Before the Conservative reform, Ontario’s elementary and secondary education funding model was a guaranteed tax base grant plan, which generated revenues for school boards from both municipalities and the provincial government (Lawton, 1996). There was significant variation in funding across the province owing to differences in wealth among municipalities. Since the 1998 reform, education has been funded according to a provincial formula, which the government uses to calculate how much each board needs, based on its student enrolment, student characteristics, and board characteristics.

In changing the funding mechanism, the Conservative government stated that it wanted to make funding more equitable. Students should receive the same amount of financial support no matter where they live (Ontario Ministry of Education, Spring 2003).
This study compared the variations in average teacher salaries across school boards and across census divisions in 1995-96 (before Bill 160) and in 2001-02 (after Bill 160), to see whether the funding reform has made teachers’ salaries more equitable. The author assumes that the government’s stated equity goal refers to horizontal equity—that is, equal treatment for equal needs. In theory, if funding for every board is the same, average teacher salaries across the province should be similar. This study also examined whether selected local variables had the same influence on average teacher salaries in 2001-02 as they did in 1995-96. Two questions were asked: (1) Are teachers paid more equitably today than before the funding reform? (2) Do local variables matter when teacher salaries are decided?

Since the last round of teacher salary negotiations, the Ontario education system has enjoyed labor peace for four years. However, most of the current contracts between school boards and teachers’ unions will expire by the end of August 2008. In January 2008, Education Minister Wynne initiated informal discussions with trustee associations and teacher federations to explore new four-year collective agreements (Ministry of Education, 2008), which means how to pay teachers appropriately will again become the focus of attention. To know how to pay teachers properly, understanding whether they are paid equitably is important. It is also important to understand if and how local variables impinge on how teachers are paid, which indicates whether wealth neutrality has been achieved. Wealth neutrality is the most frequently used measurement in assessing education funding equity.

**Related Literature, Method, and Results**

Data for average teacher salaries in 1995-96 were collected from the Ontario Education Relations Commission (1998). Similar data for 2001-02 were collected from the Ontario Ministry of Education, Budgeting and Reporting Branch (2004). Before the funding reform there was significant variation in average teacher salaries among school boards. Table 1 displays the average teacher salaries in 1995-96 for the 122 school boards for which information is available.

<table>
<thead>
<tr>
<th>Board name</th>
<th>Average salary</th>
<th>Board name</th>
<th>Average salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Algoma</td>
<td>$56,482.5</td>
<td>Windsor</td>
<td>$58,868.0</td>
</tr>
<tr>
<td>Michipicoten</td>
<td>54,793.7</td>
<td>Frontenac County</td>
<td>56,081.3</td>
</tr>
<tr>
<td>Michipicoten RCSSB</td>
<td>53,029.0</td>
<td>Frontenac-Lennox RCSSB</td>
<td>51,879.0</td>
</tr>
<tr>
<td>North Shore</td>
<td>55,783.8</td>
<td>Bruce-Grey County RCSSB</td>
<td>53,533.5</td>
</tr>
<tr>
<td>North Shore District RCSSB</td>
<td>53,760.0</td>
<td>Grey County</td>
<td>54,392.5</td>
</tr>
<tr>
<td>Sault Ste Marie</td>
<td>56,278.8</td>
<td>Haldimand</td>
<td>52,772.3</td>
</tr>
<tr>
<td>Sault Ste Marie RCSSB</td>
<td>56,024.0</td>
<td>Haldimand-Norfolk RCSSB</td>
<td>51,226.0</td>
</tr>
<tr>
<td>Hornepayne</td>
<td>53,554.9</td>
<td>Norfolk</td>
<td>54,406.9</td>
</tr>
<tr>
<td>Brant County</td>
<td>51,769.8</td>
<td>Haliburton County</td>
<td>56,314.1</td>
</tr>
<tr>
<td>Area</td>
<td>Average Salary</td>
<td>Area</td>
<td>Average Salary</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------</td>
<td>-------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Cochrane Iroquois Falls/Blacks</td>
<td>57,437.1</td>
<td>Halton</td>
<td>54,280.4</td>
</tr>
<tr>
<td>Cochrane Iroquois RCSSB</td>
<td>55,825.0</td>
<td>Halton RCSSB</td>
<td>49,782.3</td>
</tr>
<tr>
<td>Hearst District RCSSB</td>
<td>56,919.2</td>
<td>Hamilton-Wentworth RCSSB</td>
<td>57,254.8</td>
</tr>
<tr>
<td>Kapuskasing-Smooth Rock</td>
<td>55,081.9</td>
<td>Hamilton</td>
<td>58,534.2</td>
</tr>
<tr>
<td>Kapuskasing RCSSB</td>
<td>54,907.7</td>
<td>Wentworth County</td>
<td>54,072.2</td>
</tr>
<tr>
<td>Timmins</td>
<td>53,612.7</td>
<td>Hastings County</td>
<td>54,517.0</td>
</tr>
<tr>
<td>Timmins RCSSB</td>
<td>54,425.3</td>
<td>Hastings Prince RCSSB</td>
<td>52,438.0</td>
</tr>
<tr>
<td>Dufferin County</td>
<td>53,062.8</td>
<td>Huron County</td>
<td>55,982.8</td>
</tr>
<tr>
<td>Durham</td>
<td>52,768.2</td>
<td>Dryden</td>
<td>54,240.9</td>
</tr>
<tr>
<td>Durham Region RCSSB</td>
<td>47,304.7</td>
<td>Dryden DRCSSB</td>
<td>52,113.0</td>
</tr>
<tr>
<td>Elgin County</td>
<td>52,792.5</td>
<td>Kenora</td>
<td>57,424.7</td>
</tr>
<tr>
<td>Elgin County RCSSB</td>
<td>52,220.0</td>
<td>Kenora DRCSSB</td>
<td>53,271.0</td>
</tr>
<tr>
<td>Essex County</td>
<td>55,134.0</td>
<td>Red Lake</td>
<td>51,198.8</td>
</tr>
<tr>
<td>Essex County RCSSB</td>
<td>51,975.5</td>
<td>Kent County</td>
<td>57,215.3</td>
</tr>
<tr>
<td>Windsor RCSSB</td>
<td>56,018.0</td>
<td>Kent County RCSSB</td>
<td>50,277.0</td>
</tr>
<tr>
<td>Lambton County</td>
<td>55,393.5</td>
<td>Fort Frances-Rainy River</td>
<td>57,239.0</td>
</tr>
<tr>
<td>Lambton County RCSSB</td>
<td>55,177.2</td>
<td>Fort Frances-Rainy DRCSSB</td>
<td>50,199.0</td>
</tr>
<tr>
<td>Lanark County</td>
<td>54,456.5</td>
<td>Renfrew County</td>
<td>53,509.5</td>
</tr>
<tr>
<td>Lanark Leeds RCSSB</td>
<td>47,281.0</td>
<td>Renfrew County RCSSB</td>
<td>52,390.0</td>
</tr>
<tr>
<td>Leeds &amp; Grenville Co</td>
<td>55,735.6</td>
<td>Simcoe County</td>
<td>54,986.9</td>
</tr>
<tr>
<td>Lennox &amp; Addington Co</td>
<td>55,720.6</td>
<td>Simcoe County RCSSB</td>
<td>50,239.0</td>
</tr>
<tr>
<td>Manitoulin</td>
<td>53,821.8</td>
<td>Stormont Dundas RCSSB</td>
<td>54,539.2</td>
</tr>
<tr>
<td>London &amp; Middlesex RCSSB</td>
<td>55,167.0</td>
<td>Stormont Dundas</td>
<td>52,341.8</td>
</tr>
<tr>
<td>London</td>
<td>54,808.2</td>
<td>Chapleau</td>
<td>53,315.2</td>
</tr>
<tr>
<td>Middlesex County</td>
<td>53,016.2</td>
<td>Chapleau District RCSSB</td>
<td>52,696.0</td>
</tr>
<tr>
<td>Muskoka</td>
<td>53,885.0</td>
<td>Espanola</td>
<td>57,583.2</td>
</tr>
<tr>
<td>Lincoln County</td>
<td>55,095.0</td>
<td>Sudbury</td>
<td>57,382.2</td>
</tr>
<tr>
<td>Lincoln County RCSSB</td>
<td>51,859.0</td>
<td>Sudbury District RCSSB</td>
<td>57,875.6</td>
</tr>
<tr>
<td>Niagara South</td>
<td>52,876.3</td>
<td>Geraldton DRCSSB</td>
<td>47,335.0</td>
</tr>
<tr>
<td>Welland County RCSSB</td>
<td>52,069.8</td>
<td>Lake Superior</td>
<td>56,125.3</td>
</tr>
<tr>
<td>Nipissing</td>
<td>57,006.4</td>
<td>Lakehead</td>
<td>59,568.0</td>
</tr>
<tr>
<td>Nipissing DRCSSB</td>
<td>55,895.9</td>
<td>Lakehead DRCSSB</td>
<td>58,808.6</td>
</tr>
<tr>
<td>Northumberland</td>
<td>50,694.0</td>
<td>Nipigon-Red Rock</td>
<td>54,452.2</td>
</tr>
<tr>
<td>Carleton</td>
<td>55,431.0</td>
<td>North of Superior DRCSSB</td>
<td>54,585.0</td>
</tr>
<tr>
<td>Carleton RCSSB</td>
<td>52,586.0</td>
<td>Kirkland Lake DRCSSB</td>
<td>57,519.9</td>
</tr>
<tr>
<td>d'Ottawa-Carleton Conseil</td>
<td>55,326.5</td>
<td>Timiskaming</td>
<td>56,409.7</td>
</tr>
<tr>
<td>de langue francaise d'Ottawa</td>
<td>53,683.7</td>
<td>East York</td>
<td>54,866.8</td>
</tr>
<tr>
<td>Ottawa</td>
<td>55,464.7</td>
<td>Etobicoke</td>
<td>54,326.2</td>
</tr>
<tr>
<td>Ottawa RCSSB</td>
<td>53,412.0</td>
<td>North York</td>
<td>54,960.8</td>
</tr>
<tr>
<td>Oxford County</td>
<td>52,699.3</td>
<td>Scarborough</td>
<td>58,148.6</td>
</tr>
<tr>
<td>Oxford County RCSSB</td>
<td>51,578.0</td>
<td>Toronto</td>
<td>55,057.0</td>
</tr>
<tr>
<td>West Parry Sound</td>
<td>53,028.2</td>
<td>York City</td>
<td>55,162.5</td>
</tr>
<tr>
<td>Dufferin-Peel RCSSB</td>
<td>51,789.8</td>
<td>CELF de Toronto</td>
<td>50,739.9</td>
</tr>
<tr>
<td>Peel</td>
<td>56,046.2</td>
<td>Metropolitan SSB</td>
<td>58,146.6</td>
</tr>
</tbody>
</table>
Table 2 displays the average teacher salaries in 2001-02 for 72 school boards.

*Average Teachers’ Salaries for School Boards 2001-2002*

<table>
<thead>
<tr>
<th>Board name</th>
<th>Average salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSB Ontario E.</td>
<td>$58,932.3</td>
</tr>
<tr>
<td>Algoma</td>
<td>60,035.5</td>
</tr>
<tr>
<td>Rainbow</td>
<td>58,223.8</td>
</tr>
<tr>
<td>Near North</td>
<td>59,579.4</td>
</tr>
<tr>
<td>Keewatin</td>
<td>60,571.0</td>
</tr>
<tr>
<td>Rainy River</td>
<td>61,194.7</td>
</tr>
<tr>
<td>Lakehead</td>
<td>60,016.6</td>
</tr>
<tr>
<td>Superior Green</td>
<td>62,204.9</td>
</tr>
<tr>
<td>Bluewater</td>
<td>60,625.2</td>
</tr>
<tr>
<td>Avon Maitland</td>
<td>58,553.9</td>
</tr>
<tr>
<td>Greater Essex</td>
<td>56,550.4</td>
</tr>
<tr>
<td>Lambton</td>
<td>61,502.0</td>
</tr>
<tr>
<td>Thames Valley</td>
<td>58,825.8</td>
</tr>
<tr>
<td>Toronto</td>
<td>58,506.4</td>
</tr>
<tr>
<td>Durham</td>
<td>55,966.1</td>
</tr>
<tr>
<td>Kawartha</td>
<td>59,033.5</td>
</tr>
<tr>
<td>Trillium</td>
<td>59,788.6</td>
</tr>
<tr>
<td>York Region</td>
<td>59,392.4</td>
</tr>
<tr>
<td>Simcoe</td>
<td>57,783.9</td>
</tr>
<tr>
<td>Upper Grand</td>
<td>58,219.2</td>
</tr>
<tr>
<td>Peel</td>
<td>57,955.1</td>
</tr>
<tr>
<td>Halton</td>
<td>58,095.4</td>
</tr>
<tr>
<td>Hamilton</td>
<td>58,306.0</td>
</tr>
</tbody>
</table>
Are Ontario Teachers Paid More Equitably?  

Xiaobin Li

| DSB of Niagara | 58,325.7 | Renfrew | 54,202.2 |
| Grand Erie    | 60,484.0 | Algonquin | 56,542.2 |
| Waterloo      | 60,480.2 | CSD Nord-Est | 52,859.3 |
| Ottawa        | 57,219.4 | CSD Grand N. | 57,066.7 |
| Upper Canada  | 58,231.2 | CSD Centre | 51,133.7 |
| Limestone     | 58,362.8 | CSD descole | 53,173.5 |
| Renfrew       | 54,774.9 | CSD desGrand | 57,972.6 |
| Hastings      | 56,304.8 | CSD FrancoNo | 52,690.9 |
| Northeast     | 52,754.2 | CSD dueNouve | 56,693.4 |
| Nipissing     | 55,521.9 | CSD Aurores | 48,405.9 |
| Huron-Superio | 56,619.5 | CSD ecolescat | 51,145.6 |
| Sudbury       | 57,646.9 | CSD CentreSu | 51,413.8 |
| CSD del'Esto  | 55,908.4 | CSD duCentre | 54,760.0 |

Note 1: C = Catholic; CSD = Conseil Scolaire de District (District School Board)
Note 2: N = 72, M = $56,859, SD = $2,919
Note 3: The standard deviation is about 5.1 percent of the mean.

Source: Author’s calculations from Ontario Ministry of Education data, 2004

The 1995-96 standard deviation, 4.9 percent of the mean, is actually smaller than the 2001-02 standard deviation, 5.1 percent of the mean. However, the difference between the two standard deviations for 1995-96 and 2001-02 is only $276. The two standard deviations can be considered quite close. The results indicate that the variation in average teacher salaries in 2001-02 was similar to that in 1995-96. Does this mean the situation in 2001-02 was as inequitable as in 1995-96? It is difficult to give a yes-or-no answer without looking at certain local variables that can affect how teachers are paid. An effort to see whether selected variables have an impact on teachers’ salaries will help answer the equity question.

Chambers and Fowler (1995) used a hedonic model to develop a teacher cost index across the United States. In an earlier article, Chambers (1981) described the hedonic model as follows:

The intuitive notion underlying this theoretical structure is that individuals care both about the quality of their work environment as well as the monetary rewards associated with particular employment alternatives, and that they will seek to attain the greatest possible personal satisfaction by selecting a job with the appropriate combination of monetary and non-monetary rewards. Similarly, employers are not indifferent as to the characteristics of the individuals to whom they offer particular jobs. The result of these simultaneous choices is the matching of individual employees with employers. It is the result of this matching process itself that reveals implicitly the differential rates of pay associated with the attributes of individual employees and the working conditions offered by employers. More formally, it is the supply of, and demand for, individuals with certain personal attributes to any particular kind of job assignment that determines
the equilibrium wages of labour as well as the implicit market prices attached to
the personal and job characteristics.

The implicit relationship observed between wages and the personal and
job characteristics of individuals is referred to as a hedonic wage index ... The
hedonic wage index permits one to decompose the observed variation in the
wages paid to labour into the dollar values attached to each unit of the personal
and workplace characteristics. (p. 51)

McMahon and Chang (1991) point out that in the United States there is a 74 percent
difference in the cost of living between the higher cost cities and the lowest cost non-
metropolitan areas (p. 16). The main difference between cities and non-metropolitan areas
is population density. “In general, more densely populated areas and the large urban areas
exhibit significantly higher teacher salaries. One standard deviation above the mean in
metropolitan area population is associated with a 6.5 percent salary differential” (Chambers

Local wealth, indicated by average family income, is another factor often
considered (Alexander & Salmon, 1995). An area’s socioeconomic status decides the
financial ability of the local government and influences its willingness and capacity to
spend on public education.

Increasingly, geographic differences in the cost of living are a factor in collective
bargaining. Cost of living is measured in various ways. Two variables often used to
measure the cost of living are land prices and population growth. “The basic land values
affect the local costs of producing goods and services and hence the cost-of-living
differences across regions” (Chambers & Fowler, 1995, p. 39). If the population grows,
“changes in the population affect local demand for goods and services and reflect upward
pressures on local prices and hence costs of living” (Chambers & Fowler, p. 39).

In addition, the general labor market influences whether people want to enter
teaching, whether they remain in teaching, and how teachers are paid (Lewis & Norris,
1992, pp. 260-277; Jacobson, 1996). In British Columbia, when the economy is
improving and more job opportunities are present, more teachers are likely to choose to
resign. In contrast, rising unemployment rates and the lack of job openings tend to
inhibit teachers from leaving the profession (British Columbia Teacher Supply and
Demand Committee, 1994, p. 5).

Finally, weather sometimes plays a role when people decide where to work. People
prefer to live in warm and sunny places, especially in a northern country like Canada. It is
reasonable to assume that teachers act in the same way. Colder places need to provide
higher salaries to attract and keep people. AThe notion is that individuals would trade off
salaries to live and work in regions with more favourable climates (Chamber & Fowler,

A review of the relevant literature suggests that six factors need to be considered
when analyzing variations in teacher salaries. These six factors are population density,
family income, land price, population growth, unemployment rate, and weather. These six
factors are independent variables expected to influence the dependent variable, the average
teacher salaries.
The partial correlation procedure in SPSS was conducted to test whether the six independent variables had a correlation with the dependent variable, whether the correlation was positive if there was one, and how strong the correlation was. The author hypothesized that relationships existed between the dependent variable and the six independent variables. The following six hypotheses were tested:

1. The greater the population density, the higher teacher salaries tend to be, other things being equal.
2. The higher the average family income, the higher teacher salaries tend to be, other things being equal.
3. The higher the average farmland price, the higher teacher salaries tend to be, other things being equal.
4. The higher the population growth, the higher teacher salaries tend to be, other things being equal.
5. The higher the unemployment rate, the lower teacher salaries tend to be, other things being equal.
6. The warmer the climate, the lower teacher salaries tend to be, other things being equal.

In this study, teacher salaries were the average salaries in publicly funded elementary and secondary schools. Data on average teacher salaries in 2001-02 from 60 English boards were calculated to produce the combined average salary for both elementary and secondary teachers for each census division. The average teacher salaries among 49 census divisions were compared to determine whether significant variation existed. Census divisions, not school boards, were used as units of analysis, because for five independent variables data were available from Statistics Canada only at the census division level. Average teacher salaries from 60 English school boards were calculated to generate data approximately at the census division level. The 12 French boards’ average teacher salaries were not used, because for 49 census divisions there are only 12 French boards, i.e., each French board covers several census divisions. Using French boards’ data would have reduced the variation in teacher salaries among census divisions.

Some English boards have similar boundaries with census divisions of the same name. In these census divisions, average teacher salaries from the public board and the Catholic board were calculated to generate an average for the census division. Other school boards cover more than one census division. For example, Limestone District School Board and Algonquin Lakeshore Catholic School Board both cover two census divisions, Frontenac and Lennox-Addington. Average salaries from the Limestone and Algonquin Lakeshore boards were calculated to obtain an average for Frontenac and Lennox-Addington. Census divisions in a similar situation had their average salaries calculated in the same way. One census division, Thunder Bay, has four boards in it: Lakehead District School Board, Superior-Greenstone Board, Thunder Bay Catholic Board, and Superior North Catholic Board. Average salaries from these four boards were calculated to arrive at an average for Thunder Bay. The boundaries of district school boards and census divisions can be viewed at the websites of Ontario Ministry of Education (May 13, 2003) and Statistics Canada (January 20, 2003).
Data for 49 census divisions on 2001 population density, average family income, average farmland price, unemployment rate, and 2000-2001 population growth were obtained from Statistics Canada (2002; March 12, 2002; 2003a, 2003b, May 2003). Daily average temperature for 49 census divisions was taken from Environment Canada (2005). Table 3 displays average teacher salaries calculated for 49 census divisions in 2001-02.

Table 3
Average Teachers’ Salaries for Census Divisions 2001-2002

<table>
<thead>
<tr>
<th>Division</th>
<th>Salary</th>
<th>Division</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algoma</td>
<td>$58,940.08</td>
<td>Middlesex</td>
<td>$58772.38</td>
</tr>
<tr>
<td>Brant</td>
<td>59,364.88</td>
<td>Muskoka</td>
<td>57,416.30</td>
</tr>
<tr>
<td>Bruce</td>
<td>60,184.18</td>
<td>Niagara</td>
<td>55,920.35</td>
</tr>
<tr>
<td>Chatham</td>
<td>61,051.05</td>
<td>Nipissing</td>
<td>58,651.01</td>
</tr>
<tr>
<td>Cochrane</td>
<td>57,592.58</td>
<td>Northumberland</td>
<td>57,416.30</td>
</tr>
<tr>
<td>Dufferin</td>
<td>57,688.05</td>
<td>Ottawa</td>
<td>53,043.48</td>
</tr>
<tr>
<td>Durham</td>
<td>56,060.63</td>
<td>Oxford</td>
<td>58,772.38</td>
</tr>
<tr>
<td>Elgin</td>
<td>58,772.38</td>
<td>Parry Sound</td>
<td>58,651.01</td>
</tr>
<tr>
<td>Essex</td>
<td>57,444.41</td>
<td>Peel Region</td>
<td>57,688.05</td>
</tr>
<tr>
<td>Frontenac</td>
<td>57,203.81</td>
<td>Perth County</td>
<td>57,835.58</td>
</tr>
<tr>
<td>Greater Sudbury</td>
<td>58,052.76</td>
<td>Peterborough</td>
<td>57,416.30</td>
</tr>
<tr>
<td>Grey County</td>
<td>60,184.18</td>
<td>Prescott</td>
<td>56,953.07</td>
</tr>
<tr>
<td>Haldimand</td>
<td>59,364.88</td>
<td>Prince Edward</td>
<td>57,203.81</td>
</tr>
<tr>
<td>Haliburton</td>
<td>57,416.30</td>
<td>Rainy River</td>
<td>60,069.27</td>
</tr>
<tr>
<td>Halton Region</td>
<td>56,773.22</td>
<td>Renfrew</td>
<td>54,594.54</td>
</tr>
<tr>
<td>Hamilton</td>
<td>57,624.15</td>
<td>Simcoe County</td>
<td>57,416.30</td>
</tr>
<tr>
<td>Hastings</td>
<td>57,203.81</td>
<td>Stormont</td>
<td>56,953.07</td>
</tr>
<tr>
<td>Huron</td>
<td>57,835.58</td>
<td>Sudbury</td>
<td>58,052.76</td>
</tr>
<tr>
<td>Kawartha</td>
<td>57,416.30</td>
<td>Thunder Bay</td>
<td>58,421.93</td>
</tr>
<tr>
<td>Kenora</td>
<td>60,023.04</td>
<td>Timiskaming</td>
<td>57,592.58</td>
</tr>
<tr>
<td>Lambton</td>
<td>61,051.05</td>
<td>Toronto</td>
<td>59,208.73</td>
</tr>
<tr>
<td>Lanark</td>
<td>56,953.07</td>
<td>Waterloo</td>
<td>59,620.78</td>
</tr>
<tr>
<td>Leeds</td>
<td>56,953.07</td>
<td>Wellington</td>
<td>57,688.05</td>
</tr>
<tr>
<td>Lennox</td>
<td>57,203.81</td>
<td>York Region</td>
<td>59,207.25</td>
</tr>
<tr>
<td>Manitoulin</td>
<td>58,052.76</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: N = 49, M = $58,065.31, SD = $1,299.99

Source: Author’s calculations from Ontario Ministry of Education data, 2004

The standard deviation is about 2 percent of the mean. The standard deviation is smaller than the one found in 1995-96, which was about 3 percent of the mean (Li, 2002). The partial correlation procedure was conducted to test each of the six hypotheses.
Table 4 displays the results of the partial correlation analysis.

*Partial Correlation Coefficients for Six Independent Variables 2001-2002*

<table>
<thead>
<tr>
<th>Density</th>
<th>Familyin</th>
<th>Landpric</th>
<th>Popugrow</th>
<th>Unemploy</th>
<th>Weather</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>-.25</td>
<td>.03</td>
<td>.24</td>
<td>-.04</td>
<td>.26</td>
</tr>
</tbody>
</table>

Controlling:

- Familyin
- Landpric
- Popugrow
- Unemploy
- Weather

Hypothesized correlation: + + + + – –

Since population data were used, no significance testing was necessary. The results of the partial correlation analysis indicate that between population density and average teacher salaries there is a surprisingly negative correlation ($r = -.25$) at the census division level, contrary to the hypothesis.

There is a very weak positive correlation between family incomes and teacher salaries ($r = .03$), confirming the hypothesis. There is a low positive correlation between farmland prices and teacher salaries ($r = .24$), confirming the hypothesis again.

There is a very weak negative correlation between population growth and teacher salaries ($r = -.04$), contrary to the hypothesis. There is a low positive correlation between unemployment rates and teacher salaries ($r = .26$), again contrary to the hypothesis. There is a weak positive correlation between weather and teacher salaries ($r = .11$), also contrary to the hypothesis.

**Discussion**

It is difficult to determine why there is a weak negative correlation between population density and teacher salaries at the census division level. This unusual phenomenon merits further investigation.

The positive correlation between family incomes and teacher salaries confirms the hypothesis, but at .03 the relationship is very weak. There is a significant, albeit low, positive correlation between farmland prices and teacher salaries, as hypothesized. This result confirms what Chambers and Fowler (1995) found in their study.

For the surprisingly negative correlation between population growth and teacher salaries, the explanation is that as population grows in a census division, often so does...
student enrolment. As enrolment grows, schools must hire more teachers, who tend to be new teachers paid at entry-level salaries, lowering the average salary.

For the surprisingly positive correlation between unemployment rates and teacher salaries, a highly possible explanation is that there is rigidity in the public sector’s response to the ups and downs of the marketplace, especially when the sector is unionized (Dwayne, Gunderson, & Riddell, 2002). In Canada, all teachers in publicly funded schools belong to a union. Collective agreements between unions and school boards may reflect this rigidity in responding to the marketplace. In 2001-02, most collective agreements between teachers and school boards were for two or three years. This further complicates how the local economy affects the compensation of teachers. In addition, the funding formula has a “learning opportunities allocation” for socially and economically depressed areas, to reflect the higher cost of educating disadvantaged students. Is it possible that census divisions with higher unemployment rates receive a higher learning opportunities allocation and that these boards are able to pay teachers higher salaries? Whatever the case, the positive correlation is puzzling and warrants further exploration.

Contrary to the hypothesis, there is a positive albeit very low correlation between daily average temperature and teacher salaries. It is difficult to explain why.

Overall, the results from the partial correlation analysis concerning the relationships between the six independent variables and the dependent variable at the census division level contradict four out of the six hypotheses. Regarding the two relationships that confirm the hypothesis, the positive relationship between family incomes and teacher salaries is very weak, at only .03. In most cases, inequity in education financing arises from differences in local wealth. The Conservative government launched its education reform in part to make funding more equitable. In the late 1990s a study was conducted that investigated the relationships between the same six independent variables and the dependent variable for census divisions in Ontario. That study found that in 1995-96 out of the six independent variables four had an impact on average teacher salaries as hypothesized (Li, 2002). Table 5 displays the partial correlation analysis results of that study.

Table 5
*Partial Correlation Coefficients for Six Independent Variables 1995-1996*

<table>
<thead>
<tr>
<th>Density</th>
<th>Familyin</th>
<th>Landpric</th>
<th>Popugrow</th>
<th>Unemploy</th>
<th>Weather</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>.02</td>
<td>.16</td>
<td>.13</td>
<td>-.35</td>
<td>.25</td>
</tr>
</tbody>
</table>

Controlling:
<table>
<thead>
<tr>
<th>Familyin</th>
<th>Density</th>
<th>Density</th>
<th>Density</th>
<th>Density</th>
<th>Density</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popugrow</td>
<td>Popugrow</td>
<td>Familyin</td>
<td>Familyin</td>
<td>Familyin</td>
<td>Familyin</td>
<td>Familyin</td>
</tr>
<tr>
<td>Landpric</td>
<td>Landpric</td>
<td>Popugrow</td>
<td>Landpric</td>
<td>Popugrow</td>
<td>Popugrow</td>
<td>Popugrow</td>
</tr>
<tr>
<td>Unemploy</td>
<td>Unemploy</td>
<td>Unemploy</td>
<td>Unemploy</td>
<td>Landpric</td>
<td>Landpric</td>
<td>Landpric</td>
</tr>
<tr>
<td>Weather</td>
<td>Weather</td>
<td>Weather</td>
<td>Weather</td>
<td>Weather</td>
<td>Unemploy</td>
<td>Unemploy</td>
</tr>
</tbody>
</table>
Are Ontario Teachers Paid More Equitably?  Xiaobin Li

Hypothesized correlation:  +  +  +  +  -  -  -

Table 4 indicates that in 2001-02 the positive correlation between family incomes and teacher salaries for census divisions was very weak at .03, much smaller than the .16 correlation in 1995-96 (see Table 5). Family income is the most important independent variable influencing teacher salaries inter-provincially as well as intra-provincially (Li, 2002). The funding for education at the census division level was more equitable in 2001-02 than in 1995-96, because the influence of local residents’ wealth on teacher salaries had been reduced from .16 to .03.

In addition, the influence of population density was reversed. The positive correlation in 1995-96 became a negative one in 2001-02, contradicting the hypothesis. It is difficult to determine, however, whether this is a good thing or bad thing.

The answer to the first question, “Are Ontario teachers paid more equitably?” is, “Yes.” In 2001-02 teachers in publicly funded schools in Ontario were paid more equitably at the census division level than they had been in 1995-96, because the reform significantly reduced the influence of local residents’ wealth. This is confirmed by the fact that the ratio of the standard deviation to the mean of average teacher salaries was reduced from 3 percent in 1995-96 to 2 percent in 2001-02.

The answer to the second question, “Do local variables matter?” is, “Probably they do not.” As a result of the provincial funding formula, local variables do not really matter any more in deciding how teachers are paid. Out of the six independent variables hypothesized to have an impact on average teacher salaries, four have a correlation contrary to the hypothesis. Regarding the two variables confirming the hypothesis, the impact of family income has been greatly reduced.

However, in 2001-02 the variation in average teacher salaries among school boards was similar to what it had been in 1995-96 (see Tables 1 and 2). This is surprising. Every board had been funded in the same way, so why did average teacher salaries vary among school boards in 2001-02 as they had among boards in 1995-96? Since every board is funded according to the same formula, most expenditures should be similar, including teacher salaries, which are the most important item in education budgets.

One explanation is that school boards may use their allotted money in different ways. For example, in 2003-04 Toronto District School Board gave schools about 3 percent of what they were entitled to according to the formula. But Halton District School Board gave their schools about 1.44 percent of what they were entitled to. With different proportions of the money at their disposal, boards may be able to pay their teachers a little differently. Since teacher salaries are decided at the board level, it can happen that teachers employed by different boards are paid differently.

Other factors may help explain why a noticeable variation in average teacher salaries exists among school boards. For example, student/teacher ratios may vary. Provincial guidelines stipulate average class sizes for schools, but how closely do boards
follow those guidelines? If different boards have different class sizes, the different class sizes will have an impact on how teachers are paid. In addition, boards have discretion in using some allocations, of which one is the language allocation. It is reported that some boards use the money from the language allocation elsewhere (People for Education, 2008; Rushowy, 2007).

Finally, teachers are paid differently according to their education and experience: more experienced teachers and those with more training are paid more, which should affect average teacher salaries. Enrolment at Toronto Catholic School Board has been declining in recent years, but enrolment at Halton Catholic School Board has been increasing. Proportionately, the Toronto board is hiring fewer new teachers than the Halton board; as a result, there is a higher proportion of new teachers at Halton, reducing the average salary of teachers there. Table 2 indicates that Toronto Catholic School Board’s average teacher salary was $61,302, $6,889 higher than $54,413 at Halton. Actually, in the funding formula there is an allocation, the “teacher qualification and experience allocation,” that helps school boards with more senior teachers offset the higher salaries they have to pay. This makes relating variables with average teacher salaries more complicated.

In most boards a teacher with a master’s degree—usually a Master of Education degree—is paid more than a teacher with a Bachelor of Education degree. If school board A has more teachers with a Master of Education degree than board B, average teacher salaries in board A will be higher.

Unfortunately, the data associated with these two important variables—experience and education—are not available at the present time. If they had been, the research might have been more accurate. The available data and analyses are not ideal; they are approximations that offer us some insight into how equitably teachers are paid and whether selected local variables affect how teachers are paid at the census division level.

One limitation of this study is that the data from school boards and census divisions were matched approximately. In the process, inaccuracies may have arisen. A closer look at the funding formula itself and its impact on school boards may help us understand why variation still occurs in average teacher salaries across school boards. Another limitation of this study is that benefits have not been included in the analysis, and benefits may vary from board to board.

Should every teacher be paid the same when the cost of living varies across the province? For example, in Toronto—Canada’s largest city with more than two million residents—house prices are much higher than in Kenora, a town in the province’s northwest part. Should teachers in Toronto and Kenora be paid the same? Most people would say they should not, yet the current funding formula does not directly consider living costs. However, this study did find a positive correlation between one indication of the cost of living—land price—and average teacher salaries at the census division level. That is, where land prices are higher, teachers tend to receive higher salaries. Since the formula does not consider land prices, this finding merits further investigation. In deciding teacher salaries, is it possible to develop a mechanism to compare the cost of living in different locations?
Teacher salaries are negotiated locally, between union locals and school boards. Would provincial bargaining for all teachers and all boards be more equitable and more effective? Or would a regional bargaining for teachers and boards be more equitable and more effective? For example, the province could be divided into several economic regions according to Statistics Canada data. These questions deserve to be considered.

Teacher salaries are the largest item in education expenditures. Understanding whether teachers are paid equitably and whether local variables affect how they are paid helps us better comprehend their working conditions, which contributes toward decision-making that moves education along constructive paths. In addition, most teacher contracts in Ontario will expire at the end of August 2008. How to pay teachers appropriately will once again become the focus of attention.
Are Ontario Teachers Paid More Equitably?

Xiaobin Li

References


