

ACCOMMODATING LEARNING STYLES IN BRIDGING EDUCATION PROGRAMS FOR INTERNATIONALLY EDUCATED PROFESSIONALS

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July 2009

Acknowledgements: This research was generously supported by a grant from the Canadian Council on Learning. We also acknowledge the active contribution to this research from the program directors, educators and internationally educated professionals of three Ontario bridging education programs.

This work was funded by a contribution from the Canadian Council on Learning

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Executive Summary

Recent research suggests that internationally educated professionals (IEPs) continue to experience high levels of underemployment and unemployment, a situation which will not alleviate the growing demand for skilled professionals in Canada. IEPs represent a multidisciplinary group of skilled immigrants who received their professional licensure outside of Canada. Bridging education programs were developed with a view to assisting IEPs in overcoming knowledge and skills gaps in order to facilitate access to professional employment. Although these programs have been operational for a number of years in Canada, they have been less successful than anticipated. According to recent Statistics Canada reports, skilled immigrants continue to experience major under or unemployment. Despite significant financial investment by government and program delivery by post-secondary institutions, many IEPs continue to experience a multitude of challenges within these programs.

There has been little research exploring the learning experiences of IEPs enrolled in professional bridging education programs. This research identified effective educational approaches and strategies which complement IEP learner styles and preferences and promote academic success and successful employment. Questions concerning professional students' learning styles and preferences within a multicultural classroom context were addressed. The challenges, successes and barriers that IEP students experience within bridging education programs were explored using survey and interview methods.

The major objective of the research was to determine if IEPs bring distinctive learning styles and preferences, developed prior to immigrating to Canada, to bridging education classrooms. Using an instrument previously developed for North American students developed by Kolb, this research illustrated that IEPs tend to begin the learning cycle through concrete experience and reflective observation. They are also considered above average in their readiness to be self-rather than teacher-directed learners as measured by a reliable and valid instrument developed by Guglielmino. This aptitude also suggests that IEPs are able to perform well in future jobs requiring problem-solving ability and creativity and change.

The multicultural nature of bridging education also poses additional challenges for instructors. The Bridging Education and Professional Work (BEPW) questionnaire was developed to gather biographic and work information on IEP characteristics. The results illustrated the range of diversity of the professional and personal backgrounds of learners within bridging programs. As a result the educational focus of bridging education needs to accommodate this fact. Bridging education needs to focus on the development of a Canadian professional identity and cultural competency, not just bridging gaps in discrete knowledge and skills. English and professional language competency was found to be a significant challenge for IEPs, in particular, standardized tests scores may not be a reliable indicator of communication proficiency for IEPs in the workplace

It is significant that the IEPs in this research possess a distinctive learning style which is different from those previously reported for North American professionals. The results of this research are beneficial in two ways. At one level, it is informative for assisting post-secondary institutions and their faculty in learning how to adapt their bridging education programs to learner styles of IEPs. At a higher level, the research confirms the importance of designing flexible learning in bridging education based on democratic student-centered adult education principles which build on learner strengths and values their learning styles as assets.

Background

As a result of strategic immigration policies, the majority of the approximately 250 000 immigrants arriving in Canada annually are highly educated and skilled. Within the past decade, skilled workers are selected for their post-secondary education (PSE) and professional experience. In spite of their academic and professional qualifications, many newcomers continue to face difficulties in accessing equivalent professional positions in the Canadian workforce. The employment rate among prime working-age immigrants two years after arrival was 63%, 18 percentage points below the national rate of 91% (Statistics Canada Longitudinal Study of Immigrants, 2003). In 2008, Statistics Canada reported that there has been some improvement in the labour market integration of skilled immigrants nevertheless, their success rate continues to be lower. Furthermore, of those who became employed, only 58% found a job in their intended occupation. Since they were given priority based on their education, language ability and employment skills, these individuals as well as policy makers expect that they should be more likely to succeed in the labour market. In Ontario, the destination for over 50% of all immigrants to Canada, evidence revealed that only 31% of internationally educated professionals who require registration/licensing are successful in the registration/licensure process in Canada and only 35% are working in their own or a related occupation with the same status in the first four years of arrival (Government of Ontario, 2002).

Internationally educated professionals (IEPs) represent a multidisciplinary group of skilled immigrants who obtained their professional licensure outside of Canada and is synonymous with the term 'foreign-trained' professionals (Lum, 2006). This designation varies by profession, for example, in the case of medicine, IEPs are referred to as international medical graduates (Hoekje, 2006). Completion of bridging education programs is usually one component of gaining Canadian licensure for IEPs.

Workplace integration has been shown to be more problematic for workers who are members of self-regulated professions which have a direct impact on public safety and quality of life. Irrespective of the nature of the professional service, it is in the public interest to ensure that access to these professions is limited to those practitioners who meet entry-to-practice requirements. Major tensions exist within this aspect of employment integration, that is, between the need to meet the increasing demand for skilled workers in a knowledge-based economy while assuring the public that the supply of practitioners meets locally established standards in knowledge, skills and competencies. Despite dramatic increases in provincial and federal government-funded specialized immigration and settlement services, the overall success in

obtaining gainful employment by IEPs has not substantially increased and the negative outcomes of underemployment are increasingly evident (Reitz, 2005; Walters, Phythian and Anisef, 2005).

There is evidence that new immigrants possessing academic credentials and experience from their countries of origin and seeking access to regulated professions have a higher degree of failure in securing employment than their local counterparts (Canadian Nursing Association, 2005; CAPE, 2006; Thompson, 2005). Regulatory bodies assess professional qualifications, educational credentials, language proficiency and other criteria. In most industrialized countries, many professions are regulated by state/ provincial/ national laws to protect the public by setting standards of practice and competence. Canada practices self-regulation whereby associations of practicing professionals are established, usually under provincial legislation, as self-governing bodies. All regulated professions require that an individual be registered with the regulatory body in order to use the title and perform the work of the profession. In Ontario, for example, there are 36 regulated professions with over 500 000 members. Although IEPs are required to meet pre-determined knowledge and performance standards within their profession, the current systems for assessing pre-existing knowledge and skills obtained outside of Canada may fail to produce accurate appraisals of the true abilities of IEPs. The peer review process within certain professions that underlies self-regulation may limit the ability of locally experienced professionals to accurately appraise the true abilities of skilled IEPs (CAPE, 2006). Without an accurate appraisal of an applicant's existing knowledge, regulatory colleges are at risk of requiring IEPs to undertake bridging education which may in fact duplicate their former education or fail to address actual skill and knowledge gaps.

Employers continue to express a strong preference for hiring IEPs who are familiar with the social and cultural context of the Canadian workplace. However, bridging programs providing this knowledge have not been widely available (Colleges Integrating Immigrants to Employment, 2004). One of the challenges for educators is to design and provide programs which are sufficiently flexible to accommodate the diverse learning backgrounds of international professionals yet achieve a sufficient degree of uniformity in learning outcomes sufficient to enable applicants to meet Canadian profession-specific licensing or registration requirements. IEPs have identified that bridging programs must include Canadian workplace experience, knowledge of local culture and legislation (Rasheed, Chakrawati and Akhter, PROMPT, 2006). Tension resulting from the need to accommodate diversity while achieving performance standardization within regulated professions has created new challenges for post-secondary institutions.

This research focused on the identification and development of effective educational approaches and strategies based on an improved understanding of how learner styles and preferences may influence academic success and potential employment outcomes. The challenges, successes and barriers that IEP students experience as they make the transition to Canadian education and workplace expectations were explored. Questions concerning professional students' learning styles and preferences within the context of bridging education were addressed.

Specific objectives included the:

1. Identification of the benefits and challenges of bridging education programs.
2. Identification of learning styles and preferences of IEP students.

3. Identification of program development and teaching strategies in designing flexible learning in bridging education which facilitates workplace integration.
4. Description of the implications for policy and practice changes within post-secondary institutions to promote more effective bridging education

Bridging Education Programs

Professional bridging programs that assist students in making the transition into Western practice have been developed as one solution to addressing the knowledge and experience gap of international practitioners. In Canada, bridging education is widely defined to include specialized forms of education directed towards assisting learners to overcome knowledge and skills gaps (PROMPT, 2006). Bridging education has been considered an important lever in facilitating licensure and access to stable, valued work and has become the focus of an extraordinary array of government and academic reports and government expenditure over the past two decades (Hawthorne, 2002).

Similarly, the Canadian Information Centre for International Credentials (CICIC) defines *bridge training* as a program of study involving courses designed specifically to provide individuals with skills and knowledge required for entry into an occupation or a higher level educational institution (2007). The Ontario government describes these programs as “support programs intended to help newcomers get their license or certificate in their profession or trade which have been put together by employers, colleges and universities, occupational regulatory bodies, and community organizations” (Ontario Ministry of Immigration and Citizenship, 2008). Bridging programs vary by profession and serve multiple educational purposes but they usually include some combination of the following:

- An assessment of existing education and skills
- A clinical or workplace experience
- Skills training or targeted academic training programs
- Preparation for a license or certification examination
- Profession or trade-specific language training
- Individual learning plans to identify any additional training needs

The primary rationale for the development of this specialized form of professional education is the perceived discrepancy between immigrants’ prior knowledge and experiences and Canadian standards of professional practice. Although not universally recognized as being necessary in all jurisdictions, bridging education has become commonplace in most provinces. In 2006, a review of existing government funded programs revealed that 66 programs were operational in Ontario, representing 40 different occupations or professions (PROMPT). The number of for-profit programs has not been ascertained. In the absence of professions-specific programs, IEPs are required to re-qualify using the same career path as their local counterparts, for example, completing in Canada a Bachelor of Education degree for teachers or Bachelor of Science in Nursing for nurses.

Bridging education curricula have largely been developed under the assumption that IEPs possess pre-existing knowledge upon which new knowledge and experiences can be added. Two types of professional upgrading education are available in Canada; those which are government-sponsored, structured 'bridging' programs offered by community colleges and universities and unstructured options of part-time courses pre-identified by regulatory colleges but offered by continuing education departments of post-secondary educational (PSE) institutions. Educational programs offered by PSE institutions can be broadly divided into the following categories: profession or trade-specific bridging programs; academic and/or occupation-specific English/French as a Second Language programs; and, integrated English/French as a Second Language and profession or trade-specific bridging programs. These categories are not mutually exclusive and often there is significant overlap between them. Common program components, although not available in all programs, include communication and clinical skills training, licensing exam preparation and practicum experience. These initiatives represent diverse models of intervention, where some are strictly at the institutional level and others are built on partnerships between universities, employers and local service agencies. Other program providers include, although to a lesser extent, regulatory bodies, professional associations and community service agencies.

Although bridging education programs are profession-specific in their focus, all programs usually consist of direct classroom instruction and some will also provide practicum or workplace experience. Typically, the curriculum is designed to address the development of profession-specific knowledge focusing on scientific theory, technology, and oral and written literacy. Development of new policy knowledge usually relates to issues concerning self-regulation, professional accountability and client expectations (Austin, 2004). Of the Ontario programs reviewed, over 50% of the program components relate to improving language proficiency, including written and oral literacy, prior learning assessment (PLA) and credentials equivalency, and occupation-specific competency development. Less emphasis (19%) is placed on mentoring and workplace experience (PROMPT, 2006). Approximately 38% of the program components are intended to develop labour market skills and include job counseling, search strategies, mock interviewing, resume preparation and strategies to access networks.

Culturally sensitive, appropriate bridging education can be provided if designers are aware of the background and learning styles of their learners. For example, our research has identified inherent biases towards students' learning styles within health professions' bridging programs (Lum, Nestel & Hagey, 2005). Educational programming based upon a deficit model of learning which casts international students as lacking essential academic and professional competencies and therefore requires students to 'upgrade' is an ethnocentric view which may prevent integration into the mainstream culture of the North American healthcare system (McLoughlin, 1999). This approach assumes that IEPs must abandon or 'unlearn' their original knowledge and skills and adopt completely new methods of learning in order to assimilate Western values.

Conventional approaches to the design of programs for workforce learning and development have been typically based upon instructional design strategies predicated on the implicit assumption that the target group of learners will exhibit uniformity in the ways they process and organize information, and that this uniformity will mirror the predominant professional culture in Canada. In adopting such a stance one runs the risk of ignoring important aspects of individual

differences in cognitive style and instructional preferences, that is, their disposition towards particular aspects of the learning environment (Sadler-Smith and Smith, 2004). In order to accommodate the potentially diverse learning styles of multicultural students in international ‘bridging’ education programs, a model that represents an integration of learning styles and preferences is crucial to the process of effective flexible learning. At present, existing programs accommodate diversity by either ignoring its existence or crafting a unique learning experience for each individual student. Both approaches have significant limitations.

Learning Styles and Preferences

Understanding learning styles provides a framework for predicting and improving educational achievement as well as improving vocational selection, guidance and placement. Sadler-Smith and Smith (2004) propose that when designing and facilitating learning experiences, in addition to organizational and environmental contexts, it is necessary to consider the characteristics of the learner with particular emphasis on responding effectively to a variety of learning styles and preferences. Sadler-Smith (1996) defines *learning styles* as information processing activities and *learning preferences* as the individual choices of one particular mode of learning over others. Although there are a number of different constructs labeled as learning styles, learning-centered approaches described in this research are those described by Kolb (1984) and Hayes and Allinson (1984).

Aside from the continued interest in learning styles of medical students (Zhang and Flipse, 2005), there has been a serious lack of formal attention to learning styles and student outcomes in contemporary westernized professional education. In contrast, learning style concepts have inadvertently become deeply embedded in formal professional licensing mechanisms controlling the right and ability of individuals to practice in North America. Nelson and Purkis (2004) have noted that in the past two decades, competency standards enforced through legislation have been developed in response to government initiatives aimed at improving consistency in workforce training and accreditation, and in fostering national and international portability of qualifications. The implicit requirement for professional students to exhibit preferred learning styles and some degree of self-direction suggests that particular instructional, learning and support strategies need to be adopted to facilitate learning (Lum, 2006).

Knowing more about an individual’s learning style can be beneficial in several ways. It can maximize learning from educational programs and promote problem solving, working in teams, managing disagreement and conflict, making career choices and improving personal and professional relationships (Kolb, 2005, p. 2). Wolfe et al. suggests that the more an individual learner knows about his or her learning style, the more he or she becomes aware of how their learning style differs from that of others. This awareness is useful since it helps the learner to better adapt to classroom or job situations.

The literature has reported several models and instruments that have been developed to classify learning styles and identify learning preferences. The most frequently used method for assessing learning health-related professions is the Kolb’s Learning Style Inventory. This inventory is particularly relevant to students’ in professional learning environments where active involvement is important. Kolb’s inventory is based upon John Dewey’s emphasis on the need for learning to

be grounded in experiences and John Piaget's theory of intelligence resulting from the interaction of the person and the environment (Wolfe et al, 2005).

The Experiential Learning theory originally described by Kolb in 1984 describes how learners perceive and interpret information. The theory proposes that there are two dimensions to learning. A learner perceives information received from concrete experiences or abstract conceptualization. The way this information is processed is based upon active experimentation or reflective observation. These dimensions form four quadrants which Kolb has categorized as: divergers; assimilators, convergers and accommodators (Kolb, 2005).

Learners who view concrete situations from different perspectives in order to generate a wide range of ideas, are creative and good at understanding people are considered to have a *diverging style of learning*. They prefer to observe rather than take action and have broad cultural interests. In formal learning situations, they prefer working in groups to gather information, listening with an open mind and receiving personalized feedback. This learning style is considered to be effective in arts, entertainment and service careers.

Learners who combine abstract conceptualization and reflective observations perform best at understanding a wide range of information and putting it into a concise logical form and described as having an *assimilating learning style*. They tend to be more interested in abstract ideas and concepts. This assimilating learning style is important for information and science careers.

Learners who are most effective at finding practical uses for ideas and theories are those with *converging learning styles*. They have the ability to solve problems and make decisions based on finding solutions to questions or problems. These skills are important in technology careers (Kolb, 2004).

Learners who have the ability to learn primarily from "hands-on" experience possess an *accommodating learning style*. They probably enjoy carrying out plans and involving themselves in new and challenging experiences. They prefer concrete experience with active experimentation rather than logical analyses. This learning style is important in action-oriented careers such as marketing or sales. Because they tend to accomplish tasks based on facts and reality, they take risks and lead others. Castro and Peck (2005) suggest that accommodators and divergers are more communicative learners and seem to be most successful in learning foreign languages.

Elements of Kolb's learning Styles are displayed in Figure 1.

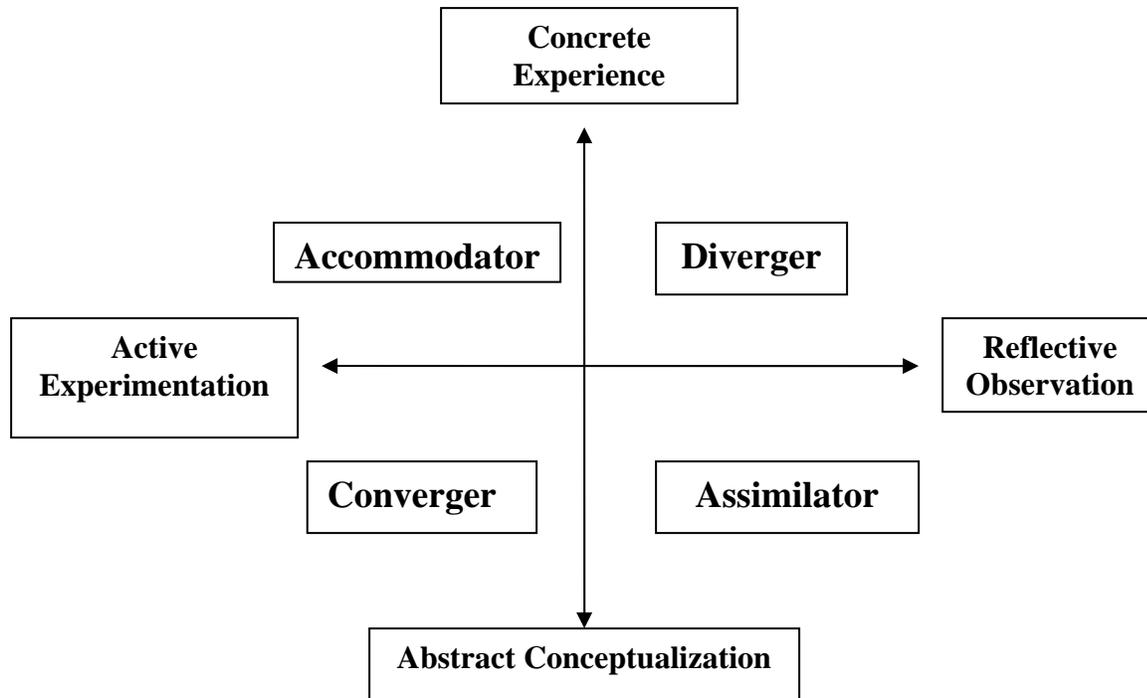


Figure 1. Elements of Kolb's Learning Styles (Kolb, 1984).

Kolb's theory of learning has its detractors. Honey and Mumford (1986) expressed dissatisfaction with Kolb's learning cycle model, citing poor face validity and questionable predictive accuracy (Devita, 2001). They proceeded to develop an alternative model consisting of four quadrants, identifying whether someone is an activist, reflector, a theorist or a pragmatist. The Honey and Mumford instrument has been widely used in management training and development.

With reference to professional education, Felder and Silverman developed a learning style model in 1988 which was first applied in the context of engineering education. This model categorizes students' preferences in terms of type and mode of information perception, approaches for the organization and processing of information and the rate at which students progress towards understanding.

Wolfe, Bates, Manikowske and Amundsen (2005) concluded that in each classroom, difference in learning styles preferences is common. A number of well-established learning style inventories have been reported. Any attempt to integrate the varied models of learning styles in an all encompassing model is an impossible task. The common theme shared by all perspectives is that learners cannot all be taught in the same way. It follows that teachers need to acknowledge learning style differences in their program delivery. Kolb believed that no one learns in one exclusive style and no learning is better or worse than another. Assessment of learning style can be used as a starting point for understanding the way an individual approaches learning in order to improve learning outcomes.

Learning styles of individuals in a variety of professions have been reported. In the earlier literature, Kolb (1985) generally classified the learning styles of individuals in nutrition-related careers in the Diverger category. A study of engineering students found all four learning styles were represented (Harb, Terry, Hurt and Williamson, 1991). Cavanaugh (1995) reported that nursing students tended to be in the assimilator category. Davis (1998) found no statistically significant correlation between learning style and medical specialty. More recently, an instrument based upon the Kolb's learning cycle was developed for pharmacy education and practice. The Pharmacist's Inventory of Learning Styles (2004) is unique to the pharmacy profession as well as having an emphasis on the psychometric measures of reliability and construct validity.

Cultural Influences and Learning Styles

In light of the highly diverse cultural background of IEPs, the question as to whether culture influences learning styles needs to be considered. De Vita (2001) argued that because culture influences the ways we perceive, organize and process information and the ways in which we communicate and interact with others, culture must by definition affect the learners' preferences for thinking, relating to others, and participating in classroom environments. In the case of IEPs, consideration of their personal cultural background and the culture within a specific profession predispose individuals to certain ways of learning. The form of learning that takes place within a given culture plays a critical role in reinforcing, if not shaping, learning style preferences that are therefore subject to cultural conditioning. If this is the case, then this may explain why teaching methods, learning tasks and environments, that promote learning in some cultures may be ineffective in others (De Vita, p. 167).

Hughes-Weiner (1986) noted that differences in cultural orientation in the context of the Kolb model. Auyeng and Sands (1996) conducted cross-cultural research using the Kolb model to illustrate that the learning styles of accounting students differed according to the location of their education. Australian students preferred an accommodator learning style while students from Hong Kong and Taiwan preferred an assimilator style. Although there is limited research in this specific area, there is sufficient evidence to support the hypothesis that the presence of international students may accentuate the diversity of learning styles within a given bridging education classroom.

Bridging education programs also need to take into consideration students' preference for teacher or student-directed learning. Although bridging education programs adopt learning environments that have fewer structured learning activities and more self-directed learning tasks, these approaches may be unfamiliar for students from countries outside of North America. The literature on learning styles and preferences does not provide any direct evidence on whether students are ready to undertake unstructured learning activities. We included the self-directed concept in this research because Western educational programs for professional students are becoming increasingly self-directed, involving problem-based or case-based learning.

Self-directed learning is a continuous engagement in acquiring, applying and creating knowledge and skills in the context of an individual's unique problems. This capability is essential in knowledge economies where there is constant change in the workplace. Instilling life long

learning perspectives implies that educational institutions need to prepare learners to engage in self-directed processes.

International students have been typically perceived to be didactic learners, that is, demonstrating lower levels of initiative and preferring teacher-directed learning (Smedley, 2008; Stewart, 2007). Tagawa (2008) found that the readiness for self-directed learning among medical students is not high and should be improved by medical school and postgraduate training curricula in Japan. Self-directed learning is an important component of life-long learning as well as being an essential component of medical competency. He recommended that in order to teach individual self-directed learning competencies, the following are important: (1) situate learners to experience “real” problems; (2) encourage learners to reflect on their own performance; (3) create an educational atmosphere in clinical training situations.

Stewart (2007) proposed that for international engineering students in Australia, who have higher readiness for self-directed learning gain greater learning outcomes. Guglielmino (1977, 1989) proposed that self-directed learners tend to perform better in jobs involving a high degree of change, requiring a high degree of problem-solving and requiring a high degree of creativity. These are all features of the workplace of the regulated professions.

Research Methodology

Data collection was conducted in Toronto, Ontario since this is the preferred destination of Canada’s newcomers and is considered to be one of the most culturally diverse cities in North America. The goal was to accrue a multicultural and multidisciplinary group of participants who were currently engaged in bridging education prior to obtaining licensure. Participants were recruited in two phases, during spring and fall 2007 fall and spring 2008.

The purposive *sample* consisted of IEP students enrolled in post-secondary bridging educational programs in Ontario between fall 2007 and spring 2008. We approached a total of 20 different programs in Ontario. Health professions were targeted since they represent the majority of the regulated professions in Canada. These programs represented a variety of professions, including dietetics, physiotherapy, medical laboratory/technician, midwifery, nursing, optometry, pharmacy, social work. Medicine was excluded from the study since their process for credential recognition and bridging education differs significantly from other professions. By way of comparison, a non-health profession, such as teaching, was included. The number of IEPs within a given program varied from approximately 20 to 50 students. Over the course of three semesters, approximately 300 IEPs were invited to participate.

Each participant was provided with an honorarium for their involvement in the survey and interviews. Participation was voluntary and consent forms were completed by all participants (Appendix A).

Quantitative data concerning learning styles and preferences and biographic information were collected using three survey instruments. Selecting an instrument to measure students’ learning styles can be difficult. Although learning styles inventories have been developed which are specific to pharmacy practice and education (Austin 2004) and the adapted form of the Grasha

Reichman Student Learning Style scale (Novak et al. 2006), their application to a multicultural, multidisciplinary group of students had not been previously determined. The two questionnaires used in this research had been extensively used previously with a variety of types of learner including professional students and had demonstrated reliability and validity.

Kolb's Learning Style Inventory (KLSIIa version 3.1) designed by Kolb was intended to assist learners in understanding how they learn best in educational settings and everyday life situations. This inventory can serve as a stimulus to interpreting and reflecting on the ways that a learner prefers to learn in specific settings.

This inventory is a self-report questionnaire that enables individuals to analyze and to identify their preferred learning style (Appendix B). This theory of experiential learning has been widely used as a basis for helping individuals identify the kinds of learning activity that they find most satisfying and will improve their learning environment (Hayes and Allinson, 1996). Student learning styles are based on responses to the 12 item questionnaire, with each question containing four multiple choice items. Currently the KLSI is the self-assessment tool forming the basis for reflective practice for registered nurses in Ontario (College of Nurses of Ontario, 2005).

Guglielmino's Self-Directed Learning Readiness Scale (SDLRS) is widely used to measure readiness for self-directed learning. This tool is designed to measure the complex attitudes, abilities and characteristics which comprise readiness to engage in self-directed learning. The construct, content and criterion reliability and validity of the instrument are well-established in the literature. The modified version of the survey developed for adults with low reading levels or non-native English speakers was used in this study and consists of 34 statements, utilizing a 5-point Likert scale response (Appendix C). Research has suggested that individuals who have developed high self-directed learning skills tend to perform better in jobs requiring a high degree of problem-solving ability, creativity and change (Guglielmino and Klatt, 1994).

The Bridging Education and Professional Work Survey (BEPWS), consisting of 60 items, was developed by the research team to gather data related to their demographic profiles, language skills, educational qualifications, international professional experience, work experience in Canada and family background (Appendix C).

Statistical analyses were completed using SPSS version 15 for the quantitative data. Descriptive and correlation statistics were completed. Reliability of the self-directed learning inventory was evaluated using Cronbach's alpha.

Additional Data Collection

A qualitative research design was also used to gain a better understanding of students' experiences within bridging education programs. Students who were currently enrolled in bridging programs and participated in the survey portion of the study were recruited to participate in focus group interviews. Qualitative research involves an interpretive *naturalistic* approach to understanding social phenomenon. We recognize that IEP students and their experiences cannot be divorced from the social, cultural, racial, gender and class context in which they live, work and learn. Therefore, in order to understand students' life learning process, it is necessary to understand the students' relationship with their experiences of the world (Jarvis, 2006; Britzman, 2006). If we are to fully understand IEP's experiences and effect

change, we must try to understand contextual patterns and how they are sustained and controlled (Kirby and McKenna 1989).

Interview questions were developed to solicit specific thematic issues. These included: student perceptions of their perceived learning style, history and instructional preferences; the experience of being an international student participating in bridging programs; everyday experiences of learning and how self-directed learning inform their current professional identity; the socioeconomic, cultural, racial and gender context in which they live; and finally, students' experiences of transitioning between learning strategies acquired from previous training from their host country and the North American educational approaches.

Several limitations in this methodology were encountered. Despite the assistance of program directors who contacted over one hundred former IEPs studying within three programs, and the offer of a small honorarium, we received a limited number of responses. Many reported being too busy or were lost to contact due to change of addresses. As a result, the final sample of respondents (30) consisted of 10 students who had completed their programs during the previous 12-20 months and with whom we conducted individual interviews and, 20 current students who participated in three separate focus groups. The findings, based upon this small sample of students and programs must be interpreted with caution. However, the emerging themes were consistent with the findings reported by other researchers.

The identification of codes and concepts arising from analysis of the open-ended questions of the student survey data were used to develop questions for the student interviews. Content analysis techniques were used to analyze emerging themes and concepts arising from individual interviews into meaningful categories. We anticipated that emergent themes to reflect learning styles and preferences associated with prior professional learning environments. When managing and analyzing data from the student interviews, each segment of data was given equal opportunity to speak in the analysis; data was linked with questions raised from the data. Contributions from secondary data and existing theory were included later in the process. In essence, analysis consisted of moving data from category to category, looking for what is common and what is uncommon within categories and between categories. The data was arranged and rearranged until the themes became evident (Kirby and McKenna, 1989). The narratives from the interviews are reported in Appendix D.

Results

Description of Sample

A total of 138 IEP enrolled in three different Ontario bridging education programs in responded to the BEPW questionnaire. The response rate varied between the bridging programs, ranging from 30% to 80%. Two of the programs were situated within post-secondary institutions, that is, colleges and university and the third was jointly offered by a community immigrant service agency and the professional regulatory college. The quantitative results are described below.

a. Biographic Profile

The majority of the respondents were female (97, 70.8%) and the remainder were male (40, 29.2%). Their age ranged from 20 to 54 years, with the majority being young to mid-aged with a range of 25-39 years (68.9%). The majority (83, 60.1%) were married and of those who reported having children, 54 respondents had one or two children.

The permanent residency status of the sample varied considerably from those who had recently immigrated, that is, less than 3 months (12, 8.7%) to those who had immigrated over 10 years or more (5, 3.6%). The majority (58, 76%) had resided in Canada for less than 5 years.

The respondents had emigrated from a variety of world regions representing different countries. The Philippines contributed the largest number of respondents (50, 36.2%) followed by India (21, 15.2%) and Egypt 10 (7.2%). The largest group of respondents consisted of nurses (18, 66.7%) and pharmacists (32, 43%) from the Philippines. The teachers emigrated from a variety of countries, the largest group (13, 34.2%) from India.

The majority (65, 82%) of the sample were well-educated, ranging between 14 to 18 years of education. A small group (10, 8%) had 19 years or more. The nurses tended to have the least amount of education, 14-16 years. The pharmacists and teachers sub-samples tended to have members who had advanced education, that is, education beyond 16 years.

The annual household incomes of the respondents varied from less than \$10, 000 to more than \$100, 000. 65 respondents (51.2%) of the respondents were in the lower levels, that is \$40, 000 or less. Thirty one respondents (24%) reported being in the mid-income levels. In contrast, a small group (11, 8%) was in the highest levels.

The biographic profile of the respondents is displayed in Table 1.

Table 1: Biographic Profile of Respondents

Characteristic	Number	Percentage
Gender:		
Males	40	29.2
Females	97	70.8
Age		
20-24 yrs	27	19.9
25-29	24	17.6
30-34	31	22.8
35-39	24	17.6
40-44	9	6.6
45-49	10	7.4
50-54	9	6.6

Marital Status:		
Married	83	60.1
Unmarried	54	39.9
Post-Immigration Period:		
3 months or less	12	8.7
5 yrs. or less	58	76
10 yrs. or more	5	3.6
Education Level:		
14-18 years	65	82
19 years	10	8
Annual Household Income:		
Less than \$10, 000	24	18.9
\$11, 000 to \$20,000	12	9.4
\$21, 000 to \$40, 000	19	22.8
\$41, 000 to \$60, 000	17	13.4
\$61, 000 to \$80, 000	14	11.0
\$81, 000 or more	11	8.6

b. Work and Professional Characteristics

The sample consisted of 138 respondents represented by three professions: pharmacists (73), teachers (38) and nurses (27).

They received their initial professional licensure in 22 different countries. Approximately half (48, 48%) were licensed in the Philippines, 9 (9%) in Egypt, 6 (7%) in India and also Nigeria. Nine respondents obtained licensure from Iran, Nigeria, Mauritius and Ghana. The remainder was evenly distributed with one person from each of the remaining countries.

The results describing respondents' work experience must be treated with caution due to high rate of non-responses to these questions. A comparison of IEPs current and prior level of work, that is, employment status and income, before immigration varied. Of the 49 responses, the majority were working below their previous levels of employment. For the combined sample, 6 (12%) were working at a higher level and 2 (4%) at the same level. The remainder were working at a lower level (31, 63%) and 6 (18%) at a much lower level. The pharmacists and teachers were more likely to be working at lower levels of employment than the nurses but the differences were small.

Table 2: Work and Professional Characteristics

	Overall Sample n (%)	Nurses (27)	Pharmacists (73)	Teachers (38)
I am working in exactly the same profession.	5 (9.8)	2 (12.5)	-	3 (12.5)
I am working in a related profession.	9 (37.3)	10 (62.5)	6 (54.5)	3 (12.5)
I am working in an unrelated profession.	12 (23.5)	3 (18.8)	-	9 (37.5)
I am working in low paying employment.	14 (7.5)	1(6.2)	5 (45.5)	8 (33.3)
Other	1 (.2)	-	-	1 (4.2)
Total	51	16	11	24

For the combined sample of 51 respondents, approximately half were working in the same (5, 10%) or related profession (19, 38%). The remainder were working in unskilled (14, 28%) or in unrelated professions (12 or 24%). Pharmacists (5 of the 11 respondents were working in a related profession) and teachers (6, 24%) were least likely to be working in the same or related profession. The nurses (10, 62%) were more successful in finding similar professional work in Canada.

c. Activities related to Job Search or Licensure

Respondents engaged a wide range of activities in order to enhance their prospects of gaining employment or professional licensure which were over and above the direct costs of enrolling in bridging education programs. The most common activities included information seeking, counseling, attendance at educational events and engagement in the licensure process. The activities most frequently reported by the majority included: purchasing learning related equipment or materials such as computers and books; accessing the internet and T.V. to seek information; working with employment counselors, recruiters and job placement agencies; attending seminars on alternative employment schemes; hiring personal consultants, and obtaining legal advice. Respondents were less likely to take language courses, become a member of an association or networking group, volunteering or having their credentials assessed.

Respondents reported a varying range of expenditure, from less than \$199 to over \$1500 on job search and licensure activities. The most costly activities, that is, those over \$1500, included taking profession-specific courses or upgrading and purchasing learning related equipment or materials. Having their credentials assessed, applying for licensure and exam writing, as well as technical communication costs resulted in expenditures between \$500 and \$999. The remainder of the activities usually cost less than \$199.

d. Language Skills

All respondents had successfully completed at least one or more English language test prior to their admission to the bridging program although this requirement was not standardized across professions or by institution. For example, the majority of the respondents completed the IELTS. The second most common test was the CLB. Fewer IEPs were required to pass computer-based TOEFL or Can Test. Each program determines a specific passing score that the applicant must meet before being admitted to the program, The results showed that although there were different tests required, every group of IEPs were generally above the average level. The purpose of this study was not to make comparisons between programs but to illustrate that on the whole IEPs had met the language competency criteria for admission.

Table 3: Language Test Scores

Test	Total Number Taking Test	Number and Percentage Below Level	Number and Percentage Above Level
CLB	35	4 (11.4%)	31 (88.6%)
IELTS	64	7 (10.9%)	57 (89.1%)
TOEFL (at 220)	15	9 (60%)	6 (40%)
TOEFL (at 103)	15	7 (46.7%)	8 (53.3%)
TOEFL (at 97)	15	6 (40%)	9 (60%)
CanTest	11	2 (18.2%)	9(81.8%)

Respondents were asked to self-assess their language abilities in relation to reading, writing, listening, speaking and pronunciation. The majority of the respondents reported that overall they were understood by others. Sixty of the respondents (45%) felt that “people always understand me” and 54 (44%) reported that they were understood most of the time. The remainder were less certain and reported that sometimes they perceived themselves to be understood some of the time.

Analyses were conducted to determine if there was a significant relationship between language self-assessment and actual proficiency on standardized tests. The results showed that for the total sample a relationship did not exist between their actual English language scores and their self-assessment of their abilities.

Learning Style Measures

a. Kolb Learning Style Inventory

The results illustrated that IEPs had a distinct preference for one type of learning style. No profession-specific differences were found. All three professions were found in the *divergent quadrant* which consists of concrete experience and reflective observation, suggesting that they tend to consider a situation from differing perspectives. There is a tendency to diverge from conventional solutions, coming up with alternative possibilities. The respondents as a whole demonstrated fairly balanced learning style since they are situated in the shaded area and closer

to the centre point. The scores illustrating the divergent learning style type for each of the professions within the Learning Style Type Grid is displayed in Table 2.

Table 4: Learning Style Type by Profession (N-128)

Profession	Learning Style	Vertical Axis (AC-CE)	Horizontal Axis (AE-RO)
Nurses	Divergent	2.23	2.88
Pharmacy	Divergent	6.69	3.81
Teachers	Divergent	5.41	1.64
Total sample	Divergent	4.77	2.77

Further analyses of our sample suggested that their learning styles are not influenced by their age, educational level, number of languages spoken or country of origin. Differences were found between male and female respondents on each of the learning quadrants. Male IEPs were found to have higher scores, significant at the 0.01 level, for abstract conceptualization. Eastern and southern European IEPs may have different preferences but the subsamples were too small to be significant.

The location of each profession on the Kolb Learning Style Grid is displayed in Figure 2.

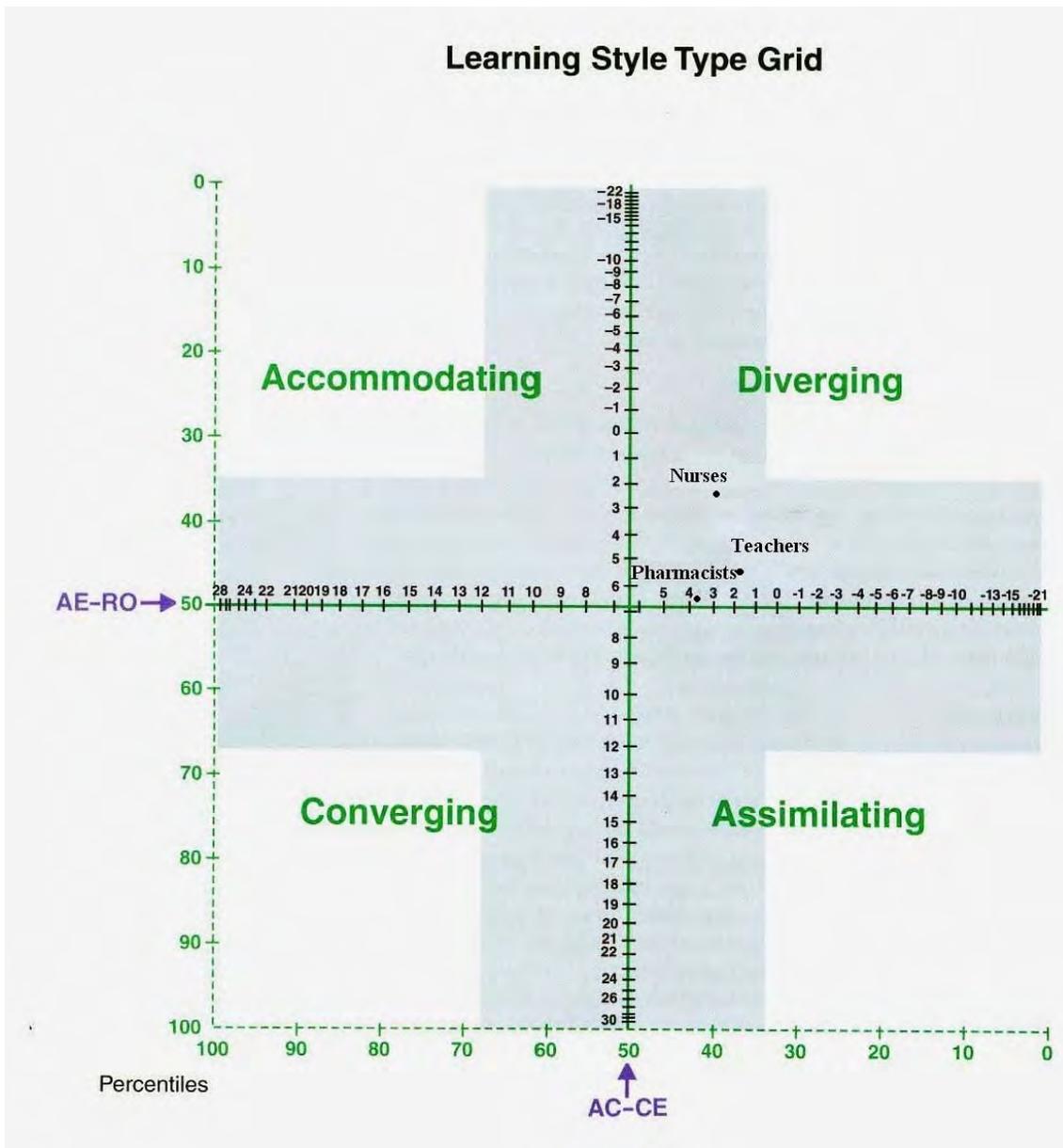


Figure 2: Learning Style Grid

b. Guglielmino Self-Directed Learning Readiness Scale-ABE

The total score reported on a 34 item scale represents the learner’s current readiness for self-direction in learning. The average score for adult learners completing the questionnaire is 126. The standard deviation is 19.21. Research has suggested that persons with high SDLRS scores usually prefer to determine their learning needs and plan and implement their own learning which may or may not include structured learning situations (Guglielmino, 1989).

The results of the research, based upon a total sample of 148 IEP responses revealed that this group of learners reported higher than average scores. The average score was 134.15 for the total group, with the teachers reporting the highest level of self-directedness, followed by nurses and pharmacists - higher than the average of 126 reported for the North American population. No significant differences were found to exist between the group scores. The scale was found to be reliable with a Cronbach Alpha of 0.895. The reliability of the original SDLRS was calculated to be 0.916 for 740 cases.

Table 5: SDLRS scores Reported for Each Profession

Profession	Sample size	Mean Score	Standard Deviation
Nurses	38	134.29	14.14
Pharmacy	73	131.47	16.33
Teachers	37	139.15	16.39
Original SDLRS sample	734	126.63	19.2

Limitations of the Research

The generalizability of these results must be treated with caution. Several factors influenced the results: difficulties in accruing a larger and more representative sample and self-selection of the participants. Each limitation is described in more detail.

- There were considerable difficulties in accessing the IEP population enrolled in bridging programs and limited responses to the number of requests put out to program providers. Therefore, a limited number of programs and their participants were studied.
- Programs varied considerably in duration, depth and cost. The Pharmacy program was a full-time, \$14,000 4 month program, the nurses programs were full-time several year programs while the Teach in Ontario program was only 4 short weeks. Program complexities also influence the characteristics of program participants – their ability to access the program may be significantly influenced due to cost or time limitations. Variability in participant responses may be influenced by program characteristics.
- Country of origin information was biased due to the Pharmacy program which actively recruits young pharmacists directly from the Philippines. This explains the relatively high concentration of participants from this country in the sample. Though the Philippines are in the top 5 immigrant source countries, is not the lead country by any means when generalized to the overall population.
- In addition, all participants had to be at a certain level of English language skills to participate in the bridging programs, thus responses represent a certain segment of the IEP population that ‘made the cut’.

Discussion

This research demonstrated that learning experiences within bridging education programs need to be structured more effectively in order to have significant benefit for IEPs seeking to integrate into the Canadian labour market. The fact that skilled immigrants continue to experience difficulties with labour market integration in Canada and other comparable countries has been well-established in the literature. The trend has been more apparent for members of regulated professions. To date, reasons explaining their difficulties have been mainly attributed to factors such as poor language and communications skills, lack of workplace experience (where required by licensing), problems with credential recognition and systemic issues in the recruitment and retention of IEPs (Liu, 2007).

These results suggest that there may be additional and perhaps more complex explanations as to why IEPs are experiencing a greater degree of unemployment in their intended professions. Simply gaining new knowledge and attitudes may not be sufficient; applying it effectively to rapidly shifting, technologically advanced professional environments is necessary to accessing and maintaining employment. We propose that educators need to attend to the learning style preferences of IEPs by structuring effective learning experiences in order to accommodate different approaches to learning.

The participants in this study are representative of the multicultural population of new immigrants seeking to enter the labour market through bridging education programs. This sample consisted of IEPs from three regulated professions who are highly diverse in terms of their personal and professional characteristics. The full extent of this cultural diversity has not been adequately recognized in terms of curriculum planning and instruction within bridging education programs. Many educators find that even well-prepared lectures or workshops often fail to engage all students when the composition of the cohort is multicultural (DeVita, 2001). But cultural differences and diverse learning styles create course design opportunities and challenges for educators as they attempt to provide locally-relevant yet culturally inclusive programming (Lum, 2006). Cultural differences in cognitive learning and affective style may also contribute to the under-representation of culturally diverse groups in North American professions and we are arguing that this is the case for IEPs.

With respect to professional characteristics, IEPs possess highly diverse professional training experiences with the majority being educated and licensed in the Philippines, India and Egypt. The results suggest that accessing equivalent professional employment following emigration to Canada to be a major challenge since the majority reported that they were working below their previous levels of employment. The results illustrated that IEPs had to make major adjustments to the Canadian practice and classroom environment in order to successfully pass licensure exams and to eventually obtain employment in their professions. IEPs for whom English is the second or third language were found to have a distinctive learning style preferences (within the Kolb divergent quadrant) but their scores demonstrated their ability to use all four learning styles. IEPs were also found to be culturally predisposed to practicing in ways, which may in fact be incompatible with the 'local' and 'common' norms of their profession in Canada. Educational and professional issues concerning bridging education are discussed.

Educational Issues

Learning Styles and Preferences

There has been no reported literature studying the learning style preferences of IEPs enrolled in bridging education programs. The majority of the results available to date concerns learning styles research of basic degree students, who tend to be more homogeneous, in a variety of professional education programs within North American or English-speaking programs in Europe. With the establishment of bridging programs in Canada, the classroom consists of students who are previously credentialed adult learners who bring a wealth of knowledge and experience. Exploring the learning styles of this population would result in several outcomes. A better understanding of the diverse nature of their learning needs and information on which to base educational programs is needed.

As previously discussed, the results of the BEPW questionnaire documented that IEP students are a highly multicultural and diverse group, in terms of their personal and professional backgrounds. The question which immediately arises is whether this heterogeneity within the student population poses challenges for teachers and program planners? In other words, if the classroom consists of students who are from diverse personal and academic backgrounds, do they also bring a variety of learning needs and preferences? If yes, how should instructors respond to this diversity? A problem can arise if there is a lack of recognition that traditional methods of uniform instruction or that one particular type of method seem to be ineffective with a student group that is highly diverse.

Research into different learning styles has been somewhat problematic. Learning styles are culturally based and are affected by the manner in which each culture treats gender, socio-economic class positions and the construction of the self and identity (Jarvis, 2006; Britzman, 2006). Social space is culturally meaningful and we construct our experiences from our own cultural understanding, which in turn means that our learning from our experiences of social space is never free of social implications. We need to understand the learners' experience since it is from this place that they learn and it is within the context of their experience that learning styles data are gathered. Similarly, one of the problems in many forms of vocational education is that students in these programs are not given the opportunity to develop the political or organizational skills necessary to implement their learning within the organizations in which they will be employed. In addition, it is important for teachers to recognize their dominant learning and teaching style in professional education settings.

For the purposes of this study, the Kolb Learning Style Inventory was used despite the fact that this instrument was not specifically designed for international students for whom English is a second language. The Kolb inventory has most extensively been researched in North America so it does provide relevant data in terms of comparing IEPs to a North American sample. In addition, the Kolb inventory is available in other languages French, Spanish, Finnish and Portuguese demonstrating interest in its use in non-English speaking countries as well. Thus, the KLSI was found to be a valid instrument to measure IEPs learning style preferences. In the qualitative results, the respondents reported that they found the inventory helpful in understanding that there were a variety of types of learning styles as well as having an

opportunity to identify their own learning style. They reported that it provided them with an opportunity to seek learning experiences which facilitated their learning as well as seeking additional opportunities to learn using other approaches to perceiving and processing information.

Previous research results suggest that each profession has been identified to have a dominant learning style. The KLSI literature has demonstrated that nursing students in have tended to report an accommodating or assimilating learning styles. Austin (2004) illustrated in his study of pharmacists that these students tend to place themselves on two learning axis: unstructured vs. structured learning and experimentation through action vs. observation and reflection before action. Teachers have been found to prefer assimilating styles.

In this research, Kolb's learning style grid was found to provide a good overall two-dimensional view of an individual's strategy or approach to learning. The KLSI scores for each of the professional groups, consisting of international nurses, pharmacists and teachers revealed that all three exhibited a preference for the *divergent style* of learning. The career characteristics of this style include gathering information, being sensitive to values and dealing creatively with ambiguity. The learner who has a divergent style of learning prefers observation rather than action and is able to view concrete situations from multiple perspectives (Kolb, 2004).

The divergent learner is situated within the concrete experience and reflective observation quadrant of the learning cycle. The learner in the concrete experience stage of the learning cycle would learn from specific experiences relating to people and would be sensitive to their feelings. In a learning setting, the learner's ability to be open-minded, flexible, and adaptable to change would be important. In the reflective observation stage, the learner depends on their own thoughts and feelings in creating their opinions. Providing opportunities for reflective exercises are important at this stage.

An additional finding of interest is that the KLSI scores for all three groups tended to be located close to the intersection of the two axes. The pharmacy students had scores closest to the two axes. The further the individual score is from the intersection of the two axes, the more that individual prefers that particular learning style and the less apt they are to use the other three styles. These scores also indicate that while they may have a predominant style, these students have the ability to use and fluctuate easily between the four different learning styles during the learning cycle.

The question arises as to why, despite their diverse backgrounds, do IEPs prefer divergent styles of learning? IEPs do not represent the typical student previously studied in the literature. These results suggest that irrespective of the country in which they obtained their original professional training and educational experience, there may be a distinctive style of learning that is associated with professional education that is common to regulated professionals outside of Canada. They are adult learners who have most likely developed a distinctive style or preference for learning prior to emigrating to Canada, learning behaviours which appear to emphasize the importance of learning from concrete experience and reflecting upon their experiences and observations.

Alternatively, a divergent style of learning may be a distinguishing characteristic of the skilled immigrant experience, that of a person who is reestablishing their professional status in order to enter the labour market integration. Certainly, in the case of IEPs who are learning new values and practices of the Western workplace through bridging education, observing and reflecting upon these experiences would be important. Reflection is an important activity for divergent learners who depend on their own thoughts and feelings before forming opinions and careful observation before making decisions.

Another learning characteristic common to all three professions was the readiness for self-directed learning. This finding is also inconsistent with cultural stereotypes reported in the literature. The assumption that all students are similar or need to move towards being homogeneous proves to be problematic in culturally diverse learning groups because there will most likely be a combination of self-directed students and those who prefer more dependent or teacher-directed learning. The concept of self-directed learning applies to a variety of learning experiences from those associated with self-instruction through to autonomy in learning in any context (Sadler-Smith and Smith, 2004).

The SDLRS modified version was found to be a reliable measure of IEPs readiness for self-directed learning within bridging education programs. In fact, the modified form adapted for students' for whom English is not the first language revealed that these students reported higher than average scores indicating that they are more than ready to adopt student-centred approaches to learning. According to Guglielmino (1994), self-directed learners perform well in jobs requiring problem-solving ability, creativity and change. Graduating students with a high aptitude for self-directed learning should be a feature of effective bridging education. If these traits are evident in IEPs which seems intuitive since migration requires problem-solving and change management abilities, then learning opportunities need to be provided in bridging programs which enhance these tendencies. In order to promote this responsiveness to self-directed learning, faculty need to situate learners to experience "real" problems and to encourage learners to reflect on their own performance. These learning behaviours are consistent with the learning style preferences of divergent learners proposed by Kolb.

Implications for designing educational programs

A number of implications for educational instruction of IEPs arise from this research. Assessment of learning styles can increase the awareness among students and faculty of the diversity in a classroom. Based upon the results, faculty could choose teaching methods to accommodate this type of learning. Equally important would be the provision of an opportunity for IEPs to experience other types of learning styles by grouping students with different learning styles so that they gain a stronger appreciation for one type of diversity. The most effective learners can use all four learning styles. Developing alternative methods to learning can be achieved through a variety of assignments. For example, lecturing on theory promotes abstract conceptualization. Reflective observation could consist of asking questions and discussing the content. Field work and laboratory work would permit active experimentation and direct small group discussions would provides a concrete experience.

One strategy proposed by Armstrong and Parsa-Parsi (2005) in reference to divergent learners within a classroom of medical students includes the activation of prior knowledge. The learning goal is for faculty to understand the experience base of the students which can be accomplished by activating, articulating, and reflecting what they already know and value. It is from this basis that students can reflect upon new information and form creative responses. Certainly from the perspective of IEPs, who bring prior knowledge and experience, an opportunity to explore personal meaning and motivation is more likely to result in a rich and experiential learning experience.

The extension of Kolb's experiential theoretical framework to an understanding of the learning process in general is also helpful to the curriculum planner. The best design for learning involves learners working through all four quadrants of the learning cycle. In the ideal learning process, learners start with a concrete experience and involve themselves fully, openly, and without bias. This would be followed by reflecting upon the experience from a variety of perspectives. Forming decisions and problem solving follows and concludes by undertaking new experiences. The most effective learners can use all four learning styles. This approach would be recommended for the education of IEPs in bridging programs.

Faculty need to be attentive to their own teaching styles while offering learning formats conducive to the majority of learners. The value of aligning learning and teaching styles has been discussed widely in the literature. It has been noted that such alignment does not imply that each student is to be taught exclusively to their personal learning preferences, rather instructors must work towards balancing numerous teaching styles. When this balance is optimized, students will have an opportunity and willingness to learn in a style that they find comfortable (Austin, 2004).

These results suggest that further research examining IEP learning styles would contribute to the continued improvement of bridging education. IEPs prefer a divergent learning style. This preference did not appear to be correlated with any of the demographic or professional characteristics examined in this research. Further research is needed to determine if IEPs continue to prefer this style in the employment setting. If IEPs continue to be divergent learners, models for adapting instruction to their needs to be developed for employment-based learning.

Professional Issues

a. Professional Socialization

Bridging education programs were found to be highly beneficial in assisting IEPs to gain an understanding of the practice standards and expectations within the Canadian workplace. Despite the fact that IEP students are highly educated and experienced practitioners who possess a high level of procedural/technical knowledge gained in their home countries, all respondents reported being unaware of the extent to which practice was different in North America. The most compelling and significant challenge cited by the participants concerned the differing notions of the professional role within a given regulated profession in society or, as described by Austin and Dean (2006), the issues concerning the epistemology of practice. Variations in professional practice, whether they are health professionals or teachers, social workers on a global scale are significantly different particularly in human service/client facing professions such as health or

teaching. These differences are evident in how patients/clients/consumers/students may be viewed by a particular society which has direct relationship to how practice is defined and regulated. This in turn influences the role responsibilities of licensed professionals.

Differences between the Canadian health care system and systems outside of Canada are substantial. The College of Nurses (2007) reported that in comparison to their countries of origin, nurses reported that Ontario clients tend to be more knowledgeable about their illness and its treatments and more involved in their care. The importance of gaining informed consent for treatments and differences in the nurse-client relationships were new experiences.

Reconceptualizing one's professional paradigm of practice is considered a difficult shift for many foreign-educated pharmacists, particularly when coupled with Western democratic notions regarding patient autonomy, decision-making and confidentiality (Austin and Dean 2006, p. 26). In the non-health professions, clients' rights and the limits to professional authority can be in conflict with the IEP's original training and Westernized practice. It is difficult to make the shift from hierarchical and authoritarian power structures to a more egalitarian approach.

Although there is a heavy emphasis on language skill training, gaining professional knowledge, communications and even counseling skills, the extent of the practice differences may not be adequately addressed in these brief educational programs. Options such as gearing bridging programs to clearly identified skills gaps, extending the time frame of bridging programs based on how long it takes to develop the necessary competencies or placing greater emphasis on cultural socialization in preparation for future employment needs to be considered. Bridging programs – particularly those at academic institutions – that have significant overlap with traditional programs such as those in several major Ontario universities could foster a climate of knowledge exchange and sharing by bringing together both IEPs and traditional students into the same classroom or workplace environment. This would create cross-cultural learning opportunities that can potentially result in more successful post-program employment retention.

For instance, the majority of the IEPs expressed concerns about their ability to adjust to a more regulated and client-centred, as compared to a skill-based, professional practice. For some, licensure was seen as an unjust and ongoing bureaucratic burden encumbering their ability to gain employment. The need to adjust one's world view of how to practice is a considerable challenge which may not be adequately addressed in short-term bridging education programs. Hawthorne (2007) concluded that professional role transition and labour market integration is a process which takes years, not months. Although there is a heavy emphasis on language skill training, gaining professional knowledge and even counseling skills, the extent of the practice differences may not be adequately addressed in these brief educational programs. Options such as extending the time frame of bridging programs or placing greater emphasis on cultural socialization in preparation for future employment needs to be considered.

b. Language Proficiency

English language proficiency and professions-specific communication skills have been cited by immigrants and employers as a major challenge to successful labour market integration. Language proficiency, as measured by language benchmark scores may not be accurate predictors of employment success as they are thought to be. In order to be admitted to a bridging

program, IEPs must demonstrate competency in a number of language tests. Common language tests for all three professions included Canadian Language Benchmarks (CLB); Language Instruction for Newcomers to Canada (LINC A Assessment) and International English Language Testing System (IELTS). All of these tests assess reading, writing, listening, speaking and pronunciation proficiency.

This research demonstrated that although they may have met required benchmarks in standardized language tests, a direct relationship between IEPs' language self-assessment and their actual English Proficiency test scores was not evident. Although approximately half of the participants perceived themselves to be understood, the remainder were less confident, reporting that people only understood "them most of the time or part of the time". Although most of the bridging education programs emphasize language training to enhance IEPs ability to communicate with their clients/consumers, these results suggest that these efforts need to be enhanced to capture the language of the workplace more effectively. Bridging education programs need provide more opportunities for IEPs to "practice" their English language skills outside of the classroom especially in actual or simulated workplace contexts.

c. Financial Challenges

There are financial implications associated with bridging education over and above direct program costs for IEPs. For some, bridging education was an additional financial burden. The family income levels of the IEPs varied significantly. There were a significant number below the poverty level and yet several were well-above the average household income. For both the pharmacists and teachers, approximately half of the IEPs were the primary wage earner. Many of those who were the primary wage earner as well as being in the lower income levels, were working in jobs while studying.

These results revealed that there are both direct and hidden costs. For programs which were cost-recovery, the students paid \$15, 000 for a four month program. For IEPs who were government-funded or industry-sponsored, the incurred costs were minimal. Costs may directly impact the return on investment in terms of program outcomes for IEPs. Do free programs create different outcomes (licensing or employment) to cost-recovery programs? This is an area for further research. The majority of IEPs paid for a variety of self-directed activities in addition to enrolling in bridging education programs in order to obtain licensure and gainful employment in their professions. The most common expenditures are associated with activities such as obtaining additional communication technology, counseling and enrolling in educational opportunities. The costs associated with these activities ranged from less than one hundred to several hundred dollars per activity.

Conclusion

The current evidence suggests that IEPs continue to experience high levels of underemployment and unemployment, a situation which will not alleviate the growing demand for professionals in Canada. Bridging education programs were developed with a view to assisting IEPs in overcoming knowledge and skills gaps in order to facilitate access to professional employment.

Although these programs have been operational for a number of years in Canada, it is premature to conclude that they have been completely successful in terms of promoting higher rates of licensure and access to professional employment (Galarneau and Morisette, 2004; Hawthorne, 2007; Blais, 2008). Despite significant financial investment by government and program delivery by post-secondary institutions, many IEPs continue to experience a multitude of challenges within these programs. More research is needed to better understand the full potential benefits of bridging education.

Barriers to institutional change include poor timing, inappropriate decision making structures, limited outcomes reporting (e.g. in terms of tracking individuals into licensing or sustainable, meaningful employment), issues of accountability and transparency related to the selection of program providers (e.g. are the right institutions hosting the right programs?) and the lack of cooperation between key stakeholders. Also, there is a need to consider the complexity of the institutional changes needed to accommodate IEPs. The development and implementation of new programs needs to be based upon a philosophy and ideology that recognizes that bridging education needs to focus on the broader development of professional identity and cultural awareness and competency, not just bridging gaps in knowledge and skill. Current bridging education programs have a limited capacity to meet the demands of new immigrants seeking access to licensed professions. With the increased global movement of skilled professionals, a more long term strategy would be to explore and develop the concept of educating for skill transferability.

There has been little research exploring the benefits of bridging education programs. Although each of the programs are profession specific, the approach to program planning and educational experiences of learners varies significantly. Some put more emphasis on knowledge upgrading or clinical education in preparation for licensing exams, while others emphasize communication and building social networks for IEPs. All of these components are needed in order for IEPs to be successful. These programs need to be systematically and regularly evaluated, approved and possibly accredited to ensure better academic success and improved employment outcomes.

This research has illustrated that the multicultural nature of bridging education poses a challenge for instructors who may or may not have sufficient understanding of the learning needs and preferences of IEPs. The development and implementation of new programs needs to be based upon a philosophy and ideology that recognizes that bridging education needs to focus on the broader development of professional identity and cultural awareness and competency, not just bridging gaps in knowledge and skill. Facilitating higher levels of language competency over and above standardized testing needs to be considered. Promoting fluency and comprehension of profession specific language in preparation for working within employment settings needs to be emphasized.

Recognizing that IEPs bring a distinctive learning style and preference to the classroom is an important aspect of bridging education. This research illustrated that IEPs tend to begin the learning cycle through concrete experience and reflective observation. They are also considered above average in their readiness to be self rather than teacher directed learners. These results confirm the importance of designing flexible learning experiences in bridging education

programs based on student-centered democratic learning education principles which build on learner strengths.

A significant shift in how bridging education is perceived is needed to bring about policy changes. For many post secondary institutions and regulatory bodies, bridging education is seen as upgrading, filling knowledge experience gaps. This may be setting the bar too low, and these should be minimal requirements. Students will not have the opportunity to develop the necessary additional skills/knowledge because there is a lack of understanding of the complexity of the integration process into regulated professions. Best practice standards would require a more holistic approach in order to promote innovation and creativity within programs so that students are initiated into the realities and challenges of regulated professions in Canada. Essential program components would include structured mentoring with linkages with potential employers, assisting obtaining employment, and follow up. Systemic solutions include essential elements such as intake and assessment, advisement and admissions, employment linkages, language assessment and training.

Even if bridging programs are highly successful, limited job options perpetuate systematic barriers to market integration. There needs to be greater recognition of bridging education as only part of a larger process. One participant expressed concerns about the transition period following graduation from bridging programs, citing that many graduates have limited options in terms of employment choices. Also, there needs to be increased recognition of the fact that many of these students, who are often the primary wage earners for their respective families, are ‘living on the edge’ both socially and financially. One respondent advocated for more transparency in terms of what credentialing and job access would mean for potential applicants to regulatory colleges. Advance information needs to be provided to IEPs about potential challenges associated with the immigration process for those hoping to enter regulated professions. There is a need to create clear pathways for professionals to improve their access to employment. Respondents expressed concern that for “many immigrants this is a lesson in disappointment [and] broken promises when they arrive and find that the system is really hard to negotiate”.

The following policy implications can be derived directly from the experiences and perceptions of IEPs while taking bridging education programs in health and non-health professions. Their narratives provided unique insights into how policies can be shaped to address their needs in obtaining licensure/accreditation and employment in their chosen profession. The policy recommendations include:

- Improved access to bridging education program is needed for IEPs to facilitate in gaining knowledge of Canadian practice standards, regulatory practices and preparation for writing licensing examinations.
- Given IEPs preference for divergent learning styles (who prefer to observe rather than take action), bridging programs should incorporate the following:
 - Ample room for practice in simulated settings after giving students a chance to observe currently licensed professionals/experts.
 - With the growing recognition of the need to acquire cultural competency within the Canadian practice setting, bridging education curricula needs to be revised to

place more specific emphasis on the cultural adjustment aspects of labour market integration.

- Bridging education programs need to incorporate work experience, knowledge of specific professional workplace culture, interview preparation, other job search related training and links with other community based organizations to help with settlement issues. In other words, bridging programs must be holistic in their approach as part of a pathway to employment.
- Provide a more comprehensive list of the financial cost of the bridging education programs and more information about each bridging program to potential students.
- There is a need to improve student access to financial support. From an equity perspective, IEPs should have access to a level of financial support in the form of loans, bursary and scholarships that is at least comparable to local counterparts.
- There is a need to establish social networks with potential employers, including opportunities for meaningful mentorship. In addition, validating how potential employers view specific programs and what they would recommend to be included is critical to ensure IEPs get employed after completing the program. Do programs that segment the population into IEP and Canadian create any dichotomies in the employer view? Identifying employer perspectives would be a beneficial direction for further research.
- Program reviews should be undertaken regularly to align programming with IEP needs as well as successful employment outcomes. Identifying ongoing learning needs and support of IEPs who successfully make the transition into professional employment would be a beneficial direction for further research.
- Development and delivery of teacher training workshops for educators working in bridging education programs to increase the use of learning style assessment and curriculum planning.

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