



# Intersectoral collaboration to enable bridging education for pharmacists: The International Pharmacy Graduate Program in Ontario, Canada

# ZUBIN AUSTIN<sup>1</sup> & DELLA CROTEAU<sup>2</sup>

<sup>1</sup>Leslie Dan Faculty of Pharmacy, University of Toronto, 144 College Street, Toronto, ON, Canada M5S 3M2, and <sup>2</sup>Deputy Registrar, Ontario College of Pharmacists, Toronto, Ontario, Canada

(Received 13 June 2006; revised 20 September 2006; accepted 25 October 2006)

#### **Abstract**

As Canada's economy and health care system become more reliant upon contributions made by individuals educated outside North America, there is an increasing need to develop systems and supportive programs to facilitate integration in the Canadian workforce. Collaboration between partners in different sectors is essential in ensuring success of such programs and systems. This paper reviews the development and outcome of inter-sectoral collaboration in the profession of pharmacy in Ontario, Canada. The need to develop such collaboration in pharmacy was particularly acute given the unusually high reliance upon internationally educated pharmacists in Canadian practice. The value of this collaboration, the way in which it developed and was nurtured, and challenges that emerged as part of the process, are discussed and analyzed as a case study example of how bridging education for internationally educated health care professionals may be operationalized.

**Keywords:** Bridging education, foreign-trained professionals, internationally educated professionals, international pharmacy graduates

#### **Background**

Integration of well-skilled immigrants into the Canadian workforce has emerged as a significant public policy issue (Alboim, 2002). The economic costs associated with misalignment between Canadian employment opportunities and previous educational background and professional experience are significant (Austin, 2003).

Within the health professions, the need to integrate foreign-trained professionals is reaching crisis proportions and has emerged as both a major political and patient care issue. As a result, governments at various levels have developed supportive programs aimed at internationally educated health care professionals in an effort to assist them in meeting licensure requirements. For example, professions such as medicine, nursing, and pharmacy have all developed clinical

training or didactic educational programs specifically aimed at teaching health care skills within a Canadian context. While these programs have attracted significant media interest, there have been fewer scholarly publications outlining the development of these programs or evaluating outcomes associated with them.

# The context of pharmacy

Regulation of pharmacists

Like other health care professions, pharmacy in Canada is regulated at the provincial level. Colleges of Pharmacy exist in each province to protect the public from harm and to ensure safe and effective provision of pharmacy services. Pharmacy regulatory authorities in Canada have the twin responsibility of regulating both *pharmacists* and accrediting *pharmacies* 

Correspondence: Z. Austin, Leslie Dan Faculty of Pharmacy, University of Toronto, 144 College Street, Toronto, ON, Canada M5S 3M2. Tel: (416) 978-0186. E-mail: zubin.austin@utoronto.ca

ISSN 1560-2214 print/ISSN 1477-2701 online © 2007 Informa UK Ltd. DOI: 10.1080/15602210601084846

for operation. The National Association of Pharmacy Regulatory Authorities (NAPRA) is an umbrella organization representing many of the provincial pharmacy regulatory authorities, and advocates at the national level for a variety of issues, including labour mobility and interprovincial qualification recognition.

# Education and licensure of pharmacists

Pharmacy education in Canada occurs at the university level, at nine schools or faculties of pharmacy across Canada. In general, these programs require one or two years of "pre-pharmacy" arts and science courses, followed by three or four years of the BSc Phm degree program, for a total of five postsecondary years of education. All pharmacy programs in Canada are accredited and reviewed on a regular basis by the Canadian Council for Accreditation of Pharmacy Programs, which establishes and measures standards related to curriculum, admissions policies, infrastructure, etc. Completion of a BSc Phm, while a requirement for licensure, does not immediately confer registration as a pharmacist. In most provinces, a compulsory in-service training (pre-registration) period must be completed prior to licensure, and in all provinces (except Quebec), a two-part national licensing examination must be completed. The Pharmacy Examining Board of Canada's Qualifying Examination consists of a case-based multiple-choice written examination (Part I) as well as a 16-station objective structured clinical examination involving standardized patient-actors and clinical simulations.

# Advocacy for the profession of pharmacy

In addition to the regulatory and educational arms of the profession, there are a variety of professional advocacy groups that represent pharmacists' interests to a variety of constituencies. Most licensed pharmacists in Canada (>90%) work in either community pharmacy practice (e.g. drug stores) or in hospital/institutional practice settings. Advocacy groups have evolved for both groups, at both the national and provincial levels, to respond to macro- and meso-level issues and concerns. For example, the Canadian Pharmacists' Association advocates at the national level for issues including national pharmacare, establishment of e-standards for electronic medical records, health human resources planning, and liaises with other national-level advocacy groups such as the Canadian Medical Association on issues of mutual interest or concern. Similarly, the Canadian Society of Hospital Pharmacists represents interests of hospitalbased pharmacists in similar areas. Each province also has provincial-level organizations (such as the Ontario Pharmacists' Association) which works with governments on provincial issues including negotiation of professional fees, evolution of provincially defined scopes of professional practice, and a variety of local initiatives including continuing education for practitioners.

The separation of education, regulation, and advocacy within the profession of pharmacy is paralleled in many other professions, and provides an important series of checks and balances in professional self-regulation in Ontario. While this system has many important advantages, it may be argued that this division of responsibilities may, in some circumstances, constrain or limit responses to emergent issues of importance, such as integration of foreign-trained pharmacists within the Canadian health care system.

# The case of internationally educated pharmacists in Ontario

Within the province of Ontario, one such emergent issue of importance related to foreign-trained pharmacists seeking integration into the professional workforce. Since the mid-1980s, there have been a large and growing number of individuals educated outside North America seeking licensure in Ontario. This evolution has occurred for a variety of reasons including a strong market-place demand for community pharmacists (driven by the growing number of community pharmacy outlets, including chain drug stores, grocery, and department stores), increasing demand for pharmacists' services, and a relatively small and fixed number of domestic graduates from one school of pharmacy in the province (until 2002, only 120 pharmacists graduated each year in Ontario; by way of comparison, in Ohio (with roughly the same population), approximately 550 pharmacists graduate each year from four (soon to be five) schools of pharmacy).

By the late 1990s, Ontario graduates of pharmacy accounted for only 30% of all newly licensed pharmacists—20% came from other parts of Canada or the USA, and fully 50% were foreign-trained pharmacists (Austin et al. 2003). In some cases, these individuals were actively recruited by large private sector employers facing difficulty recruiting North American graduates in a tight and highly competitive marketplace. In virtually all cases, individuals seeking entry to Canada as pharmacists were provided with preferential treatment, since pharmacists had been identified at the national level as a professional group facing skills shortages.

As early as the mid-1990s, the provincial regulatory authority (the Ontario College of Pharmacists or OCP), began to note concerns experienced by foreign-trained pharmacists seeking licensure in Ontario. Despite strong demand for their skills, these individuals faced a variety of problems. First, many individuals arrived in Canada believing they

could immediately begin practicing pharmacy. Unfortunately, consular staff in many parts of the world may not have been well informed regarding licensing requirements for foreign-trained pharmacists and consequently many individuals did not receive necessary information required for informed decision making. Second, many individuals were unprepared for the battery of tests required to simply begin the licensure process in Canada. These tests include language specific tests (such as TOEFL, TSE or IELTS) as well as the Pharmacy Examining Board of Canada Equivalency Examination, a case based multiple choice test designed to assess comparability of academic preparation to Canadian Council for Accreditation of Pharmacy Programs' expectations. Third, individuals who were able to pass these examinations often found it difficult to find supportive preceptors willing to supervise them during the required in-service practical training (pre-registration) period. Anecdotal reports indicated that, while many pharmacists wanted to act as preceptors, they found the challenges and potential risks associated with preceptorship of foreign-trained pharmacists significant. Fourth, should these individuals find a preceptor to act as their clinical supervisor, they often faced a variety of "culture shock" issues integrating into Canadian pharmacy and the health care system.

For some, these culture shock issues related to the roles and responsibilities of pharmacists in Canada. For example in some countries, pharmacists would never question a physician's prescription and would never educate patients about their medication since this is entirely a physician's responsibility. In other countries, pharmacists operate almost entirely autonomously since most medications are available without prescription and consequently pharmacists act in a quasi-physician capacity. Clearly, the pharmacist's role in North America is considerably different than either extreme portrayed above; defining this role and internalising its associated responsibilities may be problematic for some individuals.

These role-definition issues (Berry, 1997) were further exacerbated by general health system culture shock issues. The cultural, legal and ethical framework of Canadian health care may be quite different than in other parts of the world, and transcends issues associated with the pharmacist's role and scope of practice. Issues such as patient autonomy, the right to self-determination, inter-professional collaboration, and patient-as-partner in health care may be entirely new concepts, difficult to grasp and in some cases very difficult to embrace. Overlaid upon this may be significant communication barriers; while all candidates for licensure must have passed standardized fluency tests, these tests are not designed for the demands of professional-level communication and the intricacies of patient-professional dialogue.

Initiation of inter-sectoral collaboration in pharmacy

Paradoxically, at a time when the demand for pharmacists was peaking, the supply of foreigntrained pharmacists was expanding, and the need for their knowledge and skills was greatest, many individuals experienced difficulty and great frustration in actually becoming licensed in Ontario. In an effort to address this issue, OCP initiated discussions with the University of Toronto, home to the only accredited pharmacy program in the province. The relationship between OCP and University of Toronto was strong and had evolved over many decades; OCP staff members lectured in a variety of courses to undergraduate students, while University of Toronto faculty members served a variety of expert, advisory and committee membership roles for OCP. As a relatively small professional community, personal and professional links between individuals at OCP and University of Toronto were quite strong, allowing for significant formal and informal discussion between individuals.

The OCP Council recognized the important contributions made by foreign-trained pharmacists to the professional community, and also recognized the need to approach problems associated with licensure in a systematic manner. As a regulatory body, OCP is not able to directly provide educational certification to individuals; thus building upon existing relationships and interactions, OCP proposed a partnership with University of Toronto to develop support courses for foreign-trained pharmacists seeking licensure in Canada.

Importantly, this proposal was matched by a significant 3-year financial contribution. OCP provided University of Toronto with \$1,50,000/year for three years to establish educational programs for foreign-trained pharmacists to assist them in meeting standards of practice required in the profession. An ancillary benefit of this investment would also be development of courses that could be available to already-licensed pharmacists requiring refresher or remedial training and support. This funding was used to hire a co-ordinator and administrative assistance. At the time of this partnership, there was no previous precedent for such a direct, active intervention by a pharmacy regulatory body to support such training needs.

In an effort to establish an effective educational program, University of Toronto began examining existing models for integration of foreign-trained professionals, particularly in the health professions. At the time, the only available comparable model was the International Medical Graduate programs available through medical schools in Ontario. This model, however, was limited in its applicability due to the residency-intensive nature of medical education and training. In contrast, pharmacy education is more

university-based and didactic, with in-service clinical training generally occurring at the end of the lecture-based period. Thus, there were no readily-available "courses" upon which University of Toronto could draw or base curriculum. As a result, *de novo* synthesis of curriculum and courses specific to pharmacy practice and education was necessary.

At this time, the Ontario Government was also beginning to recognize the importance of a systematic approach to addressing issues facing foreign trained professionals in a variety of fields. The Sector Terminology, Information, and Counselling (STIC) program was inaugurated as a workplace-readiness training program aimed at addressing cultural, language and ethical issues associated with Canadian health care. The University of Toronto adapted this curriculum to the unique needs of the pharmacy workplace, and offered it as a pilot to interested participants in 1999.

The response was overwhelming. Clearly, foreign-trained pharmacists were struggling for access to supportive training resources to assist them in meeting standards of practice and licensure requirements. The STIC Pilot (offered to 12 students) uncovered both a significant need for such education, as well as a large and invisible network of individuals struggling to become licensed as pharmacists.

Following implementation of the STIC Pilot, the need for a more comprehensive "bridging education" program for foreign trained pharmacists was clear. OCP once again partnered with University of Toronto to develop a proposal for funding to the provincial government. In large part, this proposal was framed as a labour market driven initiative—the strong demand for pharmacists was continuing, and there was a large, underserviced group of individuals who could potentially address this demand provided they received additional education and support.

A major element of the proposal was to develop and test a model for bridging education in pharmacy, a model that potentially could be used by other professions and trades facing similar issues. The proposed model included five key concepts:

- prior learning assessment;
- curriculum benchmarked to university standards;
- mentorship;
- distance or distributed learning opportunities; and
- partnership between an academic institution and a regulatory body.

The proposed model was accepted for funding along with one other prototype project aimed at foreign-trained nurses. The International Pharmacy Graduate (IPG) program at the University of Toronto was formally launched in 2000, built upon the five key elements noted above. As part of the funding for this project, a comprehensive educational needs

assessment was undertaken to assist in development of curriculum and assessment. Several key findings emerged from this needs assessment, including the fact that despite accounting for only 25% of all licensed pharmacists in Ontario, international graduates accounted for 68% of all disciplinary cases at the college (Austin, 2003). Similarly, international graduates were at significantly higher risk of not meeting standards in quality assurance peer review than their North American educated peers: in one 5-year study, close to 30% of all IPGs did not meet standards in peer review as compared with less than 15% of North American educated pharmacists (Austin et al. 2003).

The value of bridging education within pharmacy, while evident to regulatory and academic partners, was not necessarily immediately understood by employers or advocacy groups. In order to advocate on behalf of IPGs and to involve key stakeholders in the program, an Advisory Board was constituted with representation from all parts of the pharmacy profession, as well as community-based social service agencies serving new Canadians. The Advisory Board canvassed ideas from key opinion leaders in the profession, and provided an important feedback mechanism to the employment marketplace.

In order to support the program and encourage applicants for licensure to consider enrolment, OCP undertook significant modification of its policies regarding licensure for internationally educated pharmacists in 2002. Currently, the IPG program is considered a requirement for licensure, just as a BSc Phm degree is considered a requirement for licensure of Canadian educated pharmacists. However, recognizing logistic, financial and other barriers associated with accessing the program, the IPG program may be exemptable under certain circumstances, provided the candidate is able to demonstrate competencies in an alternative manner.

With this change, significant interest in the program began to develop amongst employers and professional advocacy groups. Employers in particular began to recognize the importance of recruiting well-qualified pharmacists, not simply any licensed pharmacist. Employer-sponsorship models began to emerge, based on individual employer's human resources needs. For example, one large employer of pharmacists continues to recruit off-shore for pharmacists; this employer entered into an agreement with the program whereby new recruits would enroll in the program immediately upon entry to Canada as students with appropriate visas. Another employer recruits actively amongst internationally educated pharmacists already in Canada but who have not yet been successful in passing all licensure requirements. This employer enters into one-to-one agreements with potential students and will pay tuition and associated costs for the program in exchange for a guarantee from the student that he/she will work for the employer

(frequently in an underserviced area) for a minimum of 2-3 years following licensure. Other employers (particularly those in the hospital sector) host "recruitment events" for students in the program to encourage them to consider post-graduation opportunities. A key principle for the program is to work collaboratively with prospective employers to ensure fair and transparent recruitment and incentive practices.

As the program evolved academically, administrative structures have developed to align this bridging program with general university policies and procedures. For example, governance within the program is the responsibility of a series of committees such as examinations, admissions, and curriculum, modelled on the governance structure of the Faculty of Pharmacy at the University of Toronto. The Registration Committee of the Ontario College of Pharmacists acts as an arms-length appeals committee with respect to program decisions, but only with respect to licensure decisions. For example, a candidate who may have failed the program may appeal to the Registration Committee for an exemption from certain licensure requirements. While the Registration Committee may accept this appeal and in effect register the candidate as a pharmacist, the committee may not over-rule decisions of the program. Thus, in specific circumstances, individuals who have failed the program may still become licensed as a result of this appeals mechanism.

Since its inception, the program has identified several significant barriers to access. Initially, the program was offered only at the University of Toronto. While Toronto is the choice destination for over 80% of IPGs moving to Ontario, the demand for pharmacists is much more acute outside the city (Austin et al., 2003). Moreover, in an attempt to encourage IPGs to consider settlement outside the Greater Toronto Area, educational opportunities needed to be developed to support this move. In 2004, in partnership with the University of British Columbia, a satellite campus model for the IPG program was successfully piloted, using a combination of asynchronous DVD-based lectures, and on-site case-based facilitation. Based on this experience, an IPG satellite campus has been launched in Ottawa, and other campus is being planned for Kitchener, in conjunction with the projected opening of a new school of pharmacy at the University of Waterloo in 2007. Having developed an infrastructure for delivery of satellite campus-based bridging education, the IPG program may now be delivered throughout the country to groups of 20 or more students (for costrecovery purposes).

In 2004–2005, the tuition for the entire program was \$13,000 CDN (by way of comparison, the tuition for one year of the 4-year BSc Phm program at the University of Toronto is approximately \$12,000

CDN). Of those enrolled in the program in 2004– 2005, approximately 60% were enrolled in an employer-sponsored plan, so tuition costs were not borne by the student. Of the remaining 40%, approximately 20% were able to negotiate low-interest loans through an arrangement with the Maytree Foundation, a local charitable organization assisting new Canadians with integration. While, at first glance, the tuition may seem high, it is important to note that there are significant costs associated with bridging education for pharmacists, particularly in the one-toone support provided in clinical skills and language support classes. It is also important to note that comparability of tuition between BSc Phm students and IPG students must be maintained in order to ensure acceptability of the program throughout the profession.

Since its inception in 2000, over 400 candidates have taken some or all components of the program. Success rates on national licensure examinations are comparable with that of the BSc Phm program—over 95% of all candidates who successfully complete the program go on to become licensed, and 100% of licensed graduates are employed at a level commensurate with their knowledge and skills (Austin & Dean, 2004).

Currently, the IPG program model has been adapted across the country. Building upon the successful partnership of 2004, the University of British Columbia is now offering its own bridging program for internationally educated pharmacists in British Columbia. A private vocational college in Alberta has developed a bridging program in that province. Of interest, several private sector organizations across Canada have developed compressed preparatory courses for candidates for licensure.

## Discussion and analysis

The example of the IPG program provides an interesting case study of how bridging education can develop and flourish within an environment of collaboration between different stakeholders. The success of this program is in large part due to the strong and evolving collaboration between regulators, educators, and employers, with the support of advocacy groups. The absence of one or more of these stakeholders would significantly compromise the program's ability to meet its mandate. An intersectoral collaboration model is presented in Figure 1 though not discussed explicitly in this paper, community-based supports such as transparent immigration policies and practices, and the work of local settlement agencies is also integral to successful professional enculturation.

Nurturing this partnership can, however, be problematic since different stakeholders may have different priorities. The recent development of

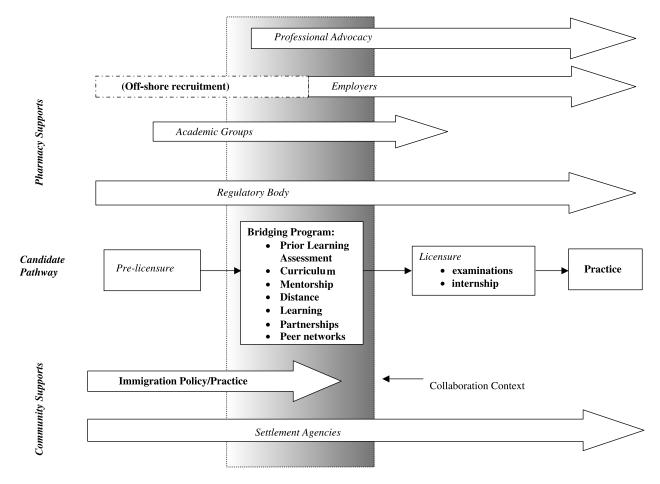


Figure 1. Inter-sectoral collaboration model.

competitor programs in the private sector points to a significant philosophical issue inherent within bridging education—what is its central aim? Employers and government sponsors may view the major objective of bridging education as the licensure and employment of individuals. Regulators may view it as ensuring standards of practice are maintained, while educators may view bridging education as "education for life-long learning". Where private sector educators may view bridging education as "exam preparatory courses", university-based educators would adamantly argue that bridging education should be aimed at preparing an individual for a life-time of on-going learning within the profession.

Unfortunately, facile analysis of exam success rates or employment statistics may disadvantage those who view bridging education in broader, long range context. If the goal is to simply get an individual licensed, there are clearly more efficient (though not necessarily effective in a long-term sense) ways of doing so than the intricate model developed by the IPG program. If, however, the goal is truly to develop a rich educational and professional enculturation process, important elements such as mentorship, university-benchmarked curriculum, and rigorous assessment are required.

The original IPG program model proposed five key elements. Of interest, several of these elements appear to be less functional within the context of internationally educated pharmacists. For example, despite repeated attempts at implementation, there has been little success with and a very low uptake of distance learning initiatives within the program. When given the choice of staying at home and learning/interacting over the Internet, or commuting 1-2h a day to participate in a classroom setting, IPGs overwhelming select the latter. Initially, the IPG program did not envision any specific need for "satellite" campuses, since the distance learning model that had been developed involved centralized teaching and assessment in Toronto. Satellite campuses (particularly those in Ottawa and Waterloo, Ontario) are much more cost and resource intensive, but appear to serve a fundamental need of providing individuals with an face-to-face academic community of peers that webbased learning does not accomplish.

The lack of success of web-based learning in the program points to an important modification required to the original IPG program model. Development of a peer-support network or community of IPG learners has been an important but unanticipated outcome of this program. The need for individuals struggling

through the complex psycho-social and professional adaptation process common to immigrants with advanced qualifications points to the need for face-to-face networking and support (Furnham & Erdmann, 1995). While such activities are not part of the program, simply convening a class of IPG students together provides an important venue and forum by which individuals struggling through the same types of problems can meet, share experiences, and learn from one another. Thus a sixth key element of the IPG program model must be added: *peer-network formation*.

It is important to recognize that the success of the program and its partnerships may be a function of the labour market and strong demand for pharmacists across Canada. Clearly, employers who are having difficulty recruiting and hiring qualified pharmacists have a major incentive to work co-operatively with educators and regulators in making the program a success. It is difficult to imagine how the program may have evolved had the labour market demand for pharmacists been less robust in the late 1990s. This is of acute relevance to the program today, as domestic production of pharmacists in Ontario is poised to triple over the next decade, with doubling of enrolment in the undergraduate program at the University of Toronto, and the opening of a new school of pharmacy at the University of Waterloo. Employer-sponsored tuitions account for the bulk of revenue for the program; in an environment of less market demand for pharmacists, will employers continue to support the program financially? And if not, will students themselves be willing to cover costs of tuition, particularly if market demand for their services following graduation is not strong?

As publicly supported post-secondary institutions continue to struggle for money, some have advocated for new models of revenue generation. While bridging education was initially framed as a cost-neutral/costrecovery service, there are increasing pressures to convert such programs into revenue generating activities. To some extent, the IPG program has begun to explore such possibilities, by providing its courses to already-licensed pharmacists interested in refresher or remedial education. This not only provides the program with an opportunity to diversify its client base (particularly important should the demand for pharmacists begin to decline), but it also heightens awareness of the program within the professional community. When marketed as continuing education rather than bridging education, new markets may become available. However, in so doing, the program may risk diluting its original objective, and may potentially price itself out of the market for internationally educated professionals. Administrative pressures for revenue generation must be carefully balanced against real-world market demands and the central objective of the program itself.

Finally, on-going systematic research is required to fully evaluate the costs and benefits of bridging education, and its long term impact. As a model for professional development and a vehicle for enhancing health human resources planning, bridging education may be important tools for educators, regulators and employers. However, further research is required to confirm the magnitude of this effect, and to continue to refine and develop alternative bridging education models that may be more effective and efficient.

#### **Conclusions**

The experience of the IPG program provides an important insight into the development of bridging education within one particular health care profession. While the unique elements of pharmacy as a profession are largely responsible for driving development of this program, many aspects of the program may be applicable to other professions and trades. Perhaps most importantly, development of intersectoral collaborative relationships appears to be pivotal to the success of bridging education. Clear articulation and definition of all stakeholders' interests and roles *a priori* is necessary to ensure common acceptance of key objectives.

As Canada's reliance on internationally educated professionals continues to increase in the decades to come, bridging education may become a more widely recognized and accepted part of the post-secondary educational system. As such, it is essential that ongoing scholarship continues and expands to evaluate alternative models and practices. While the IPG program is amongst the first formal bridging education programs affiliated with a university or post-secondary institution, other models for collaboration may emerge. The experience in Canada in attempting to facilitate integration of foreign trained health care professionals is not unique, since skills shortages have been reported in most developed countries (Pew Research Centre for the People and the Press, 2003).

While inter-sectoral collaboration is clearly important, so too is collaboration between those involved in bridging education itself. As its importance within post secondary institutions continues to evolve, bridging educators themselves will need to organize and mobilize to ensure their common interests are recognized, and that cross-program sharing of curricula, assessments, and experiences is possible. As an important part of Canada's on-going competitiveness will depend upon a well-skilled workforce, bridging education will continue to grow in prominence.

#### Acknowledgements

Support for the International Pharmacy Graduate program has been provided by the Ministry of Training, Colleges, and Universities' Access to

Professions and Trades Unit, and the Ontario College of Pharmacists. The authors would like to thank Marie Rocchi Dean for her assistance.

#### References

- Alboim, N. (2002). Fulfilling the promise: Integrating immigrant skills into the Canadian economy. Ottawa: Caledon Institute of Social Policy.
- Austin, Z. (2003). Continuous professional development and foreign-trained health care professionals. *Journal of Social and Administrative Pharmacy*, 20(6), 232–241.
- Austin, Z., & Dean, M. (2004). Development of a curriculum for foreign-trained pharmacists seeking licensure in Canada. *Pharmacy Education*, 4(3/4), 143–151.
- Austin, Z., Galli, M., & Diamantouros, A. (2003). Development of a prior learning assessment for pharmacists seeking licensure in Canada. *Pharmacy Education*, 3(2), 87–96.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review*, 46, 5–34.
- Furnham, A., & Erdmann, S. (1995). Psychological and sociocultural variables as predictors of adjustment in cross-cultural transitions. *Psychologia*, 38, 238–251.
- Pew Research Centre for the People and the Press. (2003). 2002 Global attitudes survey.