Barriers Blocking the Integration of Foreign-Trained Immigrant Professionals: Implications for Smaller Communities in Ontario

Erik Girard
egirard@uoguelph.ca

and

Harald Bauder
hbauder@uoguelph.ca

Department of Geography
UNIVERSITY of GUELPH
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Introduction

In a recent interview with the *New York Times*, federal Minister of Citizenship and Immigration Hon. Joe Volpe suggested that Canada has "an arcane infrastructure of professional organizations that essentially mitigate against the immediate integration of highly skilled immigrants" (Krauss, 2005). For decades, the Canadian government has admitted large numbers of highly skilled immigrants to support the growth and competitiveness of the Canadian economy. Yet, once immigrants arrive in Canada, their foreign credentials and work experience are often devalued (see Bauder, 2003a; Krahn *et al.*, 2000; Li, 2001; Mata, 1999; Ministry of Training, Colleges & Universities, 2002). As a result, successive immigrant cohorts are suffering declining average incomes, in spite of rising education levels (Boyd & Thomas, 2001; Reitz, 2001).

Upon arrival in Canada, most immigrant professionals seek employment in their occupation of training. However, legal eligibility for employment in regulated professions hinges on gaining acceptance into the corresponding professional association. Foreign-trained professionals must have their qualifications and employment experience assessed by licensing bodies which, in many instances, conclude that the international credentials and work experience of immigrants are unacceptable.

In Canada, provincial governments are responsible for managing the practice of many trades and professions. In a number of professions, such as engineering, law and medicine, provincial

governments have delegated regulatory responsibility to self-governing professional associations (Brouwer, 1999). The social practices of regulatory bodies and of other labour market institutions have the effect of excluding many internationally-educated immigrants from their former occupations, forcing many immigrant workers into low-wage, unstable "survival" jobs.

Evidence shows that immigrants have greater labour force participation rates and earn higher incomes when they settle in smaller communities instead of larger gateway cities (Bauder, 2003b). However, in many cases, licensing processes that devalue their human capital leave immigrant professionals with little choice but to settle in Canada's largest cities where "survival" job opportunities are more plentiful and ethnic and social networks are better developed. This is an unfortunate scenario for individual immigrants as well as smaller cities and rural areas where skill shortages are widely reported (for example, Abbate, 2004; Laidlaw, 2005; Livingston, 2004; Taylor, 2005). Many immigrant professionals have difficulty securing the proper Canadian licenses required to pursue employment opportunities outside gateway cities.

This study documents the institutional barriers to foreign credential and work experience recognition in regulated professions, using the profession of engineering as a case study. Minimizing these barriers would accelerate the integration of immigrant professionals into the national economy at a level commensurate with their human capital and facilitate the transfer of skilled immigrant workers to under-serviced communities.

Objective and Methodology

This document presents the findings of a study that explores how professional associations manage the access of foreign-trained professionals. Specifically, this study was designed to accomplish the following objectives:

- To examine the current admissions criteria employed by engineering regulatory bodies to make licensure decisions and understand how these criteria are applied to foreign-trained applicants.

- To understand how engineering regulatory bodies perceive immigrant human capital and explore the motivations that lie beneath these perceptions about the capabilities or deficiencies of immigrant candidates.

- To explore the potential impact of changes in immigrant credential and work experience recognition on the labour force of smaller Ontario communities.

The engineering profession was selected because foreign-trained engineers represent the single largest group of immigrant professionals awaiting licensure in Canada (Couton, 2002). In the case of Ontario, the Ontario Society of Professional Engineers (2002) report that more than forty thousand immigrants with foreign engineering training settled in Ontario between 1996 and 2002.

In Ontario, Professional Engineers Ontario (PEO) is the professional association that regulates the practice of engineering. PEO has been in existence since 1922 and is the largest provincial

engineering regulatory body in Canada with over 66,000 fully licensed members (PEO, n.d.a). The authority of PEO to establish standards of engineering practice is granted by a provincial statute, the *Professional Engineers Act* (PEO, n.d.b). All engineers, regardless of where they received their training, require certification from PEO in order to practice professional engineering in Ontario and to use the "P.Eng" (professional engineer) designation. The *Professional Engineers Act* gives PEO the power to develop and enforce regulations for admission to the profession (such as instituting certain academic training and work experience requisites) and standards of professional engineering practice (PEO, n.d.b).

Interviews and archival sources were used to generate the data analyzed for this study. Twelve interviews were completed with sixteen interviewees in the latter half of 2004. Key informants were selected according to their affiliations with engineering professional bodies or other stakeholder institutions and their knowledge of immigrant access to regulated professions.[1] Documents analyzed for this study included media reports, academic articles, as well as press releases, reports, web materials and periodicals produced by provincial and national engineering bodies.

Findings

The Engineering Regulation System

The professional engineering licensing system deals with foreign-trained engineers differently than Canadian-trained applicants. All applicants, immigrant and Canadian-born, must hold acceptable academic engineering credentials to be considered for licensure. The credentials of graduates of accredited Canadian engineering schools automatically meet licensing academic requirements. The Canadian Engineering Accreditation Board (CEAB) certifies undergraduate "engineering programs that provide graduates with the academic qualifications necessary for registration as professional engineers in Canada" (CCPE, n.d.a). CEAB accreditation guarantees the value of the credentials gained by graduates of Canadian engineering schools. Conversely, when graduates of international engineering schools immigrate to Canada, they forfeit the value of their credentials until they demonstrate their academic qualifications are equivalent to Canadian standards.

For internationally-trained applicants, academic evaluation processes vary depending on the national origin of their credentials. A number of international mobility agreements have been negotiated which recognize the equivalency of the accreditation or education systems of the signatory countries (CCPE, n.d.b). However, the vast majority of international engineering graduates who immigrate to Canada do not originate from countries with which mobility agreements have been negotiated. In these cases, regulatory officials insist on conducting their own credential assessments. They will not accept the assessment of any other agency or service.

Applicants holding international qualifications face several stages of assessments, including written examinations and interviews in order to establish the equivalency of their credentials. A regulator we interviewed believes that while the principles of engineering science are universal, it is "impossible to transfer simple pieces of paper, credentials, across boundaries without a suitable

[1] Ethical considerations and the promise to keep the identities of respondents confidential prevent us from disclosing more specific information on the sample collection procedure.

heavy bureaucracy." The existence of the "heavy bureaucracy" is justified on the basis that the public interest is best served by ensuring that only academically qualified individuals are licensed.

In terms of transferring engineering credentials across international boundaries, a key difficulty facing immigrant engineers is the uniqueness of the Canadian engineering regulatory system and education system. PEO's International Mobility Task Force (2001) explains:

> "The legislated right-to-practice engineering in Canada is unique in the world. Whereas few jurisdictions (notably, the United States) have implemented similar safeguards within specific areas of engineering practice … most other jurisdictions do not regulate the practice of engineering by similar right-to-practice legislation. And those which do, restrict such legal Right to Practice to only specific areas of engineering practice."

The vast majority of internationally-trained applicants come from countries where engineering is not regulated in the same way as it is in Canada. Beyond unfamiliarity with the Canadian model of professional engineering regulation, respondents report that internationally-educated engineers also tend to be trained differently than engineers who graduated from Canadian institutions. Interviewees from an engineering professional association – some of them internationally-trained engineers themselves – believe that the Canadian engineering education system is significantly different from that of most other countries. One regulator explained that the "depth and breadth" of engineering education in Canada is quite distinct. As a result, full licensing is denied to immigrants who have not been educated to the same depth and breadth until they re-train in Canadian institutions. In this situation, Canadian-educated engineers enjoy relatively expedient access to licensing while internationally-educated applicants struggle to fit their "square peg" qualifications into the "round holes" of the regulation system, to borrow an analogy from one government respondent.

While thousands of foreign-trained engineers arrive in Canada each year, regulators report that they receive applications for licensure from a much smaller number of internationally-educated newcomers. For these newcomers, credential recognition may not even present the greatest obstacle to licensure. This contention is supported by interview responses and a recent Professional Engineers Ontario press release (2003) which states that more than sixty percent of internationally-trained applicants have their academic qualifications recognized as satisfactorily equivalent to Canadian standards. In other words, more than half of foreign-trained applicants are not required to write any technical examinations administered by PEO in order to prove their technical knowledge (PEO, 2003). Instead, our study suggests that social barriers to licensure – in terms of Canadian work experience requirements – represent a larger obstacle for internationally-trained immigrants.

Professional associations demand that candidates acquire several years of work experience in an engineering role. According to regulatory requirements, one year of work must be completed in a Canadian jurisdiction under the supervision of a licensed professional engineer (PEO, n.d.c). Work experience requirements have long been a part of the licensing process in Canada. However, the

demand for *Canadian* work experience has been installed relatively recently.[2] While many immigrants arrive in Canada with significant international work experience, relatively few of them possess work experience in a Canadian jurisdiction

According to PEO, Canadian work experience "ensures that [candidates] have sufficient exposure to Canadian engineering codes, legislation, technical standards and regulations" (PEO, n.d.c) and it confirms that immigrants have "the ability to exercise sound engineering judgment, function on multidisciplinary teams and communicate effectively in the work environment and with society at large" (PEO, 2002: 6). One year of Canadian work experience is supposed to provide applicants with both the technical and non-technical knowledge required to effectively practice professional engineering.

Regulator respondents report that the professional association is primarily concerned with licensing individuals who are prepared to operate as *professional* engineers. To the regulator, the title "professional engineer" implies that an individual has internalized a range of technical, theoretical and legal concepts, professional workplace behaviours, communications techniques and ethical codes, many of which are unique to Canada or North America.

For instance, Canadian codes of engineering practice are often jurisdiction-specific. Familiarity with the engineering codes in a particular province is therefore an important part of licensure. Furthermore, regulators are concerned that immigrants may not be accustomed to practicing engineering in the variable Canadian climate, as one regulator explains:

> "There are extreme temperature swings in Canada; products have to function from -40^{o}C to +40^{o}C. These are temperature ranges that most places don't see. Snow loads are another problem. These are different things that when you are doing the design work in other countries, you don't have to worry about."

Moreover, there are contextual business and ethical conditions with which immigrants are perceived to have difficulty. In particular, professional association interviewees report that engineering business practices (for example, "what markups to apply, how to negotiate and communicate with clients, what fees to charge, how to manage subcontracts") as well as "soft skills" which immigrants are often assumed to lack (including "teamwork, leadership, communication and presentation skills") are all considered requirements for licensure. Regulators told us that Canadian professional ethics are difficult for immigrant professionals to internalize. In Ontario, passing the Professional Practice Examination (PPE), as a test of professional ethics, practice, engineering law and liability (as well as a measure of language and written communication skills because the PPE is offered only in English) is mandatory for licensure (PEO, n.d.c). Often, this exam causes problems for immigrant applicants, as one regulator describes:

[2] In a review of self-governing professions commissioned by the Government of Ontario, Murray (1978: 116) reported that "engineering experience in other jurisdictions, including foreign countries is … acceptable" for the purposes of professional licensure in Ontario. Also, Murray (1978: 120) observed that "foreign work experience can satisfy all of the work experience requirements. … If an applicant's academic credentials are acceptable, his foreign work experience will also be … accepted."

> "We require all engineers to write our Professional Practice Exam and we find that the internationally-trained folks have a tougher time passing it. The context of law is different. When you start dealing with impulses on law and ethics, ethics are very contextually based."

Until candidates internalize these context-specific soft skills and the cultural norms of professional practice they will not be licensed as professional engineers, regardless of how well they understand the principles of engineering science.

The Engineering Labour Market

Beyond the regulation system, foreign-trained engineers face the difficulty of having their credentials and work experience recognized by Canadian employers. Employers often do not want to "take a chance" on foreign-trained applicants to meet their skilled labour needs. An engineering recruiter explains how risk-averse hiring practices among employers tend to exclude foreign-trained engineers from available positions:

> "You do not know what the "others" are capable of. They [Canadian employers] feel inadequate to evaluate it. They don't know the universities; they don't know the courses available. There is probably a species-driven desire to go with something that is familiar. There is a danger represented by something unknown. If you don't have to go there, you will not. You also like to hire in your own image and what's familiar to you."

Canadian credentials have a greater value in the Canadian labour market than foreign credentials because Canadian employers tend to preferentially select Canadian-trained applicants.

Regulatory and government respondents both identified professional licensure as a way for immigrants to overcome the reservations of some employers. A government interviewee suggests that securing a license permits immigrants to "Canadianize their credentials … [as] a way for employers to recognize that the person has met certain high standards because employers are risk averse." For foreign-trained professionals, a license thus provides greater access to employment opportunities.

Canadian employers share with professional regulatory bodies many of the same concerns about internationally-trained engineering graduates. Employers want their workers to understand the same elements that engineering professional societies demand. The Canadian Council for Professional Engineering (CCPE – a national engineering body) recently published a study examining immigrant access to the engineering labour market for which a number of Canadian employers were interviewed. While none of the respondents reported difficulty in assessing the technical proficiency of internationally-educated engineers (FC2I Steering Committee, 2004: 9), Canadian employers felt the overall employability of international engineering graduates was affected when communication and language problems create non-technical difficulties:

> "Companies that require their engineers to deal with customers are reluctant to employ international engineering graduates in these positions, if their language skills are not up to the required standard of proficiency. Second … poor language skills seriously affect the ability of an international engineering graduate to work

> effectively in a team-based organizational unit. Finally, some engineering jobs require engineers to explain technical issues to non-technical staff … In these circumstances, poor language skills can be a significant impediment" (FC2I Steering Committee, 2003: 51-55).

The majority of Canadian employers interviewed for CCPE's study agree that foreign-trained engineers also tend to be "weak in their understanding of North American business practices" (FC2I Steering Committee, 2003: 52). Immigrant engineers who are unfamiliar with the nuances of North American business practices face significant consequences, as explained by the FC2I Steering Committee (2003: 53):

> "The recently immigrated, international engineering graduates bear the cost of non-technical skills weaknesses both in reduced employment options and also in lower salaries. … These reduced employment options and lower salaries are attributable chiefly to weaknesses in non-technical skills and not to deficiencies in technical skills."

Both Canadian engineering professional societies and employers require candidates to possess similar non-technical knowledge and observe Canadian behavioural practices. The one year of Canadian work experience represents the means by which regulators ensure that prospective licensees gain this knowledge and learn these practices. Yet, access to one-year positions to gain valuable work experience is also regulated on the same terms. In this situation, foreign-trained immigrants are at a significant disadvantage relative to Canadian-educated applicants. As a result, qualification standards based upon the non-technical demands of the engineering profession represents a systemic social barrier for foreign-trained immigrant engineers.

It must be noted that not all jobs require the possession of a P.Eng license. A number of interviewees including engineering recruiters, regulators and immigrant service agency staff all suggest that many employers are not necessarily concerned whether an immigrant candidate holds the P.Eng designation, unless the license is legally required as part of the job. However, employers tend to hire individuals who understand local professional practices and workplace behaviours. To reduce the risk of hiring employees who have not internalized this knowledge, Canadian employers tend to prefer Canadian-born candidates or immigrant applicants holding P.Eng licenses. As a result, the importance of securing professional licenses takes on heightened significance for foreign-trained professionals, regardless of whether a license is a mandatory requirement of available jobs.

Conclusion

For decades, Canadian immigration policy has been designed to identify and admit "the best and the brightest" of highly-educated and skilled immigrants (Hon. Joe Volpe, federal Minister of Citizenship and Immigration, quoted in Laidlaw, 2005). Yet, immigrants who lose the value of their credentials and work experience through institutional regulatory processes cannot pursue employment opportunities for which they are legally ineligible. The result is that many of these deskilled immigrants will settle in gateway cities where accessible job opportunities – often in the

low-wage, informal sector – are more plentiful. The losers of credential and work experience non-recognition are smaller communities, which seek the skill-base immigrants have but cannot apply due to credential and work experience recognition barriers.

Immigrants tend to be more geographically mobile and risk-taking than non-immigrants. They may be more than willing to move to smaller places if appealing jobs exist and if they are allowed to take these jobs. While the former factor is a difficult local economic development challenge, the latter can be addressed through the following actions:

- Redesign licensing processes to remove social and cultural barriers.
- Governments, immigrant service providers, regulators and employers must work together to design programs which expose immigrant professionals to the social, cultural and language proficiency criteria upon which licensing and hiring decisions are based.
- Inform Canadian employers about the utility of immigrant human capital.

Boyd & Thomas (2002: 78) suggest that "systemic" discrimination results from rules and procedures that are not explicitly designed to produce differential outcomes but do so through their applications. Based upon our study's findings, the professional engineering regulation system produces such discrimination. Following the above recommendations can create the dual benefit of reducing discrimination and diminishing the labour market imbalances between rural and urban areas.

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