



Canadian Society for Medical Laboratory Science
Société canadienne de science de laboratoire médical

Researcher Report:

Development of Alternate Career Information for CSMLS Internationally
Educated Medical Laboratory Technologist Applicants

COLETTE PETERS, PhD

December 26, 2013

Contents

ACKNOWLEDGEMENTS.....	3
EXECUTIVE SUMMARY	4
INTRODUCTION.....	6
PART ONE: LITERATURE REVIEW.....	9
Methods.....	9
Findings	11
Australian Literature	28
Conclusion.....	30
PART TWO: PRIMARY RESEARCH	32
Methods.....	32
List of Interviewees	33
Primary Research Findings.....	34
Research Questions	34
Australian Interview.....	44
SYNTHESIS AND RECOMMENDATIONS.....	47
Recommendations.....	48
RESOURCES SCANNED AND WORKS CITED.....	51
APPENDIX A: List of Participants	60
APPENDIX B: Sample Interview Protocol	61

ACKNOWLEDGEMENTS

This research would not have been possible without the generous sharing of time and knowledge of many experts in their respective fields. Thank you to all of the research participants who consented to be interviewed and share their thoughts about Alternate Careers for IEMLTs. In addition, the larger project of which this research is a part has been guided by an Advisory Committee whose input has been invaluable. They are, in alphabetical order:

Ossayed (Ozzy) Al Awor	MLT (Halifax, NS)
Janelle Bourgeois	New Brunswick Society of MLTs
Adam Chrobak	College of MLTs of Manitoba
Mary Golba-Bylhouwer	Mohawk College Bridging Program for IEMLTs
Aruna Kolhatkar	Michener Institute
Wayne Oake	Health Force Ontario
Beatrice Traub-Werner	JVS Toronto
Siobhan Williams	BioTalent Canada
Svitlana Yaremenko	Professional Standards Council

In addition, many thanks to the CSMLS Alternative Careers project team, who provided ongoing support and collaboration, along with the consultants on the other aspects of the project.

This project is funded by Health Canada.

EXECUTIVE SUMMARY

In April of 2013, the Canadian Society for Medical Laboratory Science launched a larger project, *Development of Alternate Career Information for CSMLS Internationally Educated Medical Laboratory Technologist Applicants*, of which this research is a part. The project was initiated based on the recognition that, due to the substantial differences between the Medical Laboratory Science context in Canada and many countries, a number of Internationally Educated Medical Laboratory Technologists (IEMLTs) were not likely to be successful in gaining certification in Canada. It was recognized as a priority to ensure that they did not “fall through the cracks” of the system and would be able to obtain the best employment possible in which to apply the skills and knowledge they had brought to Canada.

This research is comprised of an environmental scan and literature review in the area of Alternate Careers for immigrant professionals. Although there is little research available on this precise topic, a thorough review of the literature encompassed the academic literature and grey literature (unpublished reports, government literature and online resources, etc.). In addition, primary research was undertaken with 16 key informants from a range of stakeholder groups. The research questions that drove the research focussed on the definition and identification of, and communication about Alternate Careers, and any issues related to information provision about Alternate Careers from a regulatory perspective.

The following definition of Alternate Careers was informed by data collection:

“A full, permanent career option in an unregulated profession that may or may not be in a health-related field. The Alternate Career options offered by this project are intended for IEMLT applicants who have skills, education and/or experience that are different from Canadian entry-to-practice standards. Although unregulated, some Alternate Careers may require further training before entry.”

The findings of the research include agreement regarding timing of information (early and pre-arrival, as well as ongoing), and sensitivity (respectful of individual’s education and cultural context that influences their view of Alternate Careers; observant of readiness to embark on an Alternate Career journey; avoidance of a “less than” perspective on Alternate Careers.)

Several issues and questions regarding the Alternate Career fact sheets were identified that will support their development, including factors that may lead immigrants to perceive a job as underemployment, the importance (and challenge) of incorporating labour market information (for different regions), the intended target market of the fact sheets and the terminology used to describe them. Recommendations focus on ways to include the input of IEMLTs in various

ways to the research results and ensure future collaboration on Alternate Careers across a range of stakeholders. Opportunities to enhance data collection and tracking of IEMLTs through the certification process and explore systemic change are also recommended.

INTRODUCTION

While many internationally educated professionals (IEPs) now have access to bridging education and enhanced supports during licensure that were not available even five years ago,¹ it has increasingly been recognized that more focus is required on those IEPs who, for various reasons, may not be able to meet the standards for licensure in their chosen profession in Canada.^{2 3} During recent consultations supporting the Pan-Canadian Framework for the Assessment and Recognition of Foreign Qualifications (FQR Framework), the need for more research into alternative careers and related referral resources was identified as a priority by eight regulated professions, including Medical Laboratory Technologists.⁴

Indeed, each year over 100 Internationally Educated Medical Laboratory Technologists (IEMLTs) apply to have their credentials assessed by the CSMLS to establish their eligibility to write the national certification examination. Of these, approximately 10% are eligible to write immediately; the remaining 90% that do not meet Canadian standards receive a customized learning plan from the assessor/s that identifies their specific area/s of deficiency and offers suggestions of possible training and/or resources that could support remediation.

However, available data on exam results shows a concerning trend in which even those IEMLTs who have completed their learning plans to challenge the exam have a success rate of only 34% compared to 86% of those MLTs educated in Canada.⁵ While there was a recognition that, for some IEMLTs, substantial differences in the context of practice in their country of origin compared to Canada may mean that certification may not be a feasible option, there was also a recognition of the risk these individuals face of becoming “lost” in the system and either unemployed or underemployed.

¹ For example, the Ontario Bridging Participant Assistance Program:
<http://www.tcu.gov.on.ca/eng/adultlearning/faqs.html>

² Immigrant Settlement and Integration Services (ISIS). (2013). International qualifications assessment & recognition (IQAR) in Nova Scotia: Challenges and solutions. Retrieved from http://www.isisns.ca/wp-content/uploads/2010/06/IQAR_May2013_new.pdf

³ Province of British Columbia. (2013). Foreign Qualifications Recognition. Priority Areas of Work. Regulators. WelcomeBC. Retrieved from <http://www.welcomebc.ca/For-Employers-and-Regulators/regulators-home/regulators-fqr.aspx>

⁴ The other professions were registered nurses, licensed practical nurses, physicians, dentists, engineers, engineering technicians, and teachers. See LIM Consulting Associates. (2013). Foreign qualification recognition and alternative careers: Report submitted to the best practices and thematic task team of the foreign qualifications recognition working group. Retrieved from <http://novascotia.ca/lae/RplLabourMobility/documents/AlternativeCareersResearchReport.pdf>

⁵ p. 8. Nielsen, C. (2004). Determination of Factors Contributing to Exam Success for Prior Learning Assessment Candidates. Unpublished research paper.

In order to proactively address this dynamic and maximize the opportunities for unsuccessful IEMLT applicants with valuable transferable skills to apply them in careers in related or alternative areas in Canada, the CSMLS applied for funding with Health Canada for a project in Alternate Careers.

This research is part of the larger project, *Development of Alternate Career Information for CSMLS Internationally Educated Medical Laboratory Technologist Applicants*, which was launched in April 2013. The primary objectives of this project are as follows:

Project Objectives

The primary objectives associated with the “Alternate Careers” project are as follows:

- To undertake an environmental scan/literature review of best practices in the field of Alternate Career pathway development and communication;
- To have an expert review laboratory science competency profiles and essential skills (and NOC codes/descriptions) and recommend a list of suitable, potential Alternate Careers essential skills (NOC) – not confined to the health sector;
- To conduct focus groups and/or surveys with IEMLTs who are i) currently in the assessment process, ii) have become licensed and ii) “dropped out” of the assessment process and gather their feedback on the type(s) and potential utility of communication materials related to Alternate Careers;
- Develop a list of Alternate Career pathways/communication materials for IEMLTs and associated protocols how and when this information should be provided to applicants;
- Revise elements of the PLAR process as necessary (i.e. define appropriate intervention points and communication materials)
- Based on the above, develop partnerships with referral sources (i.e. employers and/or placement agencies)

This report summarizes the results of the first objective, the environmental scan and literature review, which were conducted between October and December of 2013. The environmental scan was mainly completed through primary research interviews with a range of stakeholders in the field. The literature review involved a broad-based exploration of a range of literature, along with consultations with experts at various stages of the project.

The following research questions were used to guide the research activities and focus the data collection:

1. How can “alternate” or “alternative” careers best be defined, especially with reference to MLTs?

2. What are some of the best practices currently being utilized in the identification of Alternate Careers?
3. What are some of the best practices currently being utilized in terms of providing applicants to regulated professions with information on Alternate Careers (this includes, but is not limited to timing, sensitivity of wording, method of delivery)?
4. From a legislative or regulatory perspective, what are the key issues and/or concerns related to the provision of Alternate Career information?
5. Are there any other issues associated with the provision of Alternate Career information that the CSMLS should be aware of?

In the remaining sections of the report, you will find the following:

PART ONE: LITERATURE REVIEW (methodology and findings)

PART TWO: PRIMARY RESEARCH (methodology and findings)

PART THREE: SYNTHESIS AND RECOMMENDATIONS

APPENDICES: Resources Scanned and Works Cited, Sample Interview Protocol

PART ONE: LITERATURE REVIEW

Methods

The goal of the literature review was to gain as complete a picture as possible of the existing literature in the area of Alternate Careers for immigrant professionals, with a particular focus on areas of the literature that could contribute to answering the project research questions. Due to the emerging nature of the Alternate Careers concept, there is not an established body of published literature to draw on in this specific area. This places more emphasis on researching the “grey literature,” which can be defined as “That which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers.”⁶

In order to cast as wide a net as possible, an initial extensive review of the academic literature was undertaken, using multiple databases across a broad base of subjects. Databases related to education and the social sciences were searched for their relevance to the study of immigration and the integration of immigrant professionals, and studies were identified in multiple fields, such as applied linguistics, psychology, and statistics. In addition, the science databases were also checked to search the literature related to Medical Laboratory Technologists, and Medical Laboratory Science as a field. For the grey literature, a series of searches of the internet using both Google and Google Scholar were undertaken, and results for various key words were reviewed for up to ten pages of results.

In order to establish the reliability of the searches, a number of methodological cross checks were undertaken. For example, after the results of one database search identified two articles from one immigration-related journal, all Tables of Contents for that relevant journal were reviewed for the past three years to ensure that key word searches had not missed any articles related to alternative careers. All key words and search strategies and parameters were also demonstrated and discussed with an experienced reference librarian. In addition, the Advisory Committee of the project was consulted and invited to recommend resources or research papers for review. Finally, a staff member at the CERIS – Metropolis centre with substantial knowledge in the immigration literature was asked for input in terms of resources and search strategy. Additional resources and articles were identified through the Works Cited lists of the growing list of resources, as well as through consultation with the project team; all interviewees participating in the primary research were also asked if they could recommend any relevant

⁶ As defined by The Fourth International Conference on Grey Literature, 1999, Washington, DC. Retrieved from www.greylit.org/about.

resources. All of these cross checks and consultations helped to ensure that the literature review included the most relevant resources possible.

The limited amount of literature directly on this topic means that strategic “clusters” of resources and papers were selected within themes that could support the answering of the research questions in some way. While the primary focus was on the Canadian context, international literature was also reviewed, mainly relating to best practices relating to Alternate Careers, and with a particular focus on Australia. The strategic “clusters” of resources and papers are listed in the chart that follows, along with numbers in each, whether any selection was required to arrive at the number identified and a description of how the number was selected. Clusters that include at least one paper from an Australian perspective are marked with an asterisk (*).

Strategic Cluster/Theme	Summary	Number Identified	Selection?
Programs and Resources related to Alternative Careers	Includes mainly online tools and website resources, such as sector-specific resources, Alternate Career lists, toolkits, information packages	14	No, all were included.
Immigrants and Alternate Careers	Mainly academic papers in the published literature: Alternate careers identified include physiotherapy, translation and settlement work.	5	All were included, due to the small number available.
Immigrants and Employment Outcomes (statistical studies/general)	A range of sources from Statistics Canada, as well as many papers from the Toronto Immigrant Employment Data Initiative (TIEDI)	7	Yes, selection criteria included an emphasis on papers in the last three years with some reference/relevance to alternate employment.
Immigrants and Underemployment/Barriers to Employment	Journals from a wide range of fields were identified in this cluster, with the psychological impacts of underemployment being a major theme	11	Yes, selection criteria included papers in the last three years.
Immigrants and Licensing (general)*	A range of professions and papers with a focus	5	Some selection, based on recency,

Strategic Cluster/Theme	Summary	Number Identified	Selection?
	on multiple professions, including midwives, nurses, and engineers, and MLTs.		and an emphasis on health professions.
Program/Project reports relevant to topic of employment, Alternate Career info (Government, Agency, etc.)*	Small category: one from Canada (CIIP) and one from Australia.	2	No.
General Background on MLTs and Canadian Context (workforce etc.)	A range of papers, some unpublished, from CIHI, CJMLS, and a doctoral thesis	6	No.
Policy Analysis*	A paper comparing Australia and Canada	1	No.

Findings

Due to the minimal amount of literature directly relating to Alternate Careers, findings of the literature review will be discussed in relation to the project’s five research questions, along with one additional question. The additional question, “What do we know about factors influencing immigrant success in obtaining employment, particularly immigrants in regulated professions?” provided a means to explore the existing literature on IEPs/MLTs and the body of statistical studies on immigrants and employment outcomes. In this way, papers and themes that arose in the larger literature can be highlighted directly in relation to the project’s objectives.

1. How can “alternate” or “alternative” careers best be defined, especially with reference to MLTs?

As discussed in the introduction to this report, this research and the larger Alternate Careers project of which it is a part have a particular focus on IEMLTs who are unable to get certified, for various reasons. So, in this case, the Alternate Career is a permanent career change.

Certainly, the challenges that immigrants face regarding credential recognition, wages, and employment rates are well-documented.^{7 8 9 10 11} However, there is very little formal literature

⁷ Reitz, J. G. (2007). Immigrant employment success in Canada, part I: Individual and contextual causes. *Journal of International Migration and Integration*, 8(1), 11-36. doi: 10.1007/s12134-007-0001-4

⁸ Reitz, J. G. (2007). Immigrant employment success in Canada, part II: Understanding the decline. *Journal of International Migration and Integration*, 8(1), 37-62. doi: 10.1007/s12134-007-0002-3

in relating specifically to Alternate Careers, and especially from the perspective of a permanent career change. In this section, two related threads of the literature will be discussed: the first, relating to a small number of existing studies on immigrant professionals in Alternate Careers, and the second, relating to a larger thread in the literature regarding immigrant underemployment, how it is defined, and factors that contribute to an individual perceiving that they are underemployed.

Immigrant professionals in Alternate Careers

There is one major Canadian study in the area of Alternate Careers. The recent Foreign Qualifications Recognition (FQR) and Alternative Careers study responded to the identified need for research referenced in the introduction through a qualitative study that undertook interviews with representatives from 13 occupational contacts,¹² 12 Immigrant Serving Organizations (ISOs) and 13 IEPs.¹³ The study report offers a working definition for Alternate Careers and offers several potential alternative careers for Medical Laboratory Technologists, including the Biotechnology sector (already active through CSMLS' partnership with BioTalent) and "copy editor, working in accounts payable/receivable, food/beer/wine quality control, insurance medical tester, food & safety inspector."¹⁴ In addition, a number of best practices for alternative career information are presented related to the timing of information providing, the messages provided, and the means for providing Alternate Career support.

With little other existing research on this topic,¹⁵ the FQR Alternative Careers study represents a valuable addition to knowledge in this area. The working definition that it provides contributed to the development of a definition of Alternate Careers for this project, and this process will be discussed in detail in the next section relating to the primary research. However, the perspective taken on Alternate Careers by the FQR Alternative Careers study is broader, and defines an Alternate Career as both a temporary or "stepping stone" career on the way to

⁹ Stobbe, S., & Harris, J. (2013). Tracking immigrant professionals' experience in Manitoba's labour market. Ryerson Centre for Immigration and Settlement Working Paper. Retrieved from http://www.ryerson.ca/content/dam/rcis/documents/RCIS_WP_Stobbe_Harris_No_2013_6.pdf

¹⁰ BioTalent Canada. (2013). Talent opportunities: Bringing newcomers to Canada's bio-economy. Retrieved from http://www.biotalent.ca/sites/biotalent/files/PDF/newcomers/BioTalent_Canada_Talent_Opportunities_Nov_13_2013.pdf

¹¹ R. A. Malatest & Associates. (2010). *Getting your professional licence in Ontario: The experiences of international and Canadian applicants*. Retrieved from http://www.fairnesscommissioner.ca/en/downloads/PDF/Getting_Your_Professional_Licence_in_Ontario-The_Experiences_of_International_and_Canadian_Applicants.pdf

¹² These included organizations related to the different professions, and included professional associations, regulatory bodies, and those involved with assessment (LIM Consulting Associates, 2013, p. 4).

¹³ This sample of IEPs did not include any MLTs.

¹⁴ LIM Consulting and Associates, 2013, p. 7

¹⁵ An initial Scholars Portal, PubMed, Ovid, and Scopus search did not identify an existing literature on alternate or alternative careers for Internationally Educated MLTs or IEPs.

licensure, as well as a potential permanent career. For this reason, the discussion of this particular report will be focussed in relation to other research questions where it is more relevant.

A preliminary environmental scan and literature review was also undertaken in this area with funding from the Ministry of Health and Long term Care, Ontario: “HIRE – IEHPs: A Preliminary Report of an Environmental Scan of Human Resources Practices, Employment Opportunities and Alternate Careers for Internationally Educated Health Professionals in Ontario.” This study involved an extensive review of the literature (hundreds of documents) and focus groups and interviews with key informants in the following groups: IEHPs, their employment counsellors, leaders involved in employing IEHPs, either in health care or alternate sectors in private industry or government. The goals of the study are “(1) to identify several trends that provided promise for future employment for IEHPs, (2) to identify what supports might be needed to help IEHPs, and (3) to suggest avenues for future research that might inform the development of policy interventions.”¹⁶

In terms of defining Alternate Careers, this report acknowledges the reality that the demand for health care workers is evolving, and is affected by a range of factors, including budgets and policy, and that this “evolving demand has affected the ability of foreign trained health professionals to pursue their professional careers in Canada.”¹⁷ Similar to the working definition in the LIM report cited earlier, Alternate Careers are defined as either a temporary stepping stone while pursuing licensure, or a more permanent choice. The IEHP and employment counsellor participants in the study

spoke of employment in the context of a first job after an IEHP had arrived in Canada and in the context of more permanent positions outside of their chosen profession. Throughout the conversations, it became apparent that IEHPs, and their counselors, had explored a wide variety of employment options.¹⁸

The range of options described in the report was, indeed, wide, and reflected the fact that the IEHPs in the study came from a range of fields, and that some of the employment was temporary, and some was permanent. The careers listed included health-related (e.g., health administration, regulated and non-regulated alternate health professions, pharmaceutical industry, sleep clinics) and non-health related (e.g., barista). One commonality noted was that

¹⁶ Paul, R. (2013). HIRE – IEHPs: A preliminary report of an environmental scan of human resources practices, employment opportunities and alternate careers for internationally educated health professionals in Ontario. Unpublished project report. Toronto, ON: The Hobbes Group Inc.

¹⁷ p. 7. Paul, R. (2013).

¹⁸ p. 16. Paul, R. (2013).

most of the alternatives reflected a trend “towards downward mobility.”¹⁹ One of the goals of this project is to offer IEMLTs Alternate Careers that are not a downward shift. However, later in the literature review, perceptions of downward mobility or underemployment will be discussed as a prevalent trend in the literature.

A small number of other relevant studies focus directly on immigrants in Alternate Careers. The one other Canadian study explored the research question “What do immigrants do when they can’t practise their professions?” and was conducted through a survey (n=155) and follow up interviews (n=19) with immigrant professionals working in the settlement sector. This study posits three options for immigrants who find that they are unable to practice their chosen careers after immigration: exit (leave Canada to return home or go to another country), de-professionalization (work in a job that does not use one’s skills), or professional rebuilding (rebuild oneself into a new profession, although it may not be related to the previous profession).²⁰ The main focus of the study is the concept of the field of settlement as a means of “professional rebuilding” for these immigrants. The findings indicate that the IEPs attracted to settlement work come mainly from managerial or administrative fields, although some had science backgrounds. For these professionals, their professional rebuilding had led to mixed feelings:

Thus, for 54 (nearly one half) of the respondents, not practising the primary profession was not an issue: 41 were fine with it and 13 thought that they had never left their primary professions. For the other half (55 respondents, excluding two who were neutral), however, this was an issue of varying magnitude. Twenty-one respondents still miss their primary professions but take comfort in the fact that they are able to use their analytical skills in serving newcomers. (p. 27)

Advice offered by these professionals to potential immigrants focussed on the importance of a positive and flexible attitude towards employment, and the need for a career plan and extensive preparation (even before immigration).

Moving to international literature, there are two relevant studies, both qualitative in nature, on the experiences of doctors who immigrated to Israel from Russia and found a permanent, Alternate Career in physiotherapy, and the experiences of ethnic Albanian immigrants living in the UK and US who used translation as a temporary Alternate Career. The first study, based on interviews with 28 doctors, found that the identity of physician was quite strong, even after

¹⁹ p. 16. Paul, R. (2013).

²⁰ Türegün, A. (2011). What do immigrants do when they can’t practise their professions? Immigrant professionals in the Ontario settlement service sector. WORKING PAPER SERIES: CERIS Working Paper No. 85. Retrieved from http://www.ceris.metropolis.net/wp-content/uploads/pdf/research_publication/working_papers/wp85.pdf

settling into another profession. Interestingly, the researchers hypothesized that female physicians would adapt more easily to the career change, and the results confirmed that this was the case.²¹ The explanation from the data was the women's explanations that they had already made substantial sacrifices in their careers for parenting, and so did not find the adjustment to physiotherapy to be so difficult. The physicians varied in how they coped with the change in profession – some avoided practice contexts similar to their previous medical practice, and some embraced them. The main finding of this study, as suggested by the title, "You never stop being a doctor," is that professional socialization and identity for physicians is remarkably stable, despite the substantial challenges posed by emigration. In fact, for most of these doctors, maintaining a role in a medically related profession that allowed them to continue at least some of what had made their previous practice satisfying was important.

For ethnic Albanian immigrants in the UK and US, however, interpretation meets different needs. This interview study of 12 immigrants identified the tension between interpretation as a "transient" career, which it was for most of the participants, as compared to a final destination.²² Interpretation is represented as a liminal space which the participants strategically occupy when they are themselves "in transit between different destinations."²³ Important to this analysis is the identification of significant benefits of interpretation as compared to other transient work: access to professional networks and economic resources that might otherwise be difficult to achieve, and an opportunity to enhance one's cultural competence in the new country.

Underemployment – Defining it, and its impact on professional immigrants

A review of studies on the underemployment of immigrants focussed on those studies that identify factors related to underemployment that could be relevant to the identification of Alternate Careers for IEMLTs (i.e., what leads an immigrant to label one job "underemployment" and another not), and also studies that identify factors that could be faced by IEMLTs undertaking a job search for an Alternate Career.

Perceived Underemployment and its Impacts

A 2012 mixed methods study of internationally educated Engineers in Canada used a survey (n=309) and in-depth interviews (n=20) to explore the connections between perceived

²¹ Remennick, L., & Shakhar, G. (2003). You never stop being a doctor: The stories of Russian immigrant physicians who converted to physiotherapy. *Health, 7*(1), 87-108. doi: 10.1177/136345930300700105

²² Ellis, B. A. (2013). Freelancing eagles: Interpretation as a transient career strategy for skilled migrants. *Journal of Management Development, 32*(2), 152-165. doi: 10.1108/02621711311305665

²³ p. 153. Ellis, B. A. (2013).

underemployment and life satisfaction. The authors use a framework from the literature which defines underemployment according to any of the following five dimensions:

1. Person possesses more formal education than the job requires.
2. Person involuntarily employed in field outside area of formal education.
3. Person possesses higher-level work skills and more extensive work experience than the job requires.
4. Person involuntarily engaged in part-time, temporary, or intermittent employment.
5. Person earning wages 20% or less than in the previous job.²⁴

The study found a strong correlation between perceived underemployment and lower satisfaction with life in Canada: “Almost three quarters (71.3%) of those dissatisfied with life in Canada reported that their qualifications and skills were being underused in their current jobs. Dissatisfaction with current job and feeling that one’s qualifications and skills were being under used were highly correlated.”²⁵ Other findings related to demographic factors included that females tended to have higher satisfaction with life in Canada than males, White immigrants [Caucasians] were more satisfied than any other racial or ethnic groups, and having an income of \$30,000 or greater were more satisfied with life in Canada. Finally, those immigrants who had been in Canada for more than 6 years were also more satisfied with life in Canada. Policy recommendations made by the authors include increased communication and collaboration across “immigration policies, licensing bodies, and hiring practices of the public and private sector to prevent underutilization of immigrant skills and its consequent human and economic costs” and “more relevant and focused information” for immigrants.²⁶

Another Canadian study on underemployment sought to identify the factors that lead immigrants to define themselves as being underemployed, and what impact this perception had on other aspects of their lives. Data was gathered from three surveys (n=190, 199, and 75) conducted in London and Peel region of Ontario with a diverse groups of immigrants mainly from the Skilled Workers program.²⁷ This summary will only present findings that were stable across the three studies. As wages, industry match with previous employment, and skill level relative to previous employment decreased, perceived underemployment increased. As

²⁴ Fieldman, 1996, as cited p. 408 in George, U., Chaze, F., Fuller-Thomson, E., & Brennenstuhl, S. (2012). Underemployment and life satisfaction: A study of internationally trained engineers in Canada. *Journal of Immigrant & Refugee Studies*, 10(4), 407-425. doi: 10.1080/15562948.2012.717827

²⁵ p. 418. George et al. (2012).

²⁶ p. 422. George et al. (2012).

²⁷ Hamilton, L. K. (2011). A model of perceived underemployment among immigrants in Canada. (Unpublished doctoral dissertation). University of Western Ontario, London, Ontario, Canada.

perceived underemployment increased, an individual's perception of employment-related discrimination increased and his or her satisfaction with the decision to come to Canada decreased. A number of factors that were hypothesized to impact on perceived underemployment did not: status as permanent vs. temporary/contract worker, gender, age, ethnicity, educational attainment, and self-rated English language proficiency and accent. Although these results should be viewed with some caution, as the representativeness of the samples was not established or defined, the conceptual model developed by these studies still provides a useful starting point for further research.

Other studies that focus on the impacts of underemployment on immigrants reinforce the findings of the above studies, from slightly different vantage points. A study that looked at psychological well-being in Pakistani immigrants to Canada found that acculturative stress increased as perceived income comfort level decreased, the perceived relevance of jobs decreased, and the age of the individual's children decreased.²⁸ An interview-based study that explored the health impacts of underemployment on 22 immigrants in the Mississauga area found that "mental health impacts were most frequently discussed by participants followed by aspects of physical health, particularly among those working in survival jobs."²⁹ Analysis on underemployment for all Canadians found that "Chronic unemployment and lack of commensurate employment are growing problems for many people with increasing levels of formal educational attainments."³⁰ However, the findings also indicate that the impacts are not even across all workers, and that racialized immigrants face particular challenges with underemployment. Another study that focusses on "Immigrants and the dynamics of high-wage jobs" found support for anecdotal descriptions of the trap of the survival job for immigrants. Results indicated that it was difficult for immigrants to access high-wage jobs out of unemployment, and that, while low-wage jobs appeared to be easily accessed by immigrants, they were problematic "stepping stones" to high-wage employment.³¹ One factor that could exacerbate this already existing dynamic is the resources that an individual/family arrives with to Canada: a study by TIEDI found that those immigrants who arrive with no savings were much

²⁸ Jibeen, T., & Khalid, R. (2010). Predictors of psychological well-being of Pakistani immigrants in Toronto, Canada. *International Journal of Intercultural Relations*, 34(5), 452-464. doi: 10.1016/j.ijintrel.2010.04.010

²⁹ p. 192. Dean, J. A., & Wilson, K. (2009). 'Education? it is irrelevant to my job now. it makes me very depressed ...': Exploring the health impacts of under/unemployment among highly skilled recent immigrants in Canada. *Ethnicity & Health*, 14(2), 185-204. doi: 10.1080/13557850802227049

³⁰ p. 227. Livingstone, D. W. (2010). Job requirements and workers' learning: Formal gaps, informal closure, systemic limits. *Journal of Education and Work*, 23(3), 207-231. doi: 10.1080/13639081003785732

³¹ Skuterud, M., & Sui, M. (2011). Immigrants and the dynamics of high-wage jobs. Report submitted to CERIS-Metropolis. Retrieved from [http://www.ceris.metropolis.net/wp-content/uploads/pdf/research_policy/rfp_student/Skuterud_imiglfs_final_2009%20\(january_2011\).pdf](http://www.ceris.metropolis.net/wp-content/uploads/pdf/research_policy/rfp_student/Skuterud_imiglfs_final_2009%20(january_2011).pdf)

less likely to experience a positive match between their education and employment in Canada. The researchers conclude that

About 1 in 4 immigrant with no savings worked in jobs related to their training or field of study, a proportion much lower than other immigrants. More than half of immigrants with some savings worked in jobs related to their field. Immigrant men with average savings were the most likely (65.6%), followed by immigrant men with high savings (58.7%).

This is an important finding, as it indicates that immigrants arriving with at least some savings are far more likely to eventually find work in the field for which they were trained.³²

Finally, the impact of challenges with English was identified in a number of studies that focussed on job seeking or employment. A mixed-methods study with Chinese immigrants living in the greater Calgary area used a survey (n=131) and follow up interviews (n=8) to explore the experiences of a group of relatively young and newly arrived newcomers.³³ Results indicated that language was the most commonly identified obstacle to achieving their goals in Canada and many of these young immigrants were experiencing social isolation. An interesting study of Latin American immigrants with Canadian MBA degrees found substantial challenges with employment, despite their Canadian credentials. Participants perceived language barriers and their lack of knowledge about networking and their limited professional networks to be negatively impacting their success in Canada.³⁴ For immigrants who participated in a survey study (n=357) about job search factors related to underemployment, the researchers found that “Overall, more positive job search outcomes for immigrants can be expected by improving language fluency, social support, cultural knowledge, job search clarity, and job search intensity.”³⁵

The studies identified here provide insight into how an immigrant might perceive underemployment (and, as a corollary, an appealing Alternate Career), and also some of the typical challenges faced in job search and factors that support success, which can inform further research and the messaging surrounding future project materials.

³² p. 10. Shields, J., Lemoine, M., Phan, M., Kelly, P., Lo, L., Preston, V., & Tufts, S. (2009). Do levels of savings brought to Canada affect labour market outcomes for immigrants? *TIEDI analytical report no. 1*. Toronto, Ontario, Canada: TIEDI: Toronto Immigrant Employment Data Initiative. Retrieved from <http://www.yorku.ca/tiedi/doc/AnalyticalReport1.pdf>

³³ Guo, S. (2013). The changing face of work and learning in the context of immigration: The Canadian experience. *Journal of Education and Work*, 26(2), 162-186. doi: 10.1080/13639080.2011.630657

³⁴ Hakak, L. T., Holzinger, I., & Zikic, J. (2010). Barriers and paths to success. *Journal of Managerial Psychology*, 25(2), 159-176. doi: 10.1108/02683941011019366

³⁵ Guerrero, L., & Rothstein, M. G. (2012). Antecedents of underemployment: Job search of skilled immigrants in Canada. *Applied Psychology*, 61(2), 323-346. doi: 10.1111/j.1464-0597.2011.00470.x

2. [Additional question] What do we know about factors influencing IEMLT and immigrant success in obtaining employment, particularly immigrants in regulated professions?

There are approximately 19, 664 MLTs in Canada and, in the provinces that have available data³⁶, 9.4% are IEMLTs.³⁷ IEMLTs face a range of challenges in getting certified in Canada. Many of these reflect a common immigrant experience of those in regulated occupations, such as getting adequate information about immigration pre-arrival, knowing how to find resources to support licensure, and access to bridging education/clinical placements.^{38 39} Even once certified, there can be language or cultural challenges or difficulties adjusting to the pace of work or to a new level of automation that is required.^{40 41} Some of these challenges are specific to Medical Laboratory Science, such as the particular combination of the five disciplines (clinical chemistry, clinical microbiology, transfusion science, hematology, and histology) in Canada. The inclusion of histology in these five presents particular challenges to IEMLTs, as it is not a core subject that is routinely included in curricula internationally and, therefore, it is not surprising that IEMLTs are “most likely to demonstrate major gaps in knowledge and experience” in histology.⁴² Recent consultations with IEMLT bridging program educators and administrators in Canada identified the following areas as presenting challenges for IEMLTs, while acknowledging that strengths and weaknesses varied widely, according to the individual and country of origin:

“IEMLT strengths

- IEMLTs are hard workers.
- Above average study habits (often mature students).
- IEMLT (depending from their background) are often strong in theory and written language.

IEMLT weaknesses

- Language (reading, comprehension) communication.
- Adapting to Canadian health care community (work load and work pace).

³⁶ These provinces are Nova Scotia, Ontario, Manitoba, Saskatchewan and Alberta.

³⁷ Canadian Institute for Health Information. Medical laboratory technologists in Canada, 2011. Spending and Health Workforce. Retrieved from https://secure.cihi.ca/free_products/2011_MLT_Report_EN.pdf

³⁸ Akbassi, I., & Don-Wauchope, A. C. (2010). Challenges facing internationally-educated medical laboratory technologists in Ontario – A pilot study. *Canadian Journal of Medical Laboratory Science*, 72(4), 88 – 90.

³⁹ Grant, M. M. (2008). Internationally-Educated Medical Laboratory Technologists: The Story of One... or Many?. *Canadian Journal of Medical Laboratory Science*, 70(4), 133 –135.

⁴⁰ Grant, M. M. (2008).

⁴¹ Johnson, K., & Baumer, B. (2011). Assessing the workforce integration of internationally educated health professionals. Hamilton, Ontario, Canada: Canadian Society for Medical Laboratory Science. Retrieved from <http://csmls.org/About-CSMLS/Recent-Updates/What%E2%80%99s-new-at-CSMLS-/News-and-Updates/CSMLS-Workforce-Integration-Project-Report.aspx>

⁴² p. 31. Grant, M. M. (2011). Subject certification. *Canadian Journal of Medical Laboratory Science*, 73(1), 24 – 33.

- Often not as autonomous as Canadian MLTs (often a lack of professional self-confidence).
- Laboratory information system and automation.
- Quality assurance.

Most common comprehensive discipline specific gaps include:

- Transfusion science
- Histotechnology⁴³

Interview with IEMLTs confirmed some of the above gaps identified by educators, with a majority reporting that they lacked clinical exposure in histotechnology and transfusion science (59%) and also in applying Quality Assurance within a clinical setting (59%).⁴⁴

Another, earlier study regarding competency gaps and IEMLTs found that the gaps identified by IEMLTs, employers, and educators overlapped somewhat:

- IEMLTs identified their greatest needs as “job hunting, networking, and Canadian workplace experience.”
- Employers found that the major gaps for their IEMLT employees were “communication skills and Canadian workplace experience.”
- Educators also identified Canadian workplace experience as a gap for IEMLTs, along with “critical thinking and problem solving,” and “reading complex materials and demonstrating understanding.”⁴⁵

Evaluation focus groups on the resources developed to support the acquisition of the competencies in the identified gaps were met with somewhat mixed reviews. While IEMLTs acknowledged that the new resource document would help, their concerns centered on their perceived need for practical experience and learning in a laboratory setting. Resources that were costly were also a concern due to the financial strain they were already under to achieve certification.⁴⁶

What factors have been found to be associated with success in integration for IEPs immigrating to Canada? Certain characteristics were found to be associated with success for Indian immigrants to Canada: achievement of high income was related to settling in Canada “before

⁴³ p. 9. New Brunswick Bridging Program Working Group. (2011). New Brunswick MLT bridging program – Initial report. (Unpublished program report).

⁴⁴ p. 9. New Brunswick Bridging Program Working Group. (2011).

⁴⁵ p. 4. Grant, M. (2010). FINAL PROJECT REPORT, OUTCOME INDICATORS AND TRACKING MECHANISMS: Addressing the Competency Gaps of Internationally Educated Medical Laboratory Technologists. Retrieved from http://www.csmls.org/csmls/media/documents/publications/reports/Competency_Gaps_Final_Report.pdf

⁴⁶ Grant, M. (2010).

34 years of age, having a university degree, and proficiency in English.”⁴⁷ In a comparison of data from the Longitudinal Survey of Immigrants, researchers found that immigrants in unregulated high-tech occupations were “more likely to be employed sooner in a matching and/or full-time job” and have their work experience recognized, compared to immigrants in regulated occupations.⁴⁸ However, an analysis by the Toronto Immigrant Employment Data Initiative found that immigrants planning to work in regulated professions were more likely after four years in Canada to be working in employment related to their occupation (but not necessarily in the regulated occupation) than immigrants planning to work in unregulated occupations. In addition, immigrants planning to work in regulated occupations had higher hourly wages than those planning to work in unregulated occupations.⁴⁹ However, findings between regulated and unregulated employment outcomes can vary, with another study finding that regulated immigrants in the health sector face more challenges with credential recognition than other sectors, such as the natural sciences or engineering. In addition, this study found that those immigrants planning to work in unregulated occupations fared slightly better than those planning to work in regulated ones.⁵⁰

Language was another key factor identified in another study by TIEDI, which found that being more likely to work in one’s field was associated with earning a degree in Canada, or another English-speaking country, as well as with higher earnings.⁵¹ A roundtable discussion at TIEDI made recommendations to support immigrants moving from underemployment to employment better suited to their skills. These recommendations highlighted the importance of improving supports for immigrants in relation to language training, as well as increased flexibility of access to employment-related supports for those who are working and have constrained schedules. Finally, it was recognized that financial pressures often lead immigrants

⁴⁷ Agrawal, S. K., & Lovell, A. (2010). High-income Indian immigrants in Canada. *South Asian Diaspora*, 2(2), 143 – 163. doi: 10.1080/19438192.2010.491295

⁴⁸ Hall, P. V., & Sadouzai, T. (2010). The value of “experience” and the labour market entry of new immigrants to Canada. *Canadian Public Policy*, 36(2), 181–198. Retrieved from http://resolver.scholarsportal.info/resolve/19119917/v36i0002/181_tvoatleonic&form=pdf&file=file.pdf

⁴⁹ Tufts, S., Lemoine, M., Phan, M., Kelly, P., Lo, L., Preston, V., & Shields, J. (2010). What are the labour market outcomes for immigrants planning to work in regulated and unregulated occupations? *TIEDI analytical report no. 5*. Toronto, Ontario, Canada: TIEDI: Toronto Immigrant Employment Data Initiative. Retrieved from <http://www.yorku.ca/tiedi/doc/AnalyticalReport5.pdf>

⁵⁰ Shields, J., Lo, L., Zivic, J., & Atlin, J. (n.d.) Access and entry to the labour market: Entry barriers and the job search process. TIEDI Research Snapshot. Retrieved from <http://www.yorku.ca/tiedi/doc/snapshot2.pdf>

⁵¹ Tufts, S., Lowe, S., Banerjee, R., & Park, S. (n.d.) Preparing for the Canadian labour market: Education, Training, and Language. TIEDI Research Snapshot. Retrieved from <http://www.yorku.ca/tiedi/doc/snapshot1.pdf>

into survival jobs that limit their options: access to enhanced supports, such as “training allowances, paid internships, [and] affordable child care” could help improve outcomes.⁵²

An interesting theme to emerge in the literature was the positive effect of social networks on the employment outcomes of immigrants. One statistical analysis found that “the diversity of workers’ personal networks was positively associated with their annual income.”⁵³ Another study also highlighted the value of diverse social networks for immigrants, finding them to be positively associated with the probability of employment. In addition, it was found that “attachment to the labour market for female immigrants is more related to social networks than for males. Female immigrants’ employment probability tends to be associated with all the elements of social network structure: size, diversity and density, while the frequency of contact with the networks seems to have no significant effects on the employment status for male immigrants.”⁵⁴

Finally, a logistic regression analysis by Statistics Canada looked at outcomes for several occupations across Canada, including the NOC code of 3211: “medical laboratory technologists and pathologists assistants.” The successful integration of immigrants who had arrived with credentials related to this field was defined by two possible employment outcomes: “1) working in an occupation corresponding to their field of study or in an occupation requiring similar or higher skill levels, and 2) having earnings at or above the national median earnings calculated for the occupation corresponding best to their field of study.”⁵⁵ A number of variables were found to increase the likelihood of successful integration. Language was a factor: Having knowledge of English only was found to increase the likelihood of good matches compared to individuals with other language profiles.⁵⁶ Other variables that were found to generally contribute to the likelihood of positive integration across a number of identified professions include “Living in a married or common-law relationship, having pre-school children, living in population centres, and working on a full-time full-year basis.”⁵⁷ However, for

⁵² Toronto Immigrant Data Employment Initiative. (2012). Immigrant transitions from underemployment to skills-commensurate employment. TIEDI Roundtable Discussion Paper #4. Retrieved from <http://www.yorku.ca/tiedi/doc/Roundtable4d.pdf>

⁵³ Thomas, D. (2011). Personal networks and the economic adjustment of immigrants. *Canadian Social Trends*, Catalogue no. 11-008. Retrieved from <http://www.statcan.gc.ca/pub/11-008-x/2011002/article/11592-eng.pdf>

⁵⁴ Xue, L. (2008). Social capital and labour market outcomes of recent immigrants to Canada: Employment entry, wages and duration of access to the first job in intended occupation. (Unpublished doctoral dissertation). University of Ottawa, Ottawa, Ontario, Canada.

⁵⁵ p. 11. Plante, J. (2011). Integration of internationally-educated immigrants into the Canadian labour market: Determinants of success. Culture, Tourism and the Centre for Education Statistics Research papers. Ottawa, ON, Canada: Statistics Canada. Retrieved from <http://www.statcan.gc.ca/pub/81-595-m/81-595-m2011094-eng.pdf>

⁵⁶ Plante, J. (2011)

⁵⁷ p. 10. Plante, J. (2011)

medical laboratory technologists and pathologists assistants specifically, the impact of relationship and young children appear to only be related with education-skills match, rather than earnings-skills match.⁵⁸

Some interesting trends emerged in this study specific to “medical laboratory technologists and pathologists assistants.” For example, the likelihood of education-skills match was higher in a number of provinces compared to Ontario: “from the Atlantic Provinces (+68%), Quebec (+56%), Manitoba (+120%), Saskatchewan (+53%) and Alberta (+26%).”⁵⁹ However, workers in Ontario were generally more successful regarding a match between their educational background and their earnings, with those from British Columbia and the territories were more likely (+31%) to report earnings at or above the median.⁶⁰

As well, workers with qualifications within NOC code 3211 were more likely to have a positive education-skills match within the age category of 45 to 64, compared to those younger. Regarding an earnings-skills match, the likelihood of this increased with age, with workers aged 55 – 64 being much more likely to be earning at the median or higher for their educational background (+217%).⁶¹ For workers with qualifications related to medical laboratory technologists and pathologists assistants, being from a racialized group decreased the likelihood of an education-skills match (-32%). However, this was not the case for an education-earnings match.⁶²

3. What are some of the best practices currently being utilized in the identification of Alternate Careers?

Due to the shortage of literature on Alternate Careers, this section will focus on the findings presented in the FQR and Alternate Careers report by Lim Consulting and Associates.

A dominant theme to emerge from the interviews conducted about the identification of Alternate Careers was the centrality of the IEP in the process. It was emphasized that “it is the IEP who must make the decision him/herself as to which career to pursue, based on his/her own background and circumstances.”⁶³ A further theme that arose was the “necessity of proactivity on the part of the IEP.”⁶⁴ However, proactivity is most likely to be directed towards

⁵⁸ Plante, J. (2011)

⁵⁹ p. 67. Plante, J. (2011).

⁶⁰ p. 78. Plante, J. (2011).

⁶¹ p. 75. Plante, J. (2011).

⁶² see pp. 71 and 81, Plante, J. (2011). for these analyses

⁶³ p. 46. LIM Consulting and Associates (2013)

⁶⁴ p. 46. LIM Consulting and Associates (2013)

certification unless there is compelling evidence to direct it towards Alternate Careers. This suggests an important role for messaging regarding proactivity about alternative careers and related benefits from pre-arrival onwards. In addition, given that career change is a new concept to many immigrants,⁶⁵ there could be a role in Alternate Career materials to introduce this concept from a North American perspective.

The diagram that follows represents many of the activities identified as best practices in the identification of Alternate Careers for IEPs:

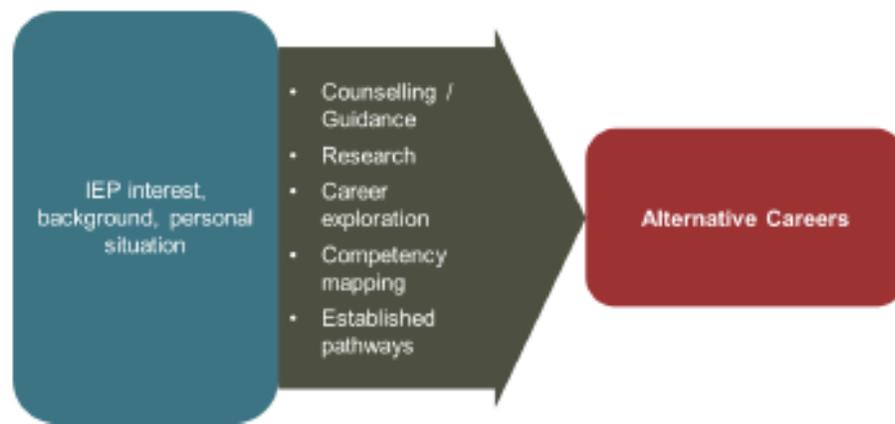


Figure 3 Identifying Alternative Careers

66

While competency mapping was identified as an informal practice used by a number of ISO counsellors interviewed, it was acknowledged that very little is available currently in terms of specific methodologies for undertaking this. Several projects related to competency mapping and/or the harmonization of competency profiles are underway in the health field across Canada, and the FQR and Alternate Careers report identifies these in an Appendix. These projects include a comprehensive database of competency profiles for regulated professions in New Brunswick, a project by Manitoba Health for registered and practical nurses, and a project by Health Canada for health professionals.⁶⁷

One of the goals of the HIRE – IEHPs project was to identify “trends that provided promise for future employment for IEHPs.”⁶⁸ The method used to identify these trends was interviews with acknowledged leaders in health care, government, and private industry. Some of the trends identified included the aging population and working in home-based care, or working as “case

⁶⁵ LIM Consulting and Associates, 2013

⁶⁶ p. 47. LIM Consulting and Associates (2013)

⁶⁷ See LIM Consulting and Associates, 2013, p. 76 for more details.

⁶⁸ p. 8. Paul, R. (2013)

coordinators in Community Care Access Centres.”⁶⁹ One additional trend identified was that of revenue generation in health care, where hospitals can sell consulting services or medical expertise abroad. IEHPs, it was proposed, could be valuable contributors to such international projects, given the fact that they are often multilingual and knowledgeable about other cultures. However, it was acknowledged that this kind of work would require that the IEHPs receive an adequate introduction to the Canadian health care system and its culture. Further research was recommended to better understand the potential contributions of IEHPs and what roles they might take in such future projects.⁷⁰

4. What are some of the best practices currently being utilized in terms of providing applicants to regulated professions with information on Alternate Careers (this includes, but is not limited to timing, sensitivity of wording, method of delivery)?

It is a common theme in immigration-related literature that earlier information about the “on the ground” reality that immigrant will face on arriving to Canada is preferable.^{71 72 73} Indeed, the most recent evaluation data from the Canadian Immigrant Integration Program (CIIP) suggests that its pre-arrival orientation sessions and one-on-one counselling sessions with immigrants about the Canadian labour market, steps to licensure in regulated professions and Alternate Careers are having an impact on these prospective newcomers’ attitudes towards Alternate Careers. At the time of registration, virtually all participants were planning to work in their chosen profession in Canada (90%). However, after participating in the program, the tables had almost turned, and almost 80% of participants were considering other occupational choices in addition to their chosen career. The top three reasons for this shift identified by the participants included (more than one response could be chosen): “expansion of career options (88% or 8,033), reinventing themselves in Canada (38% or 3,521), and pursuit of higher demand occupations (37% or 3,394).”⁷⁴ This does suggest that early and accurate information can have an impact of perceptions and planning regarding Alternate Careers. The CIIP has plans to

⁶⁹ p. 17. Paul, R. (2013)

⁷⁰ Paul, R. (2013)

⁷¹ Türegün, A. (2011). What do immigrants do when they can’t practise their professions? Immigrant professionals in the Ontario settlement service sector. WORKING PAPER SERIES: CERIS Working Paper No. 85. Retrieved from http://www.ceris.metropolis.net/wp-content/uploads/pdf/research_publication/working_papers/wp85.pdf

⁷² Toronto Immigrant Data Employment Initiative. (2012). Immigrant transitions from underemployment to skills-commensurate employment. TIEDI Roundtable Discussion Paper #4. Retrieved from <http://www.yorku.ca/tiedi/doc/Roundtable4d.pdf>

⁷³ Grant, M. (2009). CSMLS Task Force on Internationally Educated Medical Laboratory Technologists. *Canadian Journal of Medical Laboratory Science*, 71(3), 129.

⁷⁴ Canadian Immigrant Integration Program. (2013). CANADIAN IMMIGRANT INTEGRATION PROGRAM (CIIP): QUARTERLY STATISTICAL REPORT, October 1, 2010 – June 30, 2013. Retrieved from <http://www.newcomersuccess.ca/images/stories/reports/2013-september-stats-report.pdf>

continue tracking cohorts of immigrants through surveys and focus groups to observe their outcomes regarding employment in their previous or an alternate profession.⁷⁵

In terms of timing, findings in the FQR and Alternative Careers report agrees with the literature cited above. Participants emphasized the importance of pre-arrival information for immigrants so that they can be “emotionally and mentally prepared for the challenges when they arrive.”⁷⁶ Another important point was that information must continue to be presented along the way: “As the mindset of the IEP will change over time, information should be presented at different stages throughout the IEP’s transition to entry into the labour force, including pre-arrival, prior to and after assessment of qualifications.”⁷⁷

The importance of sensitivity is another key theme, and is demonstrated in various ways, including a consistent approach to describing Alternate Careers in a positive way that does not imply “less than” in terms of failure to get licensed, or the credentials held by the IEP, or that an Alternate Career is “less than” in relation to competencies. Positive messaging about Alternate Careers can focus on an Alternate Career as an opportunity and a choice that can be made by an IEP for various reasons. In addition, sensitivity requires an awareness of the aspects of Alternate Careers that may be less familiar to newcomers: the concept of transferable skills and the challenge to identify and status that the IEP is likely facing.⁷⁸

A final trend that appears in the best practices in Alternate Career supports is the value of ongoing individualized support for the IEP. It is clear that one source of information or one approach will not be adequate: an individual may require training in one or more areas, such as language or cultural issues, as well as coaching so that he or she can independently undertake a job search using all of the skills necessary to be successful.⁷⁹

The HIRE – IEHPs reports echoes these themes, in that it acknowledges that conversations about Alternate Careers were “difficult to initiate given the link between the IEHPs’ profession and their sense of identity.”⁸⁰ In addition, the IEHPs who participated in this study requested “more active involvement in helping them obtain more upwardly mobile employment.”⁸¹

⁷⁵ Personal communication, Maha Surani, CIIP, November 4, 2013.

⁷⁶ p. 43. LIM Consulting and Associates. (2013).

⁷⁷ p. 43. LIM Consulting and Associates. (2013).

⁷⁸ LIM Consulting and Associates. (2013).

⁷⁹ LIM Consulting and Associates. (2013).

⁸⁰ p. 15. Paul, R. (2013).

⁸¹ p. 16. Paul, R. (2013).

5. From a legislative or regulatory perspective, what are the key issues and/or concerns related to the provision of Alternate Career information?

Within the FQR and Alternate Careers report, the main concerns raised by regulators regarding the provision of Alternate Career information were jurisdictional. For example, one participant commented that “counselling support should be outside the regulation system.”⁸² Questions were also raised about the role of the regulators and what they know: “One contact also pointed out that regulators do not know about the eligibility and assessment processes of other professions and so cannot comment on the suitability of alternative careers.”⁸³ Even when regulators would like to help (e.g., in referring IEPs who may need an Alternate Career), they may not know where they can refer them to.⁸⁴

An additional observation related to the different motivations of regulators as compared to professional associations: “regulators are concerned about *regulating* a particular profession, while professional associations have an interest in promoting the profession (and so may guide individuals to aligned alternative careers as these individuals may come back later to pursue the profession).”⁸⁵ Participants in an occupational role did agree that their role in providing Alternate Career information would be limited, and the following are examples of what that role might look like in the future:

- “Leadership and advisory role in national harmonization of standards.
- Key informant, stakeholder.
- Cheerleader, support and encouragement.
- Provide help in defining competencies or provide input.
- Provide advice and participate as stakeholder (but have no funding nor capacity).”⁸⁶

6. Are there any other issues associated with the provision of Alternate Career information that the CSMLS should be aware of?

In the HIRE – IEHP research project, interviews with Human Resources professionals in the health sector uncovered a number of potential systemic barriers to IEHP employment, including how résumés are screened, a lack of interview training regarding cross-cultural interviewing for interviewers, and the “Canadian experience” barrier. The report concluded that

⁸² p. 8. LIM Consulting and Associates. (2013).

⁸³ p. 10. LIM Consulting and Associates. (2013).

⁸⁴ LIM Consulting and Associates. (2013).

⁸⁵ p. 10. LIM Consulting and Associates. (2013).

⁸⁶ p. 14. LIM Consulting and Associates. (2013).

Research into human resource practices and how they might be excluding IEHPs is needed. Discussions with executives and human resource managers suggested that there was considerable bias in the system that favoured locally educated health professionals at the expense of foreign educated health professionals. An exploration of the hiring process, tracking how IEHPs applications get treated, how IEHPs and human resource managers navigate the investigative process of the interview and how human resources develop the careers of IEHPs would illuminate the challenges in place and identify in more detail what interventions might be needed.⁸⁷

This is a particular concern if IEHPs are pursuing employment in a field that is less familiar to them than the one in which they originally trained, as they will need to gain confidence in extending their job search and interviewing in fields where they can transfer their skills.

Australian Literature

Beyond the international literature specifically on the topic of Alternate Careers, a separate search was undertaken to review the Australian literature in particular, as the immigration systems of the two countries share some commonalities, with Australia often at the cutting edge of policy and program development.⁸⁸ This document analysis included a review of the main Australian immigration web portal, as well as some program evaluation reports in the academic domain and grey literature. The main goals of this search were, first, to confirm whether Australia, like Canada, has a similar emerging focus on Alternate Careers for IEPs, and second, if yes, to identify any relevant best practices that might be applied in the Canadian context.

This review of the Australian literature, although not exhaustive, did not locate any emerging emphasis on Alternate Careers in Australian immigration policy and programming. To the contrary, the dominant theme to emerge from the review was a strong emphasis on immediate integration into the Australian workforce in an immigrant's area of expertise. For example, a review of an employment preparation program run by a large ISO in Victoria made the following observation about Australia's Skilled Migrants program: "With a strong focus on the applicant's English language and professional skills, most skilled migrants find work and can

⁸⁷ p. 25. Paul, J. (2013).

⁸⁸ This perception of the Australian system will be discussed in more detail in the interview summary in the primary research summary.

make an immediate contribution to Australia’s workforce and economy.”⁸⁹ Indeed, information on the main web portal for immigration to Australia emphasizes a system where applicants first post an “Expression of Interest” within the computer-based system, which can be reviewed by employers and states/territories. This system also requires that assessments be completed prior to posting an Expression of Interest (EOI): “If you are submitting an EOI for a points based visa, you must have completed an English language test, skills assessment or job ready program (if applicable) before you submit a complete EOI.”⁹⁰ There is evidence that Canada is moving more in the direction of an employer/employment driven system similar to Australia’s with higher pre-immigration language requirements.⁹¹

One comparative research paper, however, raises concerns about whether the long term implications of such policy changes have been considered. A statistical analysis of outcomes for immigrants in this paper finds that, at least for younger immigrants, the language barriers can be overcome over time. The paper raises questions about whether raising language requirements leads to Canada receiving “better” immigrants (and it is complex to define this), or simply immigrants from different source countries.⁹² Another comparative research paper exploring the integration of Internationally Educated Midwives (IEMs) in Canada, the U.S., the U.K., and Australia found that Canadian bridge training programs offered a particular strength in that they focussed on upgrading the knowledge of the IEMs, whereas most of the other programs focussed mainly on orienting the IEMs to the new practice context.⁹³ However, the dominant focus of this paper on integration meant that it was not as relevant to the topic of Alternate Careers for IEMs.

Overall, the review of Australian literature encompassed a range of sources, but was not able to confirm a similar focus within Australian policy and programs for placing IEPs in Alternate

⁸⁹ O’Dwyer, M., & Mulder, S. (2013). *Securing futures: Making the most of migrants’ skills*. . Melbourne, Australia: AMES. Retrieved from <http://www.ames.net.au/documents/research-projects/securing-futures-making-the-most-of-migrants-skills>

⁹⁰ Australian Government, Department of Immigration and Border Protection. (2013). *SkillSelect FAQs*. Retrieved from <http://www.immi.gov.au/skills/skillselect/index/faqs/#faq86648>

⁹¹ Albaugh, Q., & Seidle, F. L. (2013). REPORT: 2ND CANADA-AUSTRALIA ROUNDTABLE ON FREIGN QUALIFICATION RECOGNITION. Retrieved from <http://www.irpp.org/assets/research/diversity-immigration-and-integration/2nd-canada-australia-roundtable-on-foreign-qualifications/roundtable-043013.pdf>

⁹² Skuterud, M. (2012). Is the heightened emphasis on language in recent changes to Canada’s immigrant selection policy shortsighted? Report submitted to CERIS – The Ontario Metropolis Centre. Retrieved from http://www.ceris.metropolis.net/wp-content/uploads/2013/01/Report_Skuterud_dec20121.pdf [cited with permission of author]

⁹³ Bourgeault, I. L., Neiterman, E., & LeBrun, J. (2011). Midwives on the move: Comparing the requirements for practice and integration contexts for internationally educated midwives in Canada with the U.S., U.K. and Australia. *Midwifery*, 27(3), 368-375. doi: 10.1016/j.midw.2011.03.010

Careers or recommending Alternate Careers to IEPs. In fact, the Australian system seems to place a higher emphasis on immediate employment for IEPs in their professional field.

Conclusion

Through the exploration of different clusters of literature, many issues relating to Alternate Careers for IEMLTs have been identified. Many of these can be summarized within the following categories:

Areas of Agreement:

- Underemployment has been shown to have substantial mental health effects on immigrants and impacts negatively on their satisfaction with life in Canada; this reinforces the impetus behind the Alternate Careers Information project.
- Perceived underemployment is a personal dynamic, but a number of variables have been identified in the literature that could be considered for further research or selection of Alternate Careers: for example, wages, industry match with previous employment, and skill level relative to previous employment.
- Communication about Alternate Careers and the necessity for proactivity on the part of the individual needs to begin as early as possible before arrival to Canada. However, each person will vary in their openness to Alternate Careers along the certification journey. For this reason, the information needs to be repeated sensitively along the way.
- Sensitivity begins with respect for an individual's education and professionalism and must be based on an assessment of their readiness to engage with the topic of Alternate Careers. Sensitivity continues with a culturally informed approach to communicating with individuals about their realistic chances for certification and the options available to them. The best way to communicate about Alternate Careers and guide immigrants is through the process in one-on-one counselling and support.

Areas of Concern:

- Is funding available to support an Alternate Careers mandate on an ongoing basis and collaboration across stakeholders?
- While research results vary regarding outcomes for immigrants in regulated vs. unregulated professions, this could actually be a good finding, in that referring IEMLTs to unregulated professions has not been definitively proven to have negative impacts on employment outcomes due to the status of the profession as unregulated. Perhaps further investigation of the literature in this area might be warranted.

- Certain groups, such as racialized people, those arriving in Canada with lower language proficiency, and those arriving in Canada with no savings already face increased challenges to achieve successful integration with regard to a good education – employment match. How could the necessity to pursue an Alternate Career impact unequally on them?

Questions Remaining:

- How could research findings regarding the positive impact of diverse social networks on employment outcomes be used to support the outcomes of IEMLTs pursuing Alternate Careers?
- Immigrants participating in the Canadian Immigrant Integration Program are already in the “final stages of the immigration process.”⁹⁴ Are there any ways that key information could reach potential applicants sooner?
- How can employer buy-in be encouraged and addressed, given its importance for the outcomes of IEMLTs who will be pursuing Alternate Careers?
- What generic job search skills are required for a successful Alternate Career job hunt? Are there any skills specific to an Alternate Careers job hunt that IEMLTs will need to be supported in acquiring to facilitate their success?
- What is not known about IEMLT applicants and what factors might be associated with higher rates of success....in the PLA process? in the remediation process? in the certification exam? How might this data inform the provision of Alternate Careers information?

⁹⁴ <http://www.newcomersuccess.ca/index.php/en/about-ciip>

PART TWO: PRIMARY RESEARCH

Methods

The design of the primary interview research was an iterative model with snowball sampling. A preliminary literature review informed a proposed list of phase one interviewees. The list of phase one interviewees was then reviewed by the project team and also by the Advisory Committee of the project, and all recommendations were integrated into the research plan. All interviewees were asked to recommend relevant resources and other possible interviewees.

Coverage

Once all potential referral leads were followed up, the primary research involved 16 interviews (conducted either in person or by phone or email), across the following categories:

- 1) Organizations with recognized “best practices” in Alternate Careers
- 2) Organizations with a regulatory, legislative focus, or government role
- 3) Organizations that specialize in the provision of pre-arrival information for IEPs
- 4) Bridging Education Programs for IEMLTs
- 5) Employers of IEMLTs, especially with partnerships with bridging education

Analysis

All interviews were digitally recorded, and detailed notes were taken during each interview. The initial step of analysis was a crosscheck of the notes with a complete review of the audio recording. While listening to the recording, the interview was partially transcribed, with the researcher selecting segments that were particularly relevant to the research questions. To facilitate analysis across the cases, all transcription and responses to particular questions were entered into a spreadsheet.⁹⁵

Using the spreadsheet format, the researcher was able to “stay close to the data” by creating coding categories for emerging themes based on the content of the interviewee comments.⁹⁶ These were compared across all interviews, with a focus on the research questions, and the partial transcripts were also checked for any evidence in the opposite direction of the codes, in order to enhance the reliability or “trustworthiness” of the results.⁹⁷

⁹⁵ Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook of new methods*. Beverly Hills, CA: Sage.

⁹⁶ p. 112. Maxwell, J. A. (2012). *A realist approach for qualitative research*. Thousand Oaks, CA: Sage Publications.

⁹⁷ Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

The chart that follows summarizes the interviewees, and provides a rationale for the selection of that participant. Also included is a percentage of positive responses for participation received in relation to all contacts made for each category of participant.

List of Interviewees

#	Name	Organization	Rationale for Interview
Organizations with recognized “best practices” in Alternate Careers (71% response rate)			
1	Stephanie Hooker	Health Force Ontario	Online module; counselling
2	Sheila Hellier	Skills for Change	Extensive Alt Career experience?
3	Mohja Alia	ISIS (Nova Scotia)	Profession specific groups
4	Siobhan Williams	BioTalent	Innovative online resources
5	Razaq Ijaduola	CAPE	Online competency portfolio
6	Catherine Gerow	Career Cruising	Related careers profiles available
Organizations with a regulatory, legislative focus, or government role (50% response rate)			
7	Sharon Vanin	Office of the Fairness Commissioner (Ontario)	MLT File holder/Policy Analyst
8	Adam Chrobak	Manitoba College of MLTs	Regulatory role
9	Robert Millman	Office of the Fairness Commissioner (Manitoba)	Planning and Policy Analyst
Organizations that specialize in pre-arrival information for IEPs (100% response rate)			
10	Maha Surani	CIIP	Pre-arrival information
11	Jasmine Singh	Health Force Ontario/CIIP	Pre-arrival information
Bridging Education Programs for IEMLTs (67% response rate)			
12	Mary Golba-Bylhouwer	Mohawk College (ON)	Trajectories of IEMLTs
13	Janelle Bourgeois	New Brunswick Society of MLTs	Atlantic Canada perspective, newly launched bridging program
Employers of IEMLTs (100% response rate)			
14	Tricia Van Denakker	Diagnostic Services Manitoba	Employer with bridging education partnership
15	Christine Bruce	CML Health Care Inc.	Large employer
Other (response rate n/a)			
16	Leslyanne Hawthorne	Centre for Health Policy, The University of Melbourne, Australia	Expert in comparative immigration policy and immigrant integration

Primary Research Findings

The findings are presented first in summary across all participants in relation to each research question in turn, using a content focus. In response to the last question, “Are there any other issues associated with the provision of Alternate Career information that the CSMLS should be aware of?” additional themes arising from data analysis are presented in terms of their frequency across participants, and also in relation to their saliency. This approach ensures that themes with higher agreement are featured, along with themes that are relevant to the topic, but may have been mentioned by a smaller number of participants. Because of the small nature of this dataset and the fact that the individuals come from different stakeholder groups, this was considered particularly important to ensure a comprehensive summary of the results.

Research Questions

1. How can “alternate” or “alternative” careers best be defined, especially with reference to MLTs?

The interviews presented participants with the Working Definition from the FQR Working Group report that follows, and asked for their feedback.

“Alternative careers are career options that immigrants pursue other than the profession in which they were originally trained. Ideally, alternative careers make use of and relate to an immigrant’s skills and experience.

For some immigrants, alternative careers are sought to support themselves while pursuing licensure in a profession that is regulated in Canada. For others who are unable to achieve recognition or unable to find employment in their field once qualified, the alternative career may be a stepping stone to other careers, or become the end goal of the immigrant. In all cases, alternative careers improve the labour market integration prospects of immigrants by providing opportunities for immigrants to apply their skills and experience in a Canadian context and to learn new skills and gain further experience.

Alternative careers include:

- Professions or occupations that may not exist in the immigrant’s country of origin, but for which the scope of work is similar to that of the immigrant’s original profession in his/her home country.
- Related occupations in the same field
- Occupations in related fields
- Occupations in unrelated fields.

Alternative careers may require skills or educational upgrading on the part of the immigrant.”⁹⁸

Content

Overall, there was little feedback from interviewees on the above definition regarding its content, as most found it to be detailed and “encompassing.” However, consultation with the project’s Advisory Committee lead to the tailoring of the definition to align with the project’s goal of supporting the identification of a rewarding career for an IEMLT applicant who is unable to become certified. This is a substantially different focus from the broader definition above.

For the purposes of this project, Alternate Career is defined as follows:

“A full, permanent career option in an unregulated profession that may or may not be in a health-related field. The Alternate Career options offered by this project are intended for IEMLT applicants who have skills, education and/or experience that are different from Canadian entry-to-practice standards. Although unregulated, some Alternate Careers may require further training before entry.”

Terminology

Where interviewees (3) did have feedback on the definition, it was focussed more on the terminology used. One wondered whether the word “alternate” implied a “less than” choice, and what other terms could be used. Suggestions from other interviewees included the following: Career Change, Career Options, Career Exploration, Parallel Path, Parallel Career.

Expand and Define Target Audience?

Two interviewees provided feedback on the target audience of the Alternate Careers, wondering if references to immigrants/IEMLTs could be removed to make the Alternate Careers options for anyone interested. Potential benefits of this approach included an avoidance of a perceived “second tier” of options for immigrants only, and also an acknowledgement that some people do complete an MLT training program and realize that it’s just not for them.

Another issue related to the target audience was regarding professionals from other countries who may have worked in labs, but were not MLTs abroad, or may not have a complete match to certification requirements. Three interviewees described having conversations with individuals, for example, who may have run labs or worked in labs as a medical microbiologist, or conducted research in chemistry, or had qualifications in Molecular Genetics only. Based on

⁹⁸ p. iv-v, LIM Consulting Associates. (2013).

the conversation, it was clear that applying for PLA with CSMLS would not be feasible. One of the three participants who described having conversations like these would like to refer such individuals to the Alternate Careers, however, this may present a challenge, as the current Alternate Career selection methodology is based on an IEMLT skills core competency profile.

“Extent” of an Alternate Career

While one interviewee did acknowledge that it would be possible to recommend a regulated profession as an Alternate Career, depending on an IEMLT’s prior education, all suggestions made by interviewees for potential Alternate Careers showed a preference for unregulated professions: Medical Laboratory Assistant, Unregulated lab-related positions in food and manufacturing, Laboratory Information Systems, Biotechnology Laboratory Worker, Laboratory Quality Assurance (External Quality Assessment data management, Key Performance Indicators – accident and incident investigations), Pharmaceutical Quality Assurance, Sales (lab products, lab instruments), teaching (for example, in a bridging program), (unregulated) accounting clerk. There was also an acknowledgement that many of the above careers would require little or no additional training if selected by an individual with an appropriate background (e.g., prior teaching experience leads to bridging education instructor, or prior IT experience leads to Laboratory Information Systems).

2. What are some of the best practices currently being utilized in the identification of Alternate Careers?

The interview participants varied in terms of their experience with identifying Alternate Careers for IEMLTs or IEPs. For this reason, the responses received from those with more concrete experience are emphasized here.

The most agreed upon best practice to identify Alternate Careers is one-on-one counselling (6 responses). There were a number of reasons identified by participants for this choice. The interview can provide a starting point for Alternate Career exploration by probing the client’s original reasons for choosing the career of MLT. Another participant argued that having an IEP do an assessment or self-assessment was only the first step and that the involvement of a counsellor is crucial to the process. A counsellor, it was argued, gets to know the IEP well, and can identify his or her weaknesses (some of which the IEP may not even be aware of), and then refer him or her to resources to support their remediation. In addition, the interview can be a crucial tool for assessing whether or not an IEMLT is open to the possibility of an Alternate Career, as this participant describes:

That's where the interview process is helpful, because sometimes you're looking at a set of transcripts, a report, and so it's that interview process where you ask, "What did you

actually do" and sometimes you find that people are very passionate about the Med Lab Technology, and they don't really want to hear about the other, whereas others are more open [to Alternate Careers], and they'll say "Oh, I didn't know about that!"

Other practices that can support an IEP in identifying an Alternate Career can include software programs that identify transferrable skills (3) and mentors in the field (1), as well as working groups such as the Multi-Stakeholder Working Groups facilitated by ISIS (1).

One organization interviewed, BioTalent, has done extensive skills mapping in relation to their recruitment needs in the biotechnology sector. One practice that they engage in is identifying possibilities "backwards and forwards;" that is, working forwards from the vacant positions and required skills sets, and also backwards from health professionals with clearly relevant skill sets that could transfer to some of their vacancies:

We do the research from industry on what's needed, so we know what's lacking... We've done it forward and backwards. So, what we've identified here are gaps: Are there possible occupations that these skills can transfer from? And we'd get someone to do that in depth research. And we do it the other way....oh, here are...pharmacists, doctors, medical laboratory technologists, obvious medical health [professionals]...they can transfer in. We've done it both ways, backwards and forwards.

The in-depth research that this interviewee is referring to above is further explained:

We identified these [source professions for BioTech career options] through projects. We may think, oh, this is probably a good transfer. But, we actually go to people...For example, for the laboratory worker, we took the MLT skills profile. We went to people, did focus groups and validation with laboratory workers in the job, saying, "OK, what's YOUR profile, [compared to] THIS?" and mapped the two. It's a very in-depth process...Now, not everything's going to map perfectly, and there might be some deficiencies. But, we actually speak to people in the field, of what the profile is, in this position. Because a lot of jobs in BioTech are NOT on the NOC list.

This interviewee cited the "DACUM methodology" as being crucial to the building of the accurate skills profiles, which requires detailed input from experts from the field.⁹⁹

While clearly not identical to the process of identifying Alternate Careers, there could be some applicable lessons from BioTalent's skill mapping expertise. For example, using the "Backwards

⁹⁹ DACUM stands for Designing A CURriculum, and the methodology can be used to establish training need for a profession or set employment standards. See www.dacum.org for more information.

and forwards” analogy: What Alternate Careers have IEMLTs already been successful at? What skills do IEMLTs have? What are some professions that also use these skills?

As part of the follow up in relation to one interview, Career Cruising, a company that produces an online career counselling tool was contacted about their own methodology for identifying what they term “related careers,” which are “other careers that the user might be interested in, based on their interest in the profiled career.” One of their writers provided the following detailed description of how they select these “related careers,” which will be quoted at length:

“The Selection Process

When a new career is added to the database the writers collaborate to create a suitable list of careers for the Related Careers section. Typically one writer creates a list of possible related careers, based on the criteria below, and then at least one other writer reviews that list, making suggestions as necessary. The final list is created when the writers come to a consensus.

The Criteria

The occupations included in the Related Careers are selected based on the writers’ assessment of their similarity to the profiled occupation. Careers could be included due to similarities in:

- The nature of the work. *For instance, doctors and dentists provide medical treatment to patients.*
- The types of tasks or duties performed. *For instance, dental lab techs and jewellers perform similar hands-on tasks.*
- The level and type of education or training required. *For instance, professors and anthropologists require a similar level of training.*
- The skills or interests required of practitioners in the occupation. *For instance, wildlife technicians and animal trainers have an interest in animals; archivists and health records professionals need a high level of organization.*
- The field of work/industry classification. *For instance, roofers and tilers work in the construction industry.*

Many of these criteria tend to be interrelated, which makes choosing related careers a fairly straightforward endeavour for most occupations.”

From Career Cruising, this set of criteria represents a best practice in the identification of related or Alternate Careers that could even be applied within the one-on-one counselling that many interviewees have identified.

3. What are some of the best practices currently being utilized in terms of providing applicants to regulated professions with information on Alternate Careers (this includes, but is not limited to timing, sensitivity of wording, method of delivery)?

The theme regarding the one-on-one counselling (7) for identifying Alternate Careers certainly also applies here, in terms of communicating with applicants about them. Many of the practices cited by participants as best practices would, in fact, not be possible outside of a conversational encounter:

- Use the “human touch” to guide and support the individual through the process and to “introduce them to this information and to show them the benefit of the information.”
- Provide good information, but leave the decision-making up to the client.

Sample comments:

“I don't know if there's ever an easy way to [direct clients to Alternate Careers]...It's not our decision. It's not our decision to push the kill button. We can provide as much information as possible, and hopefully we can lead them to make an informed decision. And even if their decision doesn't seem rational or logical to us, it's not our decision. We can encourage in as many ways as possible, ‘As you're [pursuing licensing], it would be advisable to also a parallel path, or several parallel paths.’”

“It's important to start it in a very sensitive way. Make it their own decision....It must be their own interest and it must be an assessment of their knowledge.”

“We're about providing information. Providing a realistic understanding of what the challenges are and where the opportunities are, so we try to give them as much information as possible in terms of their careers so they have all of the options. Then, it's up to them to make the decisions; what they want to do. We would love to see everyone pursue their licence, but when they become aware of the cost that's involved, the years that may be involved, all of these other things--some of them may shift their way of thinking and say "I had no idea! No, I'd like to look into other options, or completely reinvent myself." So, it's about giving them information and about allowing them to make realistic decisions.”

- Choose language that is “impartial” and “leave out feelings,” using “forward thinking language”

Sample comment:

“We're trying to focus on, "Here's where we're at...this is the point and time that we're at. It's always about forward thinking language...not looking back..."We want you to have a good career in something that you enjoy. You want that too. You want to be [an XXX], if you're coming to the realization that that you're not going to be, what does that mean and how can we go forward from there? So, that's the piece of the question that you really do need...that's the trick, you need to drive people away from that backwards looking piece.”

- Recognize your own limitations and use a team-based referral approach.

Sample comment:

“Our Orientation Officers are well informed, but they can't possibly know everything. They basically represent all of Canada when they sit with these clients, so they need to know just enough for each province. In our case, what has been really successful has been our referrals to Canadian organizations: so, send them to the experts, right? So, someone going into the health field in Ontario would be referred to Health Force Ontario, George Brown College, and COSTI.”

When to communicate about Alternate Careers

Virtually all interviewees who commented on timing emphasized that earlier was better to begin offering the information. However, this was tempered by their concerns that sensitivity be shown to the client, and that the person providing the information recognizes that arriving at the decision to pursue an Alternate Career was not a simple and sudden one:

Sample comments:

“It's a very gradual slippage, where you have to almost have to look at licensing and alternative careers in tandem, and survival jobs somewhere in the middle as a bridge. Because what inevitably happens is that someone says they are interested in an alternative career, but they're really not...they really just want to be a physicians, but they're feeling stuck, so they'll say that., and there's a period of time that needs to happen between the initial "Yes, I am absolutely looking at alternative careers" (but not really), versus the individual who has tried, and perhaps failed, at the licensing process, and perhaps has a strong and sustained understanding that they are not going to be a physician and now it's time to move on.”

“With alternative careers, it needs to start with one-on-one. We can't just give them a piece of paper that says, "This is an alternative career, go and do it." It's good to have these tools for career counsellors and career practitioners...when the right time comes....They need to examine it [career change], explore it, feel the pain.”

4. From a legislative or regulatory perspective, what are the key issues and/or concerns related to the provision of Alternate Career information?

With a smaller sample of participants from this group, the results from this section are similarly smaller. The main feedback on this point related to concerns about roles. For example, the regulator interviewed was concerned that “regulators are not career counsellors,” but wanted to know that they had quality career counsellors, such as at a government employment agency, that could play that role for IEMLTs who were selecting Alternate Careers. At the Office of the

Ontario Fairness Commissioner, the concern about the roles was that any support regarding Alternate Careers would not mean that regulators were no longer required to provide fair registration practices.

In Manitoba, the Office of the Fairness Commissioner (OFC) has asked that certain regulators provide Alternate Career information on their websites, when the OFC feels that the certification rates warrant it. Here, further commentary is provided on the role of the OFC in relation to the regulators and Alternate Careers:

We'd like to see regulators, particularly where it's most needed, provide [Alternate Career] information. We also recognize that it's not the regulator's place to be able to collect or provide that information. We just want them to cooperate with us, and we'll support them in providing it. That's really been our approach. We want to see it, and we think that it is a commendable best practice and has a significant place. We look at our legislation in terms of interpreting its intent, as remedial in characteristic : we believe we're here to solve a problem. The Alternative Career information and Alternative Careers is going to be, I think, a key tool. Even in the big picture, in the long term, it might mean adjusting licensing regimes to reflect the realities of the applicants that they get. Regulators have a public mandate to set their standards and schemes in the public interest and what's the public interest?

Another initiative being pursued by both the Ontario and Manitoba OFC is the collection of additional data regarding successful and unsuccessful applicants. The Manitoba OFC is trying to get a clearer picture of how many applicants are moving on at each step of the process, and sees this kind of additional data as a priority:

There's a lot of anecdotal talk, but little numbers attached, but we want to find out what's happening, especially compared to Canadian applicants....Tracking information about your applicants in the long run is getting a picture of whether you're doing things well, and where you need to adjust your practices.

The collection of additional data regarding applicant outcomes was also identified as a priority at the 2nd Canada-Australia Roundtable on Foreign Qualification Recognition.¹⁰⁰

5. Are there any other issues associated with the provision of Alternate Career information that the CSMLS should be aware of?

¹⁰⁰ Albaugh, Q., & Seidle, F. L. (2013). REPORT: 2ND CANADA-AUSTRALIA ROUNDTABLE ON FOREIGN QUALIFICATION RECOGNITION. Retrieved from <http://www.irpp.org/assets/research/diversity-immigration-and-integration/2nd-canada-australia-roundtable-on-foreign-qualifications/roundtable-043013.pdf>

A number of other themes arose, and the frequency of the theme is noted in brackets (X):

- **Labour Market Information (7):** It was acknowledged, for example, that the labour market for the Medical Laboratory Assistant was quite low in certain areas, which was negatively affecting IEMLTs. How to deal with providing labour market information as part of the fact sheets? This is an acknowledged priority for immigrants, although it was also recognized that there is no Alternate Career with a guaranteed job.
- **Collaboration amongst stakeholders (7):** The interviews across these stakeholders made it clear that virtually everyone is engaged in discussions with IEMLTs about the licensing journey and Alternate Careers in some way. Participants repeatedly emphasized the need to work together to ensure that those who need the information about Alternate Careers receive it.
- **Language (5):** As this project is concerned about those IEMLTs who might “fall through the cracks,” it was interesting to note that language ability was raised several times as a concern that was hampering both exam success and also success on the job for IEMLTs. One concern particular to bridging educators was that some of their students with more substantial struggles with language had received an exemption from the language testing requirement because they had studied in English.
- **Resources (4):** What financial resources are IEMLTs able to bring to Canada relative to other health professionals? How might those with fewer resources be negatively impacted? How might the necessities of life in Canada, such as needing to feed one’s family and being forced to take a survival job, impinge on a more ideal Alternate Career trajectory? Are reductions in some government supports to pay for the PLA process jeopardizing some IEMLTs’ opportunities to seek certification here in Canada?
- **Employers (4):** These interviewees emphasized that, without employers, even the best programs could not provide employment. What kind of partnerships, programs, funding, etc. could support the transition of the IEMLTs into solid Alternate Careers?
- **Relocation (3):** Would IEMLTs seeking entry into an Alternate Career be willing to relocate? Two of the three interviewees had seen this occur in their professional experience relating to either MLA positions or else for newly-certified MLTs seeking employment. The third had stated that this might be necessary for the IEMLT to obtain access to certain, specialized Alternate Careers that tend to be located near urban areas, if the IEMLT lived in a smaller city. However, the question of relocation is inevitably connected to Labour Market Information, the challenges of which have already been raised.
- **Limitations of List Approach (2):** The concern raised by participants here was that there was a certain “danger” to creating a list of professions: Given the authority of the regulator in the eyes of the IEMLTs already, would the list be seen as a definitive list?

Could it, therefore, close off exploration of other potentially fruitful (and unanticipated) opportunities? In addition, given the emphasis that participants have already placed on the one-on-one counselling for identifying an Alternate Career, it is not surprising that there was a concern raised about the information in the fact sheets being translated to each IEMLT's unique context. As one interviewee argues, good information is only the first step:

I always talk about the 80/20 rule: 80% of it is, yes, getting good information in front of people, and being clear and direct in terms of how you're delivering that information, but the 20%, without which, is nothing: you really can't do anything with the information: interpreting the information on a personal level: "What does this mean to me?" You can create the systems approach, which is "Here is some really great information," but if you don't have the interpretive component, then there's no point in actually creating the materials.....And people wonder...why didn't they use our website, why didn't use our toolkits?" You can read the information, but there's this other piece of it, which is, "That's great, but how do I...? I need to talk to someone, I need to understand what can I do with this? and you can automate that and you can try to do that a bunch of different ways, but unfortunately, you need....you want to talk to a real person."

- **Where will the resources be located?** (2): One individual expressed concern regarding where links to the resources would be located. Can individual regulators provide the links on their websites? Would there need to be unanimous agreement about this? The one participant from a regulator expressed willingness to have links to the resources in the Internationally Educated section of their website.
- **Plain Language for Fact Sheets** (1): All of the fact sheets should be written in plain language, at Canadian Language Benchmark 6, so that they can be easily understood by readers with lower language proficiency. Given the concerns raised earlier about language as a factor in success in the exams and bridging education, this seems particularly relevant.
- **Rural vs. Urban Labour Markets** (1): The interviewee emphasized that not all job markets are created equal. While it is clear that there may be some natural Alternate Careers for IEMLTs, for example, in Quality Assurance in the pharmaceutical industry, not all regions in Canada have this industry. In Atlantic Canada, for example, there may not be a large pharmaceutical industry, but there is an oil and gas industry. With the smaller cities in Atlantic Canada, some Alternate Careers may need to be off the bench and out of the lab: for example, an unregulated accounting clerk is a position that would work well.

Australian Interview

While the review of the literature did not discover any Alternate Career agenda in Australian immigration policy, an interview with a top scholar in immigration policy and Australian-Canadian comparative immigration research allowed for further exploration and confirmation of the trends identified in the literature review. For example, the fact that the priority of the Australian system works directly against Alternate Careers was confirmed:

The Australian government quite explicitly has a goal for the skilled migration program that people are selected who are able to make an immediate contribution to the Australian economy by working at the appropriate level for their skills in the Australian workforce. So, the goal for all the skilled migrants, either temporary or permanent, is to find a bridging mechanism that will enable them to work in their correct field at the appropriate level. The groups that struggle the most are the unscreened family and humanitarian groups, because they have not been screened by these mechanisms.

As mentioned earlier, one of the most important screening mechanisms in the Australian system is that of language testing. The importance of high English language ability requirements was underlined by this expert:

All the Australian data shows that nothing is more important as a predictor of an immigrant's professional success in Australia than their English language ability. It matters more than anything. The English language assessment challenges are greater than the regulatory challenges, for many people....If people's English is not good they're not eligible to get registration anyway, they're poorly placed to pass exams even if they are eligible to do so, and there's a very strong concern that people aren't safe to practice.

These Australian findings concur with the Canadian findings discussed earlier that those immigrants who arrive in Canada with lower English language ability face greater challenges in getting licenced in their professions. Certainly, the screening mechanisms put in place by the Australian government do seem to be having an impact of ensuring that immigrants move more quickly into their professions. A comparative study completed by this scholar regarding employment outcomes for Indian doctors who immigrate to Australia or Canada found that, five years after immigration, 66% of the doctors who immigrated to Australia were working in medicine, compared to just 19% in Canada.

One final best practice relevant to the Alternate Careers discussion is the emphasis in Australia on creating fast track pathways to certification that are based on the review of extensive exam success rates. One example of this is the "Competent Authority Pathway" for doctors, where

applicants from certain recognized countries are not required to write any exams to be licenced, and receive “light touch” supervision for a year before becoming fully licenced.¹⁰¹ Another example of this is a fast tracked bridging education program for Internationally Educated Nurses from Hong Kong, again based on the review of extensive licencing exam results, where the nurses spend a reduced amount of time in a bridging education program and then complete a competency-based assessment, in place of a certification exam. This practice alone transformed exam success rates from 80 – 90% failure to 80 – 90% success in licensure through the competency-based assessment.

Conclusion

Participants across the several stakeholders groups have shared a range of opinions about issues relating to Alternate Careers for IEMLTs. These fall into the following categories:

Areas of Agreement:

- One-on-one counselling is a key best practice for identifying and communicating about Alternate Careers.
- Effective information provision regarding Alternate Careers needs to be supported by collaboration across stakeholder groups.
- Labour market information is a key part of directing IEMLTs to Alternate Careers, as they may be motivated to relocate for promising employment opportunities. However, it was acknowledged that this is a complex task and problematic due to variations in labour market between regions (e.g., Ontario vs. Atlantic Canada) and small vs. large cities.
- Communication about Alternate Careers needs to begin as early as possible (i.e., pre-arrival), yet it must be facts –based and sensitive to the openness of the individual client. The process and openness will vary from individual to individual.
- Regulators can play a role in providing Alternate Career information (e.g., on their websites), but need support to create the content, and good counselling services to refer individuals to.
- Methodologies for identifying Alternate Careers are time-intensive and involve some or all of the following methods: analysis and/or development of competency profiles, interviews with individuals in the professions being explored, expert panels/expert input, breakdown and analysis of possible professions into categories, such as the

¹⁰¹ For more information on the range of pathways available in Australia, see Hawthorne, L. (2012). Health workforce migration to Australia: Policy trends and outcomes. Melbourne: The University of Melbourne. Retrieved from https://www.hwa.gov.au/sites/uploads/HAWTHORNE-%20HealthWorkforceMigrationFullReport30May_0.pdf

“nature of the work, the types of tasks performed, the level and type of education required, the interests required, the field of work/industry classification/NOC.”

Areas of Concern:

- Are certification challenges affecting certain groups of IEMLTs differentially, such as those who arrive with lower language proficiency? Those with fewer financial resources to pursue their certification?
- There are dangers associated with a “list approach” to Alternate Careers that are based on cultural insights and the perception of the authority of the regulator. How can these concerns be mitigated through the context in which they are presented?
- Could the fact sheets be used by settlement agencies to unknowingly direct “false negatives;” that is, individuals who could qualify but are redirected into an Alternate Career prematurely? How could the links be presented and in what context, to prevent such use?

Questions Remaining:

- Who are the fact sheets for? Could they be helpful to those IEPs who would not even qualify to pursue a PLA with CSMLS (i.e., researcher in a lab, Master’s in Microbiology, someone with only Molecular Genetics)? Could they be helpful to Canadian-educated MLTs who choose not to work in the field? Could expanding the scope of the fact sheets to include Canadian-educated reduce any stigma associated with Alternate Careers?
- What should “Alternate Careers” be called?
- Where will the fact sheets be located and who will link to them?

SYNTHESIS AND RECOMMENDATIONS

Both the literature review and the primary research have provided useful insights into the definition and identification of Alternate Careers, and the appropriate provision of information about them. However, tensions have emerged over the course of the research between the need to generalize and learn in a larger sense about immigrant employment outcomes and the factors that influence them, and the very individualized journey that an IEMLT may experience while pursuing certification and coming to the realization that an Alternate Career is a necessity for him or her. Another emerging tension is between the desire to produce and provide a set of resources for IEMLTs about Alternate Careers which are more generic in nature with the very individualistic nature of the work of identifying Alternate Careers between an IEP and a one-on-one counsellor.

As one interviewee expressed it,

There is no one right answer and formula. The problem with Alternative careers is that it is so nuanced, and that it does not lend itself well to a systems approach, because what you have to do is dissect the individual's skill set, their interests, and figure out a way to drive towards something meaningful. And you can use different tests of what meaningful is...it's very labour intensive....This is not an easy proposition or endeavor.

While there is general agreement that the timing of information about Alternate Careers would ideally be as early as possible, there was also a repeated recognition both in the literature and interviews that each individual might arrive at the realization at a different time and for different reasons, so information should be provided on an ongoing basis.

Furthermore, the literature and interviews have provided a number of suggestions for how information on Alternate Careers can be provided sensitively, and this can also be explored in more detail in further research with IEMLTs themselves. This may include a more detailed exploration of what research-identified factors (e.g., wages, skill level, relation to previous education) would lead IEMLTs to define a prospective Alternate Career as appealing.

The research has also raised important questions for discussion regarding the design of the future Alternate Careers Fact Sheets:

- Who is the target audience of the sheets? Can it include lab professionals who would not qualify for PLA? Canadian-educated MLTs who may prefer to practice another profession?
- What terminology should be used to refer to Alternate Careers to reduce stigmatization or expand the target audience (or both)?

- Given the acknowledged importance of the labour market to the end users of the fact sheets, how can they be designed to be kept current or avoid becoming dated? What resources will be available for maintenance? For how long?
- What kind of context would be required to ensure the proper implementation by all users that would ensure that no IEMLTs who might qualify for certification are prematurely directed into an Alternate Career? Could this be achieved through accompanying content? A training webinar or resource to accompany the fact sheets?
- What range of Alternate Careers can be included that would be inclusive of labour markets in areas other than Ontario (i.e., smaller cities, Atlantic Canada)?
- Given the emphasis placed on the danger of a list-based approach to Alternate Careers, how could the fact sheets be contextualized within a skills-based approach to job hunting for an Alternate Career (e.g., could users be referred to the Health Force Ontario toolkit as an initial step)? Could this increase capacity in the “proactivity” that was emphasized in other research findings? Should the fact sheets emphasize the need for an IEMLT to seek career counselling in concert with using the fact sheets?
- Where will the fact sheets be located? Who will link to them?

Recommendations

The recommendations that follow are organized according to the research questions driving the project:

1. How can “alternate” or “alternative” careers best be defined, especially with reference to MLTs?
 - A range of options to describe “Alternate Careers” can be explored with the IEMLT focus groups to gather their input on preferred terminology. It is recognized that, regardless of what is suggested by the IEMLTs, the term “Alternate Career” will likely need to be used within the materials somewhere, due to the fact that it is one of the most commonly used terms in this emerging area.
2. What are some of the best practices currently being utilized in the identification of Alternate Careers?
 - Given the challenges in accessing a clearly delineated methodology for identifying Alternate Careers, it is recommended that every step possible be taken to document and share the methodology developed in this project, both in the final report for the materials segment of the project, but also through conferences and, possibly, other future publications.

3. What are some of the best practices currently being utilized in terms of providing applicants to regulated professions with information on Alternate Careers (this includes, but is not limited to timing, sensitivity of wording, method of delivery)?
 - If it is possible to recruit them, IEMLTs who have been unable to get certified can offer invaluable input into the final Alternate Career materials.
 - As a longer term goal, IEMLTs already in Alternate Careers could be involved in the production of testimonials (video or other) to enhance communications materials and bring the process to life.
 - Many of the best practices in communication regarding Alternate Careers rely on collaboration across stakeholder groups (e.g., Multi-Stakeholder Working Groups by ISIS). Already existing forums to promote the Alternate Career materials for IEMLTs with regulators, government agencies and ISOs can be explored, as well as the possibility of creating a new forum, if the need is identified.
4. From a legislative or regulatory perspective, what are the key issues and/or concerns related to the provision of Alternate Career information?
 - Data can be identified that could support the identification of IEMLTs at risk for not becoming certified or track the progress of IEMLTs through the certification process in more detail. Examples of possible data sources that arose during the course of research include self-assessment data, exam results, and increased levels of applicant data at each step of the certification process, including detailed exam results. If required, funding can be accessed to consolidate or analyse this data.
5. Are there any other issues associated with the provision of Alternate Career information that the CSMLS should be aware of?

EMPLOYERS

- Results emphasized the importance of employers, and their openness, to a successful outcome for immigrants. How can employers be further involved?
- How could already proven methodologies, such as mentorship or internships be applied to Alternate Careers to enhance IEMLT success? Existing data that speaks of IEMLTs' need for further Canadian workplace exposure in Medical Laboratory Science is likely equally applicable (or even more so) to any new fields they may enter.

VULNERABLE CANDIDATES

- Given the differential employment outcomes based on certain factors, such as being a member of a racialized group, opportunities to work for systemic change need to be

explored through further research (within the immigration system, the settlement sector, and especially with employers).

- The formation of a national association for IEMLTs may offer a potential voice to vulnerable candidates and support the establishment of advocacy priorities.

RESOURCES SCANNED AND WORKS CITED

Programs and Resources related to Alternative Careers (includes sector-specific resources, Alternate Career lists, toolkits, information packages)

1. <http://www.settlement.org/alternativejobs/>

Created by OCASI and funded by a partnership between CIC and the government of Ontario, this web-based resource provides information on “alternative jobs” for ten regulated professions (Accountant, Architect, Dentist, Doctor, Engineer, Lawyer, Nurse, Pharmacist, Social Worker, and Teacher). Four to five alternate careers are listed for each of these professions, with basic information, such as duties and requirements and links to comparisons across the options for labour market information and wages. There are also video testimonials from successful IEPs who made the transition some of these alternative jobs.

2. BioTalent. (n.d.) Foreign Professionals: The right skills and being ready results in job success. Retrieved from <http://www.biotalent.ca/en/areyouready>

This is a series of web-based tools to support IEPs in identifying transferable skills and preparing to apply for BioTech employment. BioCareer Pathways are one-page pdfs that show possibilities for entry into numerous careers, as well as potential for promotion. The Bio-economy Skills Profiles provide a detailed breakdown of each occupation, along with relevant Essential Skills and required Language Benchmarks. Common tasks are also features. The much shorter Skills At-a-Glance offer a summary list of the skills required for each position. The PetriDish™ is an online job board that is searchable by keyword and can be filtered by employer or province. Finally, the BioSkills Recognition Program offers an IEP who feels there is good potential to work in the bio-economy to develop an online portfolio and have their skills assessed by the BioReady Review Board. Once their portfolio is approved, the candidate receives the “BioReady” designation, which can be used in job applications to BioTech employers.

3. Health Force Ontario Marketing and Recruitment Agency. (2013). Alternative career toolkit: Module 1. Toronto, ON: Queen’s Printer for Ontario. Retrieved from <http://www.healthforceontario.ca/UserFiles/file/Physician/Outside/alternative-career-toolkit-2013-en.pdf>

This 16-page pdf of Module 1 provides an introduction to the concept of Alternate Careers for someone at the beginning stages, but could also be useful for someone at a later stage. The first section provides a framework for an individual’s exploration of change

management and culture shock in their own lives. The second section facilitates an IEP's focus on what their own thoughts about an Alternate Career are (e.g., common concerns) and provides a description of how someone can explore alternate options. The final section provides practical support for the many, smaller steps that are part of an alternative careers exploration, such as how to study job postings or how to research Labour Market Information.

4. Calgary Region Immigrant Employment Council. Smart Connections: Information Package for Internationally Trained Lawyers. Retrieved from http://www.criec.ca/documents/SmartConnections%20for%20Internationally%20Trained%20Lawyers_Info%20Package.pdf

This package contains some Calgary-specific information, such as descriptions of local ISOs and relevant resources and regulators. However, the appendices offer some generic resources, such as a Transferrable Job Skills tool that scaffolds an individual into identifying their own transferrable skills, and an Action Plan tool that support an individual in identifying the key take away points from the sessions, and what their next steps will be.

5. The Career Transitions for International Medical Doctors program by Skills for Change (which is no longer funded) offered some health care alternate employment information online, which is still available <http://www.imd-info.ca/labour-markets.htm>

There are a series of 20 occupational areas listed that include dietetics/nutrition, pharmacy, and health administration. Each occupational area offers a list of potential careers with a description, wage ranges, requirements, and information relevant to IEPs. A summary chart is also available at the top of the page, with over 50 health care related jobs listed in chart form. In addition, a separate page offers links to pdfs on Labour Market Information on four Health Care-related labour markets: Ontario Public and Community Health, Biotech, Pharmaceutical and Medical Devices, and the Health Insurance Industry. While these were prepared in 2005, there still does appear to be some useful information in some of these resources.

6. The Insurance Institute of Canada has a Career Connections website that offers information about employment in their field to interested "Career Changers." <http://career-connections.info/Career-Changers/Career-Changers.aspx>

Separate pages help an individual "Career Changer," as they are called, to match their education and their interests to various careers in the insurance industry. On the "Your Experience" page, transferrable skills from a wide range of sectors are identified, including Health Care, and Teaching/Education. An interactive aptitude quiz directs Career Changers to more likely matches, and detailed Career Profiles list roles and responsibilities and answer questions, such as "How do I get here?" A series of videos also offers the

opportunity to “Meet a [insert various careers]” and also hear people working in the insurance industry describe their experience while working with clients after a range of natural disasters.

7. The region of Peel/Halton has a labour market website, www.workingatpeelhalton.com

There are a number of relevant LMI resources available on this site, including an LMI self-assessment checklist that helps anyone assess whether they are covering all bases in a targeted job search using LMI data. There is a weekly e-newsletter that gives updates on relevant labour market information, including new companies moving to the region.

8. ISIS has a series of Alternate Career resources, including this one in the Health Care field for physicians: http://www.isisns.ca/wp-content/uploads/2010/02/FactSheet_Alternative_May2010.pdf

This two-page pdf initiates a discussion with an International Medical Doctor about the possible benefits and/or necessities of pursuing an Alternate Career, either enroute to licensure or in place of it. Factors that can influence success are identified, as well as possible transferrable skills that can be highlighted in applications. A list of possible types of positions is provided, and the second page of the document offers a brief summary of relevant job search skills, including interview preparation.

9. The province of British Columbia offers Work in B.C., which provides potential immigrants with a range of information about employment and immigration, including occupational profiles (including Medical Laboratory Assistant and Medical Laboratory Technologist) with an overview of wages and employment options, and information about getting certified, as well as a job search tab with links to employers. <http://www.welcomebc.ca/Work/work-in-bc.aspx>

The WORKBC section (www.workbc.ca) has an online or downloadable smart phone app called “Build a Career” that collects an individual's skills and preferences and matches them to “more than 500 career options.” In the section for Job Seekers, there is a searchable WorkBC job board, a Labour Market Information exploration support tool, and career and industry profiles are also available.

10. The Alberta Learning Information Service offers a multifaceted resource at <https://alis.alberta.ca/index.html>

There are separate sections for Planning Your Career, Information on Occupations, Planning Your Education, Paying for Your Education, and Finding a Job. In addition, one page offers a series of instructional videos to facilitate the use of all resources. Under the Planning Your Career section, there is free access to an online career planning tool, called Careerinsite, where individuals can develop a career plan and identify their values and skills, and explore career options. There are self-assessments on interests, abilities, and preferred working

conditions, and at any time, an individual can download their complete career plan in pdf format.

11. Another provincial online career/employment resource from Nova Scotia has a variety of features. <http://careers.novascotia.ca/>

Under the “Know Yourself” heading, individuals can receive an introduction to career planning and access a series of career quizzes.¹⁰² Under the “Choose a Career” option, LMI information and support is available, as well as career profiles. The “Education and Training” area provides information about funding for further education, and also programs available. There is also a “Job Search” area with current Nova Scotia opportunities and links to multiple resources. At the bottom of the page, the Publications section is worth a click, as it contains detailed documents about high opportunity careers and an overview of the Nova Scotia labour market.

12. While not available to individuals on a fee for service basis, Career Cruising represents an excellent resource for exploring the potential application of skills from one profession to another and also to see what careers are related to your previous or current profession. <http://public.careercruising.com/ca/en>

Many institutions and ISOs have subscriptions to Career Cruising, and IEPs interested in this kind of tool could ask if it is available to them through counselling appointments with staff. It is also worthwhile to ask at any local employment centres if passwords can be obtained free of charge to take the Career Cruising quizzes.

13. <http://www.ic.gc.ca/eic/site/cis-sic.nsf/eng/home>

This Industry Canada website allows users to search for statistical data by industry. This can be useful, for example, to identify the regions in Canada where specific industries are clustered (e.g., pharmaceutical industry in Toronto and Montreal).

14. <http://www.torontolip.com/sites/default/files/Toolkit%20-%20FINAL,%20for%20circulation.pdf>

The Toronto South Local Immigration Partnership developed a toolkit based on research regarding private colleges and reports from local immigrants that they had been pressured

¹⁰² At the time of publication, this resource also stated that Nova Scotia employment resource centres could also provide someone with a password to access Career Cruising (see no. 12 above) career quizzes for no charge.

or otherwise mistreated by some private colleges. This toolkit in pdf format provides newcomers with a checklist of questions to ask a prospective college and employment data to request before making a commitment to pay for an expensive program.

Literature: Immigrants and Alternate Careers

15. LIM Consulting Associates. (2013). Foreign qualification recognition and alternative careers: Report submitted to the best practices and thematic task team of the foreign qualifications recognition working group. Retrieved from <http://novascotia.ca/lae/RplLabourMobility/documents/AlternativeCareersResearchReport.pdf>
16. Paul, R. (2013). HIRE – IEHPs: A preliminary report of an environmental scan of human resources practices, employment opportunities and Alternate Careers for internationally educated health professionals in Ontario. (Unpublished project report). Toronto, ON: The Hobbes Group Inc.
17. Türegün, A. (2011). What do immigrants do when they can't practise their professions? Immigrant professionals in the Ontario settlement service sector. WORKING PAPER SERIES: CERIS Working Paper No. 85. Retrieved from http://www.ceris.metropolis.net/wp-content/uploads/pdf/research_publication/working_papers/wp85.pdf
18. Remennick, L., & Shakhar, G. (2003). You never stop being a doctor: The stories of Russian immigrant physicians who converted to physiotherapy. *Health, 7*(1), 87–108. doi: 10.1177/136345930300700105
19. Ellis, B. A. (2013). Freelancing eagles: Interpretation as a transient career strategy for skilled migrants. *Journal of Management Development, 32*(2), 152–165. doi: 10.1108/02621711311305665

Immigrants and Employment Outcomes (statistical studies/general)

20. Plante, J. (2011). Integration of internationally-educated immigrants into the Canadian labour market: Determinants of success. Culture, Tourism and the Centre for Education Statistics Research papers. Ottawa, ON, Canada: Statistics Canada. Retrieved from <http://www.statcan.gc.ca/pub/81-595-m/81-595-m2011094-eng.pdf>
21. Agrawal, S. K., & Lovell, A. (2010). High-income Indian immigrants in Canada. *South Asian Diaspora, 2*(2), 143–163. doi: 10.1080/19438192.2010.491295

22. Hall, P. V., & Sadouzai, T. (2010). The value of “Experience” and the labour market entry of new immigrants to Canada. *Canadian Public Policy*, 36(2), 181–198. Retrieved from http://resolver.scholarsportal.info/resolve/19119917/v36i0002/181_tvoatleonic&form=pdf&file=file.pdf
23. Tufts, S., Lemoine, M., Phan, M., Kelly, P., Lo, L., Preston, V., & Shields, J. (2010). What are the labour market outcomes for immigrants planning to work in regulated and unregulated occupations? *TIEDI analytical report no. 5*. Toronto, Ontario, Canada: TIEDI: Toronto Immigrant Employment Data Initiative. Retrieved from <http://www.yorku.ca/tiedi/doc/AnalyticalReport5.pdf>
24. Tufts, S., Lowe, S., Banerjee, R., & Park, S. (n.d.) Preparing for the Canadian labour market: Education, training, and language. TIEDI Research Snapshot. Retrieved from <http://www.yorku.ca/tiedi/doc/snapshot1.pdf>
25. Shields, J., Lo, L., Zikic, J., & Atlin, J. (n.d.) Access and entry to the labour market: Entry barriers and the job search process. TIEDI Research Snapshot. Retrieved from <http://www.yorku.ca/tiedi/doc/snapshot2.pdf>
26. Shields, J., Lemoine, M., Phan, M., Kelly, P., Lo, L., Preston, V., & Tufts, S. (2009). Do levels of savings brought to Canada affect labour market outcomes for immigrants? *TIEDI analytical report no. 1*. Toronto, Ontario, Canada: TIEDI: Toronto Immigrant Employment Data Initiative. Retrieved from <http://www.yorku.ca/tiedi/doc/AnalyticalReport1.pdf>

Immigrants and Underemployment/Barriers to Employment

27. Reitz, J. G. (2007). Immigrant employment success in Canada, part II: Understanding the decline. *Journal of International Migration and Integration*, 8(1), 37– 62. doi: 10.1007/s12134-007-0002-3
28. Reitz, J. G. (2007). Immigrant employment success in Canada, part I: Individual and contextual causes. *Journal of International Migration and Integration*, 8(1), 11– 36. doi: 10.1007/s12134-007-0001-4
29. Hamilton, L. K. (2011). A model of perceived underemployment among immigrants in Canada. (Unpublished doctoral dissertation). University of Western Ontario, London, Ontario, Canada.
30. Dean, J. A., & Wilson, K. (2009). ‘Education? it is irrelevant to my job now. it makes me very depressed ...’: Exploring the health impacts of under/unemployment among highly skilled

recent immigrants in Canada. *Ethnicity & Health*, 14(2), 185 – 204. doi: 10.1080/13557850802227049

31. George, U., Chaze, F., Fuller-Thomson, E., & Brennenstuhl, S. (2012). Underemployment and life satisfaction: A study of internationally trained engineers in Canada. *Journal of Immigrant & Refugee Studies*, 10(4), 407– 425. doi: 10.1080/15562948.2012.717827
32. Guerrero, L., & Rothstein, M. G. (2012). Antecedents of underemployment: Job search of skilled immigrants in Canada. *Applied Psychology*, 61(2), 323 – 346. doi: 10.1111/j.1464-0597.2011.00470.x
33. Guo, S. (2013). The changing face of work and learning in the context of immigration: The Canadian experience. *Journal of Education and Work*, 26(2), 162 – 186. doi: 10.1080/13639080.2011.630657
34. Hakak, L. T., Holzinger, I., & Zikic, J. (2010). Barriers and paths to success. *Journal of Managerial Psychology*, 25(2), 159 – 176. doi: 10.1108/02683941011019366
35. Jibeen, T., & Khalid, R. (2010). Predictors of psychological well-being of Pakistani immigrants in Toronto, Canada. *International Journal of Intercultural Relations*, 34(5), 452 – 464. doi: 10.1016/j.ijintrel.2010.04.010
36. Livingstone, D. W. (2010). Job requirements and workers' learning: Formal gaps, informal closure, systemic limits. *Journal of Education and Work*, 23(3), 207 – 231. doi: 10.1080/13639081003785732
37. Skuterud, M., & Sui, M. (2011). Immigrants and the dynamics of high-wage jobs. Report submitted to CERIS - Metropolis. Retrieved from [http://www.ceris.metropolis.net/wp-content/uploads/pdf/research_policy/rfp_student/Skuterud_imiglfs_final_2009%20\(january_2011\).pdf](http://www.ceris.metropolis.net/wp-content/uploads/pdf/research_policy/rfp_student/Skuterud_imiglfs_final_2009%20(january_2011).pdf)

Immigrants and Licensing (general)

38. Cheng, L. (2012). Internationally educated professionals weighing the benefits and the challenges of licensing and certification in Canada. CERIS – The Ontario Metropolis Centre Research Summary. Retrieved from <http://www.ceris.metropolis.net/wp-content/uploads/2013/04/CHENG-Internationally-educated-FINAL.pdf>
39. R. A. Malatest & Associates. (2010). *Getting your professional licence in Ontario: The experiences of international and Canadian applicants*. Retrieved

from http://www.fairnesscommissioner.ca/en/downloads/PDF/Getting_Your_Professional_Licence_in_Ontario-The_Experiences_of_International_and_Canadian_Applicants.pdf

40. Blythe, J., Baumann, A., Rhéaume, A., & McIntosh, K. (2009). Nurse migration to Canada. *Journal of Transcultural Nursing*, 20(2), 202 – 210. doi: 10.1177/1043659608330349
41. Zikic, J., Lemoine, M., Phan, M., Kelly, P., Fang, T., Preston, V., & Tufts, S. (2011). *What are immigrants' experiences of the accreditation process in different occupations? TIEDI analytical report no. 15*. Toronto, Ontario, Canada: TIEDI: Toronto Immigrant Employment Data Initiative. Retrieved from <http://www.yorku.ca/tiedi/doc/AnalyticalReport15.pdf>
42. Bourgeault, I. L., Neiterman, E., & LeBrun, J. (2011). Midwives on the move: Comparing the requirements for practice and integration contexts for internationally educated midwives in Canada with the U.S., U.K. and Australia. *Midwifery*, 27(3), 368 – 375. doi: 10.1016/j.midw.2011.03.010

Program/Project reports relevant to topic of employment, Alternate Career info (Government, Agency, etc.)

43. Canadian Immigrant Integration Program. CANADIAN IMMIGRANT INTEGRATION PROGRAM (CIIP) QUARTERLY STATISTICAL REPORT, October 1, 2010 – June 30, 2013. Retrieved from <http://www.newcomersuccess.ca/images/stories/reports/2012-september-stats-report.pdf>
44. O'Dwyer, M., & Mulder, S. (2013). *Securing futures: Making the most of migrants' skills*. Melbourne, Australia: AMES. Retrieved from <http://www.ames.net.au/documents/research-projects/securing-futures-making-the-most-of-migrants-skills>

General Background on MLTs and Canadian Context

45. Canadian Institute for Health Information. *Medical laboratory technologists in Canada, 2011. Spending and Health Workforce*. Retrieved from https://secure.cihi.ca/free_products/2011_MLT_Report_EN.pdf
46. Nielsen, C. (2004). *Determination of Factors Contributing to Exam Success for Prior Learning Assessment Candidates*. Unpublished research paper.

47. Grant, M. M. (2004). Under the microscope: 'race', gender, and medical laboratory science in Canada. (Unpublished doctoral dissertation). University of Toronto, Toronto, Ontario, Canada.
48. Grant, M. M. (2008). Internationally-Educated Medical Laboratory Technologists: The Story of One... or Many?. *Canadian Journal of Medical Laboratory Science*, 70(4), 133 – 135.
49. Grant, M. (2009). CSMLS Task Force on Internationally Educated Medical Laboratory Technologists. *Canadian Journal of Medical Laboratory Science*, 71(3), 129 – 131.
50. Agbassi, I., & Don-Wauchope, A. C. (2010). Challenges facing internationally educated medical laboratory technologists in Ontario – A pilot study. *Canadian Journal of Medical Laboratory Science*, 72(4), 88 – 90.

Policy Analysis

51. Skuterud, M. (2012). Is the heightened emphasis on language in recent changes to Canada's immigrant selection policy shortsighted? Report submitted to CERIS – The Ontario Metropolis Centre. Retrieved from http://www.ceris.metropolis.net/wp-content/uploads/2013/01/Report_Skuterud_dec20121.pdf [cited with permission of author]

APPENDIX A: List of Participants

In grateful acknowledgement of the participation of the following individuals, without whom the primary research portion of this research would not have been possible (in alphabetical order):

Mohja Alia, Immigrant Settlement & Integration Services (ISIS), Nova Scotia

Janelle Bourgeois, New Brunswick Society of MLTs

Christine Bruce, CML Health Care Inc.

Adam Chrobak, Manitoba College of MLTs

Mary Golba-Bylhouwer, Mohawk College

Catherine Gerow, Career Cruising

Lesleyanne Hawthorne, Centre for Health Policy, The University of Melbourne, Australia

Sheila Hellier, Skills for Change

Stephanie Hooker, Health Force Ontario

Razaq Ijaduola, Council for Access to the Profession of Engineering (CAPE)

Robert Millman, Office of the Fairness Commissioner of Ontario

Jasmine Singh, Health Force Ontario/CIIP

Maha Surani, Canadian Immigrant Integration Program (CIIP)

Sharon Vanin, Office of Fairness Commissioner of Ontario

Tricia Van Denakker, Diagnostic Services Manitoba

Siobhan Williams, BioTalent Canada

APPENDIX B: Sample Interview Protocol

[Due to the differences across stakeholder groups and the varying experience of each stakeholder with Alternate Careers, the interview protocol was adapted for each interview. What follows is a sample for a stakeholder in the category of “Organizations with a regulatory, legislative focus, or government role.”]

Interview Protocol: *Development of Alternate Career Information for CSMLS Internationally Educated Medical Laboratory Technologist Applicants*

1. What is your opinion about Alternate Career information for IEMLTs in relation to your official capacity as an organization legally empowered to oversee the regulatory bodies in Ontario?
2. Do you see any kind of potential role for your organization to play in terms of Alternate Career information for those IEMLTs who face challenges in getting certified?
3. Based on your professional experience, what do you think might be some of the best, or most effective, practices to identify Alternate Careers might be for IEMLTs?
4. Based on your professional experience, what do you think might be some of the best, or most effective, practices might be to share information with IEMLTs about Alternate Careers (this could include timing, sensitive wording, methods or other)?
5. Can you think of anything specific to MLTs and Alternate Careers that we should consider?
6. Are there any possible issues regarding Alternate Careers and IEMLTs that we should be aware of?

7. We are developing a working definition of “Alternate Careers” specifically for IEMLTs that we would appreciate your input on. The definition below, which is more generic, appeared in a recent research report in this field. Do you have any thoughts about this definition? Is there anything that you would change to make it more relevant to IEMLTs?

Working Definition:

“Alternative careers are career options that immigrants pursue other than the profession in which they were originally trained. Ideally, alternative careers make use of and relate to an immigrant’s skills and experience.

For some immigrants, alternative careers are sought to support themselves while pursuing licensure in a profession that is regulated in Canada. For others who are unable to achieve recognition or unable to find employment in their field once qualified, the alternative career may be a stepping stone to other careers, or become the end goal of the immigrant. In all cases, alternative careers improve the labour market integration prospects of immigrants by providing opportunities for immigrants to apply their skills and experience in a Canadian context and to learn new skills and gain further experience.

Alternative careers include:

- Professions or occupations that may not exist in the immigrant’s country of origin, but for which the scope of work is similar to that of the immigrant’s original profession in his/her home country.
- Related occupations in the same field
- Occupations in related fields
- Occupations in unrelated fields.

Alternative careers may require skills or educational upgrading on the part of the immigrant.”

(from LIM Consulting Associates. (2013). Foreign qualification recognition and alternative careers: Report submitted to the best practices and thematic task team of the foreign qualifications recognition working group.)

8. Is there anything that we haven’t already touched on that would be relevant to our topic? Is there anything else that you would like to add?

9. Are you aware of any resources/reports or other that would be relevant to this project? Is there anyone in the field that you feel we should talk to?