



2007 Engineering Roundtable

PROCEEDINGS

On Implementation of the
'From Canadian First to Canada First' Employment Strategy for
Immigrants with Engineering Backgrounds Settling in Ontario

North York Centre Council Chambers
March 20, 2007
10:30am – 3:00pm

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FOREWORD

In June 2003, CAPE initiated the 'Engineering Access' project. Under this CAPE Council for Access to the Profession of Engineering organized a series of six multi-stakeholder roundtables between October 2004 and May 2006, as detailed in Table 2, with the objective of developing and launching a forward looking multi-stakeholder driven employment strategy for immigrants with engineering backgrounds coming to Ontario. Baseline issues identified at CAPE's first multi-stakeholder forum and formed the agenda for the first multi-stakeholder roundtable.

Table 1 - Multi-stakeholder Roundtables 2005/2006

RT	Date	Title	Focus
1	Apr 6, 2005	The Inevitability of Change	Extensive matrix of employment strategies favored by various stakeholders
2	Jun 30, 2005	Integrating Stakeholder Employment Strategies and consensus building	Building consensus to derive a matrix of selected employment strategies or solutions that all stakeholders collectively felt could help integrate IEBs into meaningful engineering occupations in Ontario
3 4	Oct 20, 2005 Feb 10, 2006	Defining stakeholder roles and responsibilities	Developing activities/actions and partnerships to implement the strategies in the matrix
5	Mar 31, 2006	Determining outcome and performance measures	Defining expected outcomes and performance measures
6	May 18, 2006	From 'Canadian First' to 'Canada First'	Public Launch of the Employment Strategy

In 2000, Gordon H. Maynard¹ while making a presentation on "The New Economy - Strategies for Importing Workers and Executives" first articulated the fact that "Canada is in the midst of a transition of focus from "Canadian First" to "Canada First". This aptly captures the paradoxes surrounding globalization and the emergence of the General Agreement on Trade and Services (GATS) and the North American Free Trade Area (NAFTA). These agreements open doors to foreign skilled workers in specific occupations to meet demands for border-less access to both the global market place and the global labor pool, of which process immigrants with engineering backgrounds are an integral part. Deriving from this the final output of the deliberations of these multi-stakeholder Roundtables was an employment strategy for immigrants with engineering backgrounds entitled "From Canadian First to Canada First" that was released on May 18, 2007.

CAPE now intends to take a lead in implementing this employment strategy and to develop an appropriate multi-stakeholder roundtable mechanism to oversee this. These proceedings report on the first employment roundtable held under this second series of our multi-stakeholder consultations.

¹ Maynard, Gordon H. 2000 *The New Economy: Strategies for Importing Workers and Executives*, accessed from: <http://www.cle.bc.ca/CLE/Analysis/Collection/00-5025700 neweconomy?practiceAreaMessage=true&practiceArea=Immigration>

FROM 'CANADIAN FIRST TO CANADA FIRST' STRATEGY TO PRODUCTIVELY EMPLOY IMMIGRANTS WITH ENGINEERING BACKGROUNDS (IEBs) INTO THE ONTARIO ECONOMY

The strategy comprises three components as summarized in the table 2 below and can be read in conjunction with the detailed proceedings of roundtable outputs that accompany this strategy available online at http://www.capeinfo.ca/docs/employment_strategy_may_18_2006.pdf.

The action plan under this strategy breaks down strategies into the three major components; Systemic Change, Labour Market Strategies and Support Strategies.

Table 2 - Action Plan Outline

<i>I</i>	<i>Systemic Change</i>	Outline strategies related to process changes, licensing, mobility and accreditation , standards and regulations and redefining the role of government
<i>II</i>	<i>Labour Market Strategies</i>	Informed decision making through the dissemination of accurate, reliable and up to date labour market information and to tackle employer risk adversity
<i>III</i>	<i>Support Strategies</i>	Outlining the roles of communities and networks, education, training and empowerment, employers and new economic realities

Within each of these sections, there are sub-sections, and specific strategies within these sub-sections. The table below captures this for easy perusal.

Table 3 - Action Plan Breakdown

<i>Major Sections</i>	<i>Sub-Sections</i>	<i>No. of Strategies</i>
<i>Systemic Change (I)</i>	a) Process Change	3
	b) Broader Public Consultation	2
	c) Licensing, Mobility and Accreditation	3
	d) Bridging Knowledge Gaps	6
	e) Standards and Regulation	1
<i>Labour Market Strategies (II)</i>	a) Labour Market Information	2
	b) Labour Market Participation	6
<i>Support Strategies(III)</i>	a) Community Network and Support	2
	b) Community Based Education and Training	1
	c) Employers, Empowerment and Economic Realities	2

The first roundtable, in this implementation phase was sponsored by SkillRoute Canada who have developed The SkillRoute gateway to help Canadian engineering employers to take advantage of international candidates who have been bridged through the Canadian-specific regulations for engineering occupations.

From 'Canadian First' to 'Canada First' –Next Steps

By G.K. Bambrah

CAPE (Council for Access to the Profession of Engineering)

This presentation started out with an overview of the following three components of 'From Canadian First to Canada First' employment strategy for immigrants with engineering backgrounds

1. Systemic Change - Outline strategies related to process changes, licensing, mobility and accreditation, standards and regulations and redefining the role of government
2. Labour Market Strategies - Informed decisions, accurate, reliable and up to date labour market information and tackling employer risk adversity
3. Support Strategies - Outlining the roles of communities and networks, education, training and empowerment, employers and new economic realities

This was followed by a proposal that the broader public consultation process initiated through the employment strategy roundtables should be strengthened into an oversight mechanism during the implementation phase of the this strategy. The employment strategy multi-stakeholder roundtable would be restructured to develop an oversight mechanism through its devolution in to Three Roundtables as follows

1. Policy Roundtable that will steer, coordinate monitor Systemic Change
2. Employer Roundtable that will steer, coordinate and monitor Labour Market Strategies
3. Community Roundtable that will coordinate and monitor Support Strategies

To strengthen commitment to the broader public consultation and oversight mechanism being developed through this implementation phase, CAPE is proposing that the roundtables should open up space for those implementing any of the components of the employment strategy to share their experiences and initiatives or for those interested in this oversight mechanism to sponsor a roundtable.

SkillRoute Canada Inc. oversaw this mechanism and will guide, manage and assist any employer who wishes to sponsor future roundtables.

SkillRoute Canada Inc.

SkillRoute Canada's mandate is to effectively integrate international professionals and tradespeople into the Canadian economy by:

- eliminating the real (not perceived) barriers faced by new immigrants, and,
- providing a means of employment at a level commensurate with their skills

The evolution of this idea was the result of 2.5 years of research, development, testing and discussions with Regulatory Bodies, Community Colleges, Trade Associations, Immigration Consultants, Career Resource Centres and newcomers themselves.

Utilizing a highly efficient, participatory and intuitive web algorithm, SkillRoute Canada empowers the newcomer by allowing them to work through the barriers, specific to their profession or trade whether living in Canada, and before they arrive. This revolutionary and inclusive approach allows the international professional or skilled worker the means to know what steps to take in landing in a job of their choosing as opposed to one of convenience. Through the SkillRoute model, all aspects of the development cycle are highlighted to the candidate, including movement through International Organizations serving the Profession or Trade (i.e. CAPE), Skills & Language Training (i.e. TRIEC, Access Centres, MTCU), Bridge Training (Colleges and Universities), Licensure & Certification (Regulators such as PEO, OACETT), Mentoring Programs (JobStart, etc.) and others. Candidates are then prepared in every stage of their development in a way that is intended to effectively deliver their expertise to employers.

Surrounding this issue is the indispensable fact most commonly addressed by immigrants of not knowing what to do next in the efforts to integrate properly into the Canadian work force. Most newcomers to this society are visibly lost and are seldom able to seek out effective avenues for proper integration.

On the side of employers, there is no yardstick or guideline available to verify a candidate's familiarity with Canadian occupational standards. As well, employers are not aware of the cultural differences and work place philosophy that affect the integration of newcomers.

SkillRoute's evaluation tools are designed to aid, manage and guide the work experience evaluation process in being objective and comprehensive. SkillRoute Canada's WEEM™ solution addresses a major barrier faced by immigrants, that is, the foreign credential work experience recognition issue.

The final result presented to the employer is an easy to understand and informative rating mechanism.

The SkillRoute solution is designed to eliminate barriers in a way that is fair to the candidate, effective for planning for the NGOs and appealing for Canadian employers who require candidates who have integrated at each level of their profession or trade. While the internal model of the SkillRoute Solution is complex, the outcome for the candidate and employer is intuitive, informative and incredibly simple.

TRIEC – Mentoring

- 1) Matching skilled immigrants with their Canadian counterparts in the same occupation
- 2) Mentoring creates links and relationships; builds social capital
- 3) Program delivered in Toronto, Peel, York and Halton

WHO IS A MENTEE:

- A recent skilled immigrant to Canada
- No prior Canadian work experience in their field
- Lacks access to professional networks
- Motivated and open to learning

WHO IS A MENTOR:

- Mentors draw wisdom from their own knowledge and business experience
- shares insights on Canadian work values & culture
- provides access to professional networks
- provides feedback on preparing for interviews and meetings
- shares information on current workplace/ industry trends

WHAT DOES THE MENTOR DO:

- Volunteers 24 hours during a span of 4 months
- Acquaints mentee with Canadian workplace culture
- Motivates mentee to gain self-confidence in new society, workplace and culture
- Shares industry contacts and knowledge
- Provides access to tools and opportunities for successful job searches within trained profession

MENTORING BY THE NUMBERS:

- More than 1350 registered mentors
- Over 1550 matches made since February 2005
- Over 750 mentoring matches have completed their 4 month commitment

Solette Gelberg – New Employment Realities

Leonardo da Vinci's illustration of a polyhedra for Pacioli's 1509 book *The Divine Proportion* was the first illustration to show the solid edges of a polyhedron and to allow you to see through to the structure of the real surface. Da Vinci, born in 1492, in Anchiano, a tiny town in Tuscany, was the illegitimate child of a wealthy Florentine notary and a peasant girl, Caterina. Luckily for Leonardo, and for us, he was treated as an equal son in his father's household. He started out as an artist and sculptor but by the age of 30 he was doing work as an engineer and architect.

Why am I telling you all of this? Because we need to think about the fact that if Leonardo walked into a large company today - like Imperial Oil, General Motors, Tridel or other firms, he probably wouldn't be hired to do anything. He has no formal training or designation of any kind, he dresses funny, he has long flowing locks and a beard that would get in the way. The simple anemometer which is a device for measuring the velocity of the wind is another Leonardo invention, is roughly the same design as the modern 2007 John Deere version.

Most immigrants come here to work and for a better life for themselves and their families. On a few hours, the individual can be taught how to look, how to dress, how to behave in business and even how to sound. There are many courses available, some through personal training, some on the web and on CDs. However, the immigrant engineer needs work. Engineers can work in many fields without a Professional Engineers licence. However, to pursue a Professional Engineer designation, in addition to passing some exams, one year of Canadian work experience is required.

What's in it for the employer? Make no mistake - this is not a social service exercise. You get a work ready individual with professional training and usually a minimum of 5 years' experience. I'm told that the salary for an engineer with no license and 5-10 years experience is around 60% of what a licensed engineer with 5 years experience would demand.

Why not give an immigrant engineer a chance for 1 year so they can attain the one year's experience that they need to be licenced in Canada? In return, you get the opportunity to see what they are like and how they work. At the end of the year, you can terminate their employment as agreed, by contract, in the beginning or if they meet or exceed your expectations, you can hire them as a permanent employee.

Kolin Ali – A Policy Perspective

- According to statistics obtained from Citizenship and Immigration Canada (CIC), Statistics Canada, Canadian Council of Professional Engineers (CCPE), Ontario Society of Professional Engineers (OSPE), Council for Access to the Profession of Engineering (CAPE) there are between 20,000 and 22000 foreign trained engineers that enters into Canada each year.
- Of these 7,000 to 10,000 settle in Ontario which also produces about 4500 graduates of its own every year. This constitutes about 5% of the total engineering workforce in Ontario estimated to be a total of about 220,000
- According to PEO (2003), one-third of the approximately 66,000 licensed professional engineers in Ontario were educated outside of Canada. However we do know that a large number of baby boomer engineers will soon be retiring. This leaves a smaller pool of qualified engineers to replace them. Unfortunately we do not have data on the attrition rate of this workforce
- Entry to engineering courses is dropping. According to Job futures Ontario only 2 to 3% of the total engineering workforce in this Province is unemployed
- As Employers and Service providers, what can we do to help?
 - Identify systemic barriers to licensing and employment opportunities faced by foreign trained engineers
 - Break down that wall of “Canadian Experience” requirement
 - Develop social network employment events for newcomer engineers to meet employers to share information on current trends and hiring opportunities
 - Develop strategies and commitment to overcome these barriers
 - Include employers for their input before future programs are designed and implemented

Plenary Discussions – Oversight Mechanism

In general all the participants expressed an interest in strengthening the CAPE multi-stakeholder Roundtable for broader public Consultation.

Except for a single participant who expressed reservation about the separation of the community organizations and employers, there was a general consensus on devolving into the three roundtables. In response to the reservation that this devolution of the roundtable would make it less interactive, it was agreed that all roundtables would come together at an annual forum to update each other.

An employer was of the opinion that the employer roundtable would have to be marketed to employers to show a real 'value-add' to the return on investment to be attractive enough for sponsorship. Another participant added that organizations such as FCM are the bodies at government level to be convinced to join the roundtable. For private sector, Federations/Chambers/Associations could be the target market. It was further stated that as employers are always careful, FCM, and Industrial associations is a good point to start.

A participant pointed out the benefits of adding a gender dimension to the roundtable discussions.

The participant from the Public Service Commission promised to share the information gained from the roundtable with MOT, MOE and other governmental departments and partners, and see what level of interest would come up.

The participants were of the opinion that the Roundtable Consultation Process was very beneficial in leading the way to working in non traditional way. An employer added that in view of the eminent labor shortage, employers are supportive of non-traditional ways of identifying manpower.

As regards the community roundtable, interest was expressed by some participants on taking the lead on initiating this.

CAPE will maintain the responsibility for initiating the policy roundtable.

Plenary Discussions – The SkillRoute Gateway

Much discussion was generated by the Skillroute Gateway. In general, the participants felt that this tool could prove useful for the employers as well as immigrants with engineering backgrounds, both those who have already landed in Canada and those who are intending to immigrate to Canada. The opinion was also expressed that giving access to the agencies serving immigrants would be good.

In terms of the content that this tool would capture, the tool was rated as being very good.

Several participants felt that the data collection and needs matching functions as well as the one stop shop approach of the tool was not only impressive but was also unique.

A participant expressed the view that the Skillroute gateway could "ease out the shock of experience in Canada for the immigrants before they come in". Also the immigrants with relevant engineering experience could be assisted with tools to shorten their Resume. Also noted by the participant was the fact that the participant was not familiar with any other program offering this kind of good one stop shopping. Also the tool would indicate to the user that issues that may face immigrants are "beyond academic understanding of what they are bringing to Canada."

An Employer opined that the tool could benefit from the addition of a video clip prepared by the candidate and that the potential of the tool for occupational matching will give a competitive result and make decision making easier.

A participant from the community service sector remarked that although the Skillroute gateway is a sophisticated and integrating piece of work for bridging the gaps in the candidate's credentials and experience, it was important to compare it with the database driven tools such as those that are used by skills international.

In terms of the possible weaknesses of this gateway, a participant pointed out that the tool would be limited by the consideration of licensing for those with professional backgrounds. That in fact a whole range of options from core licensed occupations to skills commensurate and emerging occupations would need to be a part of the knowledge system of this tool. The participant offered that suggestion that the gateway could be made more comprehensive

A regulator expressed concern with the WIEM candidate rating scale. The participant as concerned that while the rating scale was a good idea, the licensing process for the engineers already included a credential and experience assessment mechanism. The candidate also noted that while labor surveys identifying skills commensurate occupations outside of the licensed occupations are helpful, the regulator has integrated the emerging disciplines of engineering into regulation and is leading other provinces in this area.

A participant also pointed out that not all countries had efficient access to the internet and this might affect the effectiveness of an online tool such as the Skillroute gateway.

Also stated was the opinion that the Skillroute gateway had the considerable strength because of its candidate rating scale and information updating mechanism. The gateway can be further strengthened through the interation of profession specific Self assessment tools.

In Conclusion, the participants expressed the opinion that the Skillroute gateway should be marketed to the employers as well as regulators through individual presentations to gain their trust and commitment to use the gateway.

List of Participants

1. Kim Taylor, Ontario Power Generation	13. Nirav Patel, Ontario Power Generation
2. Kevin McLellan, TRIEC	14. Chrys Louie, City of Toronto
3. Vicki Chieu, Ontario Society of Professional Engineers	15. Solette Gelberg
4. Joan Atlin, ACCES	16. Kolin Ali
5. Stephan Boreau, Ontario Public Service	17. Shan Palanisamy
6. Alison Green, Women In Leadership Foundation	18. Jim Buchan
7. Laura-Lee Sanson, HATCH	19. Tahira Qamar CAPE Board member
8. Randy Sinukoff, Jacques Whitford	20. Gurmeet Bambrah CAPE Coordinator
9. Jane Cullingworth, SkillsForChange	21. Mohan Doss CAPE labor Market Researcher
10. Tej Wadhwa, JobStart	22. Muhammad Khan CAPE Volunteer
11. Julia Knapp, JobStart	23. Geethanjali Dagar CAPE Volunteer.
12. Michael Price, PEO	

Roundtable Panel Biographies

Gurmeet Bambrah, PhD.

Executive Director, Council for Access to the Profession of Engineering

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Dr. Gurmeet Bambrah is the project Coordinator for the 'Skills Commensurate Engineering Access Project' of CAPE the Council for Access to Profession of Engineering. This project is a community action research project concerned with integrating internationally educated engineers into engineering jobs that do not require licensing or those jobs which are currently being defined through emerging fields of engineering in Ontario.

With over fifteen years experience in water and wastewater engineering Dr. Bambrah, an immigrant with a background in professional Engineering, holds Bachelor's, Masters and Doctorate degrees from Britain. In addition she holds many professional affiliations including a membership of the Association of Consulting Engineers (Kenya), Past Vice-Presidency of the international Rainwater Catchment Systems Association, a license as a consulting engineer in Kenya, and a fellow of the Institution of Civil Engineers (UK).

Shan Palanisamy
President & Co-Founder, SkillRoute Canada
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With over 21 years of experience in Information Technology and Business Reengineering solutions, Mr. Palanisamy has a wide variety of Industries ranging from Financial, Transportation, Shipping, Oil and Gas, Plant and Process automation, Education, Regulatory, Property Management, Telecommunications and many others. He has worked in providing Project Management expertise in developing IT related solutions to the managing of very large databases and in the creation of data warehouse solutions for Multi-National corporations. His performance tuning expertise of corporate databases and in the architecture of technology and business solutions are frequently sought after. Shan has 7 years of regulatory experience in North America, providing technology and business related solutions.

Shan is also the President and Chairman of a multi-million dollar non-profit organization for over 6 years and is familiar in the projection, allocation and management of fiscal budgets for such organizations.

Jim Buchan
Co-Founder, SkillRoute Canada
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A technology professional with an emphasis on web development and security, Mr. Buchan has over 10 years of management and development expertise in a variety of sectors including Telecom, Retail and Industrial. Mr. Buchan has over 6 years of Canadian Regulatory experience working as a senior web developer for Canada's largest regulatory body. Prior to working in the regulatory sector, Mr. Buchan served as senior manager, web services at C1 Communications (now Group Telecom) and Manager of Internet Development at Kumaran Systems Inc., a world leader in Oracle application reengineering.

Mr. Buchan is the president of Reform Data Systems, a firm specializing in providing business process engineering and custom technology solutions to the regulatory sector in Canada.

Solette N. Gelberg
President of the SOL Consulting Group
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With a background in senior levels of business, financial management, regulatory affairs and education, she has been Vice Chair of a University Board of Governors, started a high school, and was the Executive Director of the Canadian Educational Standards Institute (CESI), an organization that evaluates and accredits independent schools across Canada.

She is a member of the Ontario College of Teachers and was, for six years, a public appointee to its Governing Council, Chair of its Audit Committee and a member of its Discipline Committee. She has completed the University of Windsor Alternate Dispute Resolution Courses I and II.

Her first career was in Market, Consumer and Advertising Research and she has also been Registrar of an Ontario regulatory body and Treasurer of a Canadian public company operating in a highly regulated sector from coast to coast. Most recently, Mrs. Gelberg completed a seven months contract as acting Executive Director/Registrar for the Ontario Public Accountants Council.

Kolin Ali, MPA (Public Administration)
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Khalid Ali has over 10 years of working experience as a policy analyst, consultant and researcher to the non-profit sector in Toronto. He has also worked with Ryerson University, Department of Politics and Public Administration for the past 8 years as an Academic/Teaching Assistant. He currently works with the Office of Equity and Inclusivity at Centennial College as a Researcher.

- Analysis of Determinants of Health and Urban Youth in Toronto including the role of income and poverty, housing and homelessness, employment and education. (Ryerson - Wellesley Foundation)
- Evaluated and identified systemic barriers facing ethno-racial and other disadvantaged groups (People Organization in North Toronto, POINT)
- Analysis of Newcomer Youth at Risk In Ontario (Joint Centre of Excellence for Research on Immigration and Settlement, CERIS)
- Completed a virtual meta database research project on issues of immigration policy (Joint Centre of Excellence for Research on Immigration and Settlement, CERIS)
- Researched the need for accessible transport for members of diverse disabled and non-visible disability community (Centre for Rehabilitation Institute, CRI)
- Coordinated and supervised participatory based research project on psychosocial impact of Spinal Cord Injury (SCI) and problems of community integration (Toronto Rehabilitation Institute (Toronto Rehab), a fully affiliated teaching hospital of the University of Toronto)
- Researched and wrote literature review on employment impediments for people with disabilities (Toronto Rehabilitation Institute (Toronto Rehab), a fully affiliated teaching hospital of the University of Toronto)
- Consulted on work-related effects of contingency labour, occupational health and ageing in the workplace (DNI Consultants)

Kevin McLellan
Project Manager, TRIEC
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Mr. McLellan joined TRIEC in 2005 after successfully launching an award winning labour market initiative in Durham Region in collaboration with educators, employers and NGOs. He spent fifteen years in the advertising industry working with clients such as General Motors, BMO and the Canadian Tourism Commission.

He has an undergraduate degree from the University of Windsor, a certificate in Business Administration from Seneca College and is a provincially licensed ESL instructor. His community work includes serving as a Board Director for the Durham Region Unemployed Help Centre. He is also currently serving as a member of the National Steering Committee for the Information and Communications Technology Council's project Building an IT Framework for Internationally Educated Professionals.



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