

THE COUNCIL FOR ACCESS TO THE  
PROFESSION OF ENGINEERING (CAPE)

*PROCEEDINGS OF THE FIFTH MULTI-STAKEHOLDER ROUNDTABLE OF  
THE 'ENGINEERING ACCESS' PROJECT*

ON

*A UNIFIED APPROACH TO INTEGRATING IMMIGRANTS WITH  
ENGINEERING BACKGROUNDS INTO THE ONTARIO ENGINEERING  
WORKPLACE*

*18<sup>th</sup> April 2006*

## **FOREWORD**

Under its 'Engineering Access' Project, the Council for Access to the Profession of Engineering (CAPE) under the trusteeship of the Council of Agencies serving South Asians is organizing a series of six multi-stakeholder roundtables to develop an employment strategy for Immigrants with Engineering Backgrounds (IEBs) arriving in Ontario. These proceedings report on the outcome of these roundtables the last of which was held on 31<sup>st</sup> March 2006. Since June 2003 when this project was initiated, CAPE has engaged in dialogue and built partnerships with a multitude of stakeholders including immigrants with engineering graduates, employers, professional associations, regulatory bodies, credential recognition services, educational providers and community-based service providers and these are our partners in developing the employment strategy presented here.

'Engineering Access' is a community action research project funded jointly by Canadian Heritage, Human Resources Skills Development Canada (now part of Human Resources and Social Development) and in-kind contribution by CAPE members. CAPE has developed a database and information service of/for internationally trained engineering graduates (ITEGs) through an online survey that was initiated in May 2004 that was initiated in May 2004 that was initiated in May 2004 that was initiated in May 2004. The current membership of this database stands at nearly 1100 IEBs. Until now CAPE has been managed by a steering committee of nearly thirty voluntary members comprised of 70% internationally trained engineers and engineering graduates and the balance consisting of a mix of representatives from community associations, service agencies, recruiters and academics. Our communication with the CAPE membership and partners is maintained thorough our interactive website and through coalition building with our partners.

The first roundtable resulted in a comprehensive matrix of employment strategies that were suggested and favored by different stakeholders. This matrix formed the basis for consensus building discussions at the second roundtable focused on identifying strategies that all the stakeholders collectively felt could be included in a unified employment strategy for immigrants with engineering backgrounds. This matrix was built upon at the third and fourth roundtables by focusing on roles and responsibilities; which stakeholders should be the key-movers of a strategy? Which stakeholders have the capacity to implement the strategy and how to effectively mobilize resources for a strategy? The penultimate and fifth roundtable focused on expected outcomes and performance measures. The final employment strategy resulting from this initiative will be released in May 2006.

The multi-stakeholder roundtable process adopted by the Council for Access to the Profession of Engineering (CAPE) is a systematic, integrated and strategic (SISA) research approach<sup>1</sup> involving:

- Needs assessments
- Leadership development to build a collective and community coalition to represent the Ontario workplace and economy

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<sup>1</sup> SISA was developed and patented by G.K. Bambrah (1990)

Following from this CAPE organized a series of six roundtables held over eighteen months to develop a multi-stakeholder employment strategy for immigrants with engineering backgrounds coming to Ontario. The agenda for the first roundtable was developed on the basis of issues that had been identified at the multi-stakeholder forum held on 16th October, 2004.

- The first roundtable entitled ‘The Inevitability of Change’ held on 6th April, 2005 produced an extensive matrix of the employment strategies that various stakeholders were adopting or that they favored for IEBs.
- The second roundtable entitled ‘Integrating Stakeholder Employment Strategies and Approaches’ held on 30th June, 2005, focused on building consensus to derive a matrix of employment strategies or solutions that all stakeholders collectively felt could help integrate immigrants with engineering backgrounds into meaningful engineering occupations in Ontario.
- The third and the fourth roundtable focused on defining stakeholder roles and responsibilities, and activities to implement the strategies set out in the matrix.
- The penultimate and fifth roundtable centered outcomes and performance measures. The complete and final strategy will be released at the sixth and final roundtable to be held on 18<sup>th</sup> May 2006.
- Appendix 1 contains the complete list of stakeholders who have participated in these roundtables.
- A set of discussion rules adopted for these multi-stakeholder roundtables and are contained in Appendix 2.

The objective of the roundtable deliberations was to begin the process of broader multi-stakeholder consultations to develop a unified approach to integrating IEBs into the Ontario engineering workplace.

### ***MATRIX FRAMEWORK***

A matrix was developed that systematically captured the outputs from each of the roundtables progressively through the five roundtable discussions. This report contains a record of the proceedings of five multi-stakeholder roundtables.

#### **Process for Change**

The creation of a process from pre-immigration selection and information, to settlement into relatively suitable employment for immigrants with engineering backgrounds (IEBs) has been under extensive discussion. As discussed, this process should include information on: employment options and realities for IEBs; skills commensurate employment opportunities for IEBs; and it should not overlook the need to define equivalency criteria for foreign credential recognition and evaluation.

Some participants felt that the IEB expectations were too high. IEBs should not expect to find the kind of permanent employment patterns they had enjoyed elsewhere to also be offered to them in Canada where contract based employment is common. IEBs also should be more open to locating in communities other than their own and in the colder regions. They need to network outside their own communities.

OSPE presented the view that there is an over supply of engineers to Ontario. The participants felt that in such a situation the current messaging from the Federal Government “Canada welcomes you” needs to change to one that accepts this over supply and gives people a realistic picture of engineering employment opportunities in Ontario.

While several initiatives are currently underway to provide information to immigrants, it is important to engage all the key stakeholders in seeking ways to integrate IEBs and other professionals into the workplace. There is confusion over the numerous organizations that are working towards the settlement and integration of immigrant professionals e.g. TRIEC, PROMPT and who is doing what. Thus, better coordination and clarification of organizations needs to be made so both new immigrants and policy makers are clear as to which role each organization fulfills.

The following strategies and actions were agreed upon::

*i.*

The participants discussed this extensively and felt that coordination and sharing of information between all stakeholders are major components of such a process. The participants felt that it was difficult to conceptualize this process without first developing a framework of reference for such a process within the context of engineering practice in Ontario and Canada. Participants expressed the view that IEB input in defining this frame of reference was important. A discussion then ensued on who should represent the IEB input? PEO represents licensed engineers, OSPE represents the voice of licensed engineers, CCPE is the umbrella body for the regulators. It was therefore obvious that there is no voice for non-licensed engineers and the following strategy was developed on this understanding:

*Recommendation:*

*The participants recommended that CAPE has proved to be an effective and collective voice for IEBs in Ontario and should be the key mover working closely with PEO, OSPE and CCPE in developing the frame of reference for a seamless process commensurate employment for IEBs.*

*The key movers and partners:*

*Development of this frame of reference for a seamless process should be led by CAPE (which is recognized as the legitimate voice for immigrants with engineering backgrounds) and PEO, CCPE and OSPE as well as organizations such as the Human Resources Professionals Association of Ontario and CHIRP.*

*Capacity and resources:*

*The Participants recognized that CAPE has the capacity but lacks resources so funding will be required for this initiative.*

*Outcome and performance measures:*

*Through this initiative, baselines will be established for IEB access to engineering in Ontario, a legitimate voice and resource center will be established for IEB and a screened pool of IEBs will be identified that can be integrated into the Ontario Engineering workforce. The number of IEBs*

*who find engineering employment and their rates at which they are retained in these positions will be the measure of performance of labour market participation.*

**ii.**

The participants expressed the view that at present there is much confusion about on-going initiatives by CCPE, TRIEC, OSPE, PROMPT, CAPE etc and who is doing what. Better coordination and clarification of organizations roles needs to happen so both new immigrants, the local engineering fraternity and policy makers are clear about the roles of all these organizations. The participants felt that the multi-stakeholder consultation process being adopted by CAPE was very useful and should be enhanced.

*Recommendation:*

*Public consultation processes must be broadened to engage all stakeholders, including the employers; the regulators; the education, training and immigration services sectors; and the immigrants with professional backgrounds.*

*The key movers and partners:*

*CAPE should continue to sustain the multi-stakeholder roundtable but focus on building credibility and building the capacity of the roundtable to address specific issues.*

*Capacity and resources:*

*CAPE volunteers and information infrastructure developed with support from other resources.*

*Outcome and performance measures:*

*Information build-up, sustainability of the roundtable and its credibility measured through participation and interest in the roundtable.*

**iii.**

The participants felt that current message to new immigrants is one of welcoming and needing the foreign credentials and skills of IEBs but this is not reflective of the economic job reality. There is an oversupply of engineers. There needs to be a link between supply and demand. CAPE has made a submission to the Standing Committee of the House of Commons on Foreign Credential Recognition regarding these issues and recommending a revision of the point system to reflect the employment realities for immigrants with engineering backgrounds.

*Recommendation:*

*The participants recommended revision of the point system by CIC to reflect the realities of economic trade/demand*

*The key mover:*

*Citizenship and Immigration Canada (CIC)*

*Capacity and resources:*

*Citizenship and Immigration Canada (CIC)*

Outcome and performance measures:

*Reduction in number of immigrants intending to work as engineers in Ontario*

- -
- y immigrants with engineering and other professional backgrounds.  
The following strategies were agreed upon:

***i. The. It must kill is addressed appropriately.***

PEO suggested that ensuring all investments in engineering services are through a quality based selection process would be the way forward to a shared vision. The participants expressed the view that the new shared vision should be based on sustainability – environmental, economic and social rather than labor market and demographic needs of Canada

Recommendation:

*All decisions to invest in engineering services, outputs or manpower should be through sustainability based selection.*

The key movers and partners:

*The Sector Councils should take a lead in defining the sustainability criteria for investments and PEO should lead in translating this into the selection criteria for engineering services in consultation with CCPE, OSP, CEO and CAPE*

Capacity and resources:

*Sector Councils and PEO with funding support if required*

Outcome and performance measures:

*Definition of sustainability-based selection criteria for engineering services and the number of Sector Councils engaged*

***ii.***

The participants expressed the view that the CAPE multi-stakeholder roundtable should be sustained stakeholder engagement to facilitate the development of the common vision for Ontario and Government. A number of participants felt that all levels of government need to take control of this roundtable to ensure policy coordination but at the fifth roundtable the participants decided this was not to be recommended.

Recommendation:

*CAPE should strengthen and sustain the multi-stakeholder Roundtable consultation process The key movers and partner: CAPE*

Capacity and Resources: *CAPE with other funding support*

Outcome and performance measures:

*Number of participants and interest in the roundtable and sustenance of this number and interest.*

## **Licensing, Mobility and Accreditation**

- i. strategies and **Most Engineers do not require P.Eng to obtain skills commensurate employment.***

The participants attempted to define the nature of engineering occupations that did not require licensing. It was felt that little information was available regarding these.

### Recommendation:

*Initiate research to identify the range of occupations that will utilize the education, experience and skills of IEBs without necessarily pulling them into the licensing process.*

### The key movers and partners:

*CAPE should undertake this on an action research basis*

### Capacity and Resources:

*Research funding to be raised by CAPE*

### Outcome and performance measures:

*Survey of employers and preparation of database of skills commensurate opportunities and production of the research report*

- ii. or even **'Engineer' international mobility of IEBs***

The participants discussed this in some detail. PEO and OSPE were of the opinion that this was necessary in public interest to maintain the standard of engineering. Other participants however felt that the reserved title particularly the title of 'Engineer' locked them out of the practice of engineering (both professional engineering and skills commensurate engineering related occupations). The case was presented by PEO that about 6% of the Canadians educated outside of Canada were also subjected to this situation and therefore this was not related to the country of origin of the applicants for licensing. PEO stated that it operates under statute set up by the provincial government so this issue should be addressed by this stakeholder.

### Recommendation:

*This should be addressed as a systemic issue*

### The key movers and partners:

*PEO, Ministry of Attorney General and CAPE*

### Capacity and Resources:

*PEO, Ministry of Attorney Genera*

Outcome and performance measures:  
*Regulatory change*

*iii. .*

PEO presented the case that the mechanism of mutual recognition agreements (MRAs) that has evolved to create greater inter-provincial as well as international mobility in a limited number of countries should be looked as a model that could create mobility for engineering graduates from other countries. Other participants pointed out however, that while it would be useful to extend mutual recognition to other countries, 60-70% of IEBs can get past the academic accreditation phase of the licensing process. Their major hurdle is the one year Canadian Experience requirement and this is not addressed by the Mutual Recognition Agreements.

Recommendation:

*There is merit to extending the Mutual Recognition Agreement with priority given to countries from which the majority of IEBs have been originating in recent years*

The key movers:

*PEO*

Capacity and Resources:

*PEO*

Outcome and performance measures:

*Increased mobility of immigrants with engineering backgrounds from major source countries*

***iv. Increase awareness amongst engineers and engineering employers of the global credentials and experience of IEBs and provide employers with the criteria to be used to grade IEBs for experience requirements for licensing***

The participants felt there was need for the licensed engineers in Ontario to increase their understanding of international engineering practice and credentials. It was also strongly felt that employers needed to clearly identify and understand the requirements of experience they are expected to provide for IEBs through the one year Canadian experience period.

The participants also agreed that continuing professional development of Ontarian engineers is a discussion that needs to be continued as currently there are no requirements for P.Eng.'s to assess their own continued competence (as is the case with other international engineer accreditation institutions e.g. Institute of Civil Engineers London, UK).

The participants also felt that further discussion with educational institutions, HR boards and institutions should be explored. The participants felt that in the short term it is essential to influence the HR decision makers. Learn & Lunch programs for HR professionals were suggested,



giving them an opportunity to learn about IEBs as well as network (need to provide a carrot) – perhaps including a positive story of success?

Recommendation:

*The participants recommended the introduction of education of licensed engineers on globalization and international credentials and practices in engineering in comparison to Canadian engineering practice to identify the constituent elements of the one year Canadian experience to be acquired by IEBs under their supervision. CAPE can support this through knowledge sharing with relevant stakeholders.*

The key movers and partners:

*Ontario Society of Professional Engineers*

Capacity and resources:

*OSPE to raise funds to develop this education program*

Outcome and performance measures:

*Licensed Engineers became less averse to foreign training and experience. Number of licensed engineers taking up the education*

- v. Work with strategic partners to develop bridging and mentoring programs geared to the needs of IEBs for skills commensurate employment.***

The participants agreed that one route to employment has been the bridging program and this was discussed at length at the roundtable. Bridging programs are deemed to have the merit of reducing risk to the employer because he is able to see the IEB at work. However, bridging programs need to be able to fulfill certain conditions to be truly meaningful for the IEBs for whom they are suitable.

They must be able to bridge the 1 year Canadian experience requirement as required under the Engineering Act so that IEBs can apply for licensure (although the trend is towards fewer people applying for the license) and it would be an inefficient exercise to provide a bridging program that does not let an IEB use that program to fulfill this experience requirement; bridging programs should add to the existing skill sets of IEBs i.e. be meaningful in adding to their knowledge and finally, they should be specific as to the skill sets they are bridging (there needs to be clear skills gap analysis conducted between employer skill sets and IEB skill sets, and then if there are gaps, bridge programs should train IEBs).

The participants discussed in detail the limitations imposed on the one year Canadian experience in that this cannot be substituted by any form of pre-graduation stage and/or toward a postgraduate degree, higher education or course based bridging programs. The participants felt that if focus is shifted to skills commensurate occupations then mentoring and bridging programs could be more useful.

Recommendation:

*The focus of bridging programs and mentoring should be employment rather than licensing. Guidelines need to be developed for multi-stakeholder inputs into the content definition of these programs.*

*The key movers and partners:*

*CAPE multi-stakeholder roundtable*

*Capacity and Resources:*

*CAPE to raise funds for this*

*Outcome and performance measures:*

*Production of the Guidelines*

#### **4. B) LABOUR MARKET STRATEGIES Informed Decisions**

##### **i. Strategies and at roundtable 3IEBs**

The roundtable agreed that creative solutions to employment search must be cultivated by IEBs e.g. targeting international businesses rather than specifically Canadian businesses. In particular, this roundtable identified that IEBs must identify Canadian companies in own countries and market themselves for specific jobs. Further, IEBs need to create targeted and specific resumes instead of blitzing employers.

##### Recommendation:

*IEBs must identify and target multi-national companies and create targeted and engineering job specific resumes. CAPE's resume builder that was launched in December 2005 might be the kind of tool necessary that can be refined to meet the needs of IEBs as well as employees.*

##### The key movers and partners:

*Service providers in partnership with CAPE*

##### Capacity and Resources:

*Service Providers*

##### Outcome and performance measures:

*IEBs are employed in multi-national companies providing engineering services in their countries of origin. Number of IEBs employed in these multi-national companies*

##### **ii.**

The participants felt that since Small and Medium Enterprises (SMEs) are key employers in the economy and are particularly risk averse do not have much information about engineering skills in other countries. These must be educated about the skills and experience that IEBs bring. IEBs must find spaces to inform and educate them. One idea that was discussed at the roundtable was to make presentations and undertake outreach/ awareness through sector councils, Chambers of Commerce, employer associations' e.g. Canadian manufacturers association or Canadian exporters association etc.

Events that bring employers and IEBs together should be explored e.g. (related) immigrants with IT backgrounds were invited by Communitech and Canada's Technology Triangle to meet with IT employers from Kitchener-Waterloo area held in November 2005 in Toronto. It was also discussed that IEBs should approach Small Medium Enterprises (SME) thinking of expanding overseas. These must be targeted –the potential of growth through utilizing new markets and engineers with skills relevant to those markets – will lead to a mutual benefit.

##### Recommendation:

*Spaces need to be opened to bring together sector councils, Chambers of Commerce, employer associations and employers at which IEBs can make presentations to make SMEs aware of the potential to use IEB skills and experience. A longitudinal survey of SMEs must be carried out first.*

The key movers and partners:

*Employment services providers such as ACCESS, CASIP etc*

Capacity and Resources:

*Large employment services providers*

Outcome and performance measures:

*Number of Agencies engaged. Number of IEBs hired by SME's*

## 5.

The issue of labour market information fell into a few broad categories: the issue of oversupply of engineers, the need for employer specificities and a scientific method of assessing engineering skills, increased role of the government and need for better information flow.

An evaluation of the issue of oversupply of engineers must be conducted to investigate the depth of the problem and the various facets associated with it, relating to employability and skills that they possess.

Employer specificities and needs must also be investigated, so that skill deficiencies can be confirmed, and gap analysis can take place. This will help to provide better information to immigrants, as well as better tailoring of existing skills to match employer needs that may not be occurring due to partial information currently.

The government's role in settlement of engineers is expanded and explored in much more depth in this roundtable. The government should increase its role from pre-immigration information deployment to the settlement of engineers to skills commensurate employment. It is the government's responsibility to engage employers as well, perhaps a system such as the United States, where employers direct the government to release H1B employment visas depending on the needs identified by employers in the labour market. This program could also subsidize employers to hire IEBs for the one year Canadian experience requirement (more details in C iii). The idea to set up a not for profit recruitment agency to match IEBs to engineering jobs was discarded.

The following strategies and actions were agreed upon:

### *i. how match IEB skills and experience (gap analysis)*

The participants felt that employers could benefit from the knowledge of some IEBs in areas of engineering that are emerging or new to the Canadian context and that could be of global advantage to employers. Perhaps discussions can take place as to finding ways to share knowledge between employers and IEBs? Further, the creation of skills assessment frameworks and inventories that factor in demonstrated competencies (which does not currently exist; so far we have paper accreditations) has been discussed and may indeed be a future tool of assessment. CAPE needs to apply for funds to research into that possibility.

Participants felt that in terms of outlining IEB skills, CAPE has extensive data on IEBs, the disciplines they are in, the level etc. and would be in a position to take the lead and aid in designing this skills comparison system with support of CCPE (which has labour market info) PEO and OSPE, and they can use Ontario as a model (since Ontario receives 54% of new engineers and this would make a good case). However to date there has been little effort made to assess skill sets existing in the Engineering employer community.

Recommendation:

*The participants recommended there needs to be clear skills gap analysis conducted between employer skill sets and IEB skill sets, and then if there are gaps, they can be addressed*

The key movers and partners:

*CAPE in partnership with PEO, OACETT, CCPE*

Capacity and resources:

*The participants recognized that CAPE has the capacity but lacks resources so funding will be required for this initiative.*

Outcome and performance measures:

*Defined competencies to evaluated experience of those applying for an engineering license or position*

***ii. ility to provide coordinated information from***

The participants felt that a constructive, new system is needed that catalogues current resources and redesigns the way the best information resources are shared between IEBs, CAPE, Key stakeholders including governments, ORB, employers etc. The participants felt that in addition to the above suggestions for a new constructive information system, there is a need for a searchable database of engineering jobs, and in fact this could be part of this information portal

Recommendation:

*The participants recommended that this system must clarify information and increase effective coordination between different information sources and key stakeholders. Further, this portal should coordinate between stakeholders so as to give the most relevant information without duplication. This information system should also include an engineering and skills commensurate opportunities portal*

The key movers and partners:

*CAPE in partnership with other stakeholders*

Capacity and resources:

*CAPE to seek funding*

Outcome and performance measures:

*Different information portals should converge into a single point of information contact for IEBs*

*iii. on the needs of employers*

The participants felt that more discussion needs to happen around the possibility of a H1B style labour market driven recruitment that occurs in the US. One idea that was floated earlier, and needs to be further discussed, was for the idea of a program that scientifically assesses an IEB to find out what skills he possesses (can we use the skills accreditation frameworks here?) and then employers can be told that he has been assessed and they are encouraged to hire these IEBs once the risk has been managed through this assessment.

Recommendation:

*The participants recommended that there is some merit to this suggestion and it should be investigated further*

The key movers and partners:

*Citizenship and immigration Canada*

Capacity and resources:

*Citizenship and immigration Canada*

Outcome and performance measures:

*Standing Committee deliberations*

**6.**

The following actions were agreed upon

**i. M**

The participants stated that employers are risk averse the s. The participants

Recommendation:

*The participants recommended that professional engineers in Ontario need to learn about engineering practices and education in other countries to benefit from globalization.*

**PEO, recruiters and employers preferred to put this strategy on hold**

***ii. Address lack of knowledge of Ontario codes of practice and regulations among IEBs***

The participants were of the opinion that the training of most engineers gears them to pick up knowledge on codes and practices in different locations rapidly so if they have access to the Ontario codes of practice and regulations they should be able to understand these quickly.

Recommendation:

*The participants suggested that effort should be made to centralize information on codes of practice and regulatory knowledge.*

**PEO, recruiters and employers preferred to put this strategy on hold**

### *iii. and bridging for IEBs*

It was discussed that the education and training discourse has centered on assuming that IEBs are deficient when compared to engineers trained in Ontario. This assumption is the foundation of the bridging, education and training programs for IEBs and do not specifically take into account the skills and experience of IEBs and are not tailored to improving or upgrading their skill sets.

The participants suggested that if the core competencies for engineers could be defined clearly than a comparison of these with international experience based competencies would create better understanding of the unique features that Canadian Experience may provide. All participants agreed that international experience as a whole may be too wide to be part of the competency tool. The participants were of the opinion that definition of core competencies for engineers would go a long way in ensuring efficient bridge training and mentoring programs for IEBs.

Subsidized work placements were not viewed as a promising practice. However the participants expressed the opinion that subsidized training based on identified core competency gaps could be more useful especially if this training is complemented by mentorship.

The participants agreed for bridging e.g. s. However the content, context and delivery of these programs need to be examined. The structure also owners, who hire) or Employers?

for licensing or certification

#### *Recommendation:*

*The participants recommended that bridge training should be transformed into subsidized learning based on defined core competencies and knowledge to be acquired by IEBs. The participants recommended that CAPE should help define coaching of IEBs tailored to their profession in Canada. The participants further suggested that a limited core competency comparison between Canada, India and China (these being the countries from which the majority of IEBs are originating) should be attempted as a pilot phase.*

#### *PEO, recruiters and employers preferred to put this strategy on hold*

### *iv.*

The participants were of the opinion that unless employers are actively engaged in the accreditation process, they will continue to be risk averse. It was felt that if employers could be involved in identifying the core competencies; this would help them to address their risk averseness. The participants were of the opinion that any training that is provided to IEBs must incorporate placement components during which the service providing organization/ program picks up the tab for liability insurance, allowed employers to see the benefits and knowledge of IEBs first hand.

#### *Recommendation:*

*The participants recommended that employers should be engaged in providing probationary employment to help IEBs to attain core competencies that they lack and the government should support the employer by meeting the liability insurance for the IEB for this probationary period.*  
**PEO, recruiters and employers preferred to put this strategy on hold**

C)

### **7. Communities and Network Support Strategies**

the Chinese professionals association of Canada (CPAC) for Chinese professionals. This is a comfort issue; that of an access. should not. The following action was agreed upon:

#### *i. s, government, IEBs and communities*

The participants felt that information flow between different participants (as part of the information system) would improve the quality of partnerships. In particular, discipline specific (engineering specific) information & job portals could bring together employers, communities and IEBs together. It was felt that such a system would be particularly useful for small and medium sized employers who cannot afford over developed human resources departments. It was suggested that a pilot program be set up to develop a partnership between community services in particular neighborhoods, employers and IEBs in those communities to establish this mechanism.

#### Recommendation:

*The participants suggested that a pilot partnership be set up between the Thorncliffe and Flemington neighborhoods that house many IEBs and employers.*

#### The key movers and partners:

*The Don Valley employment Coalition in partnership with CAPE, Employers, Economic Development unit of City of York and strong neighborhoods initiative*

#### Capacity and resources:

*Don Valley Employment Coalition*

#### Outcome and performance measures:

*Healthy vibrant community, Number of employers engaged, Number of IEBs employed and length of time in which IEBs are placed in employment.*

#### *ii. Provide information on 'Best Practices'*

The participants felt that as part of information flow, there must be channeling of accurate information to sources of information for IEBs i.e. families and friends should be reached through e.g. ethnic media, information booklets in places of worship or cultural centers etc. That building stronger relationships between employers and IEBs would also be enhanced by the collection of best practices of employers across Canada and the world, in integrating and optimizing on the knowledge of skilled IEBs.

#### Recommendations:



*The participants recommended that ethno specific and other community associations should be drawn into mentoring and other such services that create ways to link the host community in Canada to IEBs.*

*The key movers and partners:*

*CAPE in partnership with its community coalition*

*Capacity and resources:*

*CAPE already has on-line mentoring tools. Resources are need to administer this program.*

*Outcome and performance measures:*

*IEBs find direct links to the engineering fraternity in Ontario. Number of IEBs who find mentors and number of mentors participating in this initiative*

## **8. Education and Training**

at the third roundtable ally, targeting employers emerged as an issue of hiring In any case if emerging practices are included in the training it is most cost effective to offer these to new graduates as opposed to highly qualified and experienced IEBs. assuming some responsibility on/for utilizing ns) ensuring fair selection.

*i.*

It was discussed that the education and training discourse has centered on assuming that IEBs are deficient when compared to engineers trained in Ontario. This assumption is the foundation of the education and training programs for IEBs including bridge training programs, which do not specifically take into account the skills and experience of IEBs and are not tailored to improving their skill sets. Keeping this in mind:

*Recommendation:*

*The participants suggested that information relating to the skill sets of engineers in Ontario needs to be collected for comparison to the skill sets of IEBs so that an appropriate skills gap analysis, can be performed and used to modify the content of training if necessary.*

*The key movers and partners:*

*PEO, OACETT in partnership with CAPE*

*Capacity and resources:*

*PEO, OACETT and CAPE with external support*

*Outcome and performance measures:*

*Competency-based experience assessment tool is developed. Equivalency can be established on the basis of clearly defined engineering competencies*

*ii. and market to change mind sets*

The participants felt there needs to be more public awareness and real commitment from different levels of management in companies to understanding IEB skills and experience. CEOs that lead with a vision of globalization and global competitiveness through hiring for merit, skills and experience need to be engaged in this process. How can we influence that? TRIEC, through its circle of champions, tries to do exactly that. How can CEOs of SMEs be influenced to commit to global competitiveness?

Recommendation:

*The participants recommended that there is a balance between tackling employer risk adversity and lack of information, and empowering IEBs to create jobs for themselves in areas of emerging engineering disciplines, and this balance needs further research*

The key movers and partners:

*CAPE in partnership with Universities*

Capacity and resources:

*CAPE to seek research funding for community action research*

Outcome and performance measures:

*Research report and community action plan*

**iii. Provide Language training programs tailored to needs of IEBs.**

Language issues were brought up at this roundtable as being significant for some IEBs. However, IEBs hailing from countries that are part of the Commonwealth have significantly fewer language and communication issues. While ESL training can be useful for some IEBs, for those who are more proficient there is a need for communications' training at advanced levels that incorporate sector/profession-specific terminology, codes of practice and regulations.

Recommendation:

*The participants suggested that CAPE provides direct inputs and work with educational institutions to develop language coaching of IEBs tailored to their profession in Canada.*

The key movers and partners:

*Employment and settlement service providers.*

Capacity and resources:

*Settlement and employment services providers*

Outcome and performance measures:

*Profession specific advanced English language training recognized by employers*

**iv. The government at all levels should improve its primary function of budgeting for services delivered to IEBs.**

Initially this strategy had required that but this was re-conceptualized at the third roundtable as the participants felt that the Governments primary role is that of that of budgeting for services delivered.

Recommendation:

*The participants recommended that government approach to funding IEB targeted initiatives should evolve to one of return on investment based on employment outcomes and that resource decisions should incorporate multi-stakeholder consultation*

The key movers and partners:

*Federal, Provincial and Local Governments*

Outcome and performance measures:

*Cost effective job placement programs for immigrants with engineering backgrounds. Cost per job placement*

**v. T**

Globalizing and augmenting HR curriculum and training was discussed, as a long term solution, in educating HR professionals to understand global credentials and experience. As no research has been carried out to understand the nature of barriers facing hiring personnel little knowledge is available regarding this.

Recommendation:

*The participants recommended that research needs to be carried out to identify the barriers facing recruiting personnel.*

The key movers and partners:

*CAPE*

Capacity and resources:

*CAPE to seek funds for community action research*

Outcome and performance measures:

*Research report and IEB geared HR strategy*

re agreed upon:

i) ;

PEO stated that it operates under public statute which does not lend itself to the recognition of internships as the legitimate one year experience under a licensed engineer required of IEBs. It was pointed out that favor also must be found for internships amongst employers if these are to be recognized as part of the licensing requirements.

Recommendation:

*The participants recommended that this issue is a systemic one and should be addressed as such.*

The key movers:

*PEO, Employers*

Capacity and resources

*PEO and employers, in-kind IEBs*

Outcome and performance measures:

*Internship program instituted, Number of interns*

**ii. Provide Health and occupational Safety Training**

The issue of lack of knowledge on the workplace health and occupational safety regulations in Ontario among IEBs discussed and the participants felt this needed to be addressed.

Recommendation:

*The participants recommended introduction of a compulsory and discipline specific health and occupational safety training module for different engineering disciplines*

The key movers and partners:

*WSIB and CAPE*

Capacity and resources:

*Fee for service*

Outcome and performance measures:

*Number of IEBs trained*

- s to access to engineering jobs for enterprise development
- ncial services and other key stakeholders to create an

**i) rate citizenry and focus on finding solutions to problems.**

CAPE should also develop a preferred list of service providers based on the hiring of IEBs in these organizations. Rather than the 'business case' and 'diversity champions, CAPE should focus on entrepreneurship amongst IEBs.

Recommendations:

*The participants recommended that CAPE should identify the 'best practices' to get IEBs to sell their ideas and expertise.*

The key movers and partners:

CAPE

Capacity and resources:

CAPE research

Outcome and performance measures:

*Success stories and champion profiles published on website*

**iii.**

The participants were of the opinion that information about entrepreneurship is available to economic immigrants (business) not skilled immigrants (professional) through the Ministry of Economic Development and Trade. As part of the information portal, information relating to entrepreneurship, available funding, ways of doing business in Canada and other related knowledge should be included so that all immigrants regardless of designation can access this. Also the financial services industry is particularly conservative and needs to be involved multi-stakeholder discussions.

Recommendation:

*The participants recommended that CAPE / IEBs should discuss funding options and reduction of risk with the 5 big banks*

The key movers and partners:

CAPE

Capacity and resources:

CAPE volunteers

Outcome and performance measures:

*Number of IEBs who become entrepreneurs*

*The final employment strategy derived from these proceedings will be launched on 18 May 2006*

## 1List of Participants: Fifth Multi-stakeholder Roundtable.

1. Howard Mcfadden	Trade unionist	Employer
2. Randy Sinukoff	Principal	Employer
3. Steve Hope	Senior Recruiter	Brunel Multec
4. Greg Mcneil	APT	Ontario Ministry of Citizenship and Immigration
5. Kim Allen	Registrar,	PEO
6. Jyoti Sengupta	Member	Bengal Engineering College Alumni Association Of Canada 'BECAAC'
7. Prof. Raghu Nayak	President	IIT Alumni Association, Canada
8. Jack Zlahoda	Member	Association of Polish Engineers, Toronto
9. Tahira Khan	Coordinator	Association for Access to the Professions of Planning and Architecture
10. Darshak Vaishnav	Outreach Coordinator	Skills for Change
11. Manjeet Dhiman	Manager	ACCES Scarborough Office
12. Darryl Gershater	Community Worker	Don Valley Employment Council
13. Nikhat Rasheed	Coordinator	Policy Roundtable for Mobilizing Trades and Professions (PROMPT)
14. Gurmeet Bambrah	Coordinator	Council for Access to the Profession of Engineering (CAPE)
15. Muralidhar Maheshwara	Database Researcher	Council for Access to the Profession of Engineering (CAPE)
16. Kushmeet Gill	Volunteer	Council for Access to the Profession of Engineering (CAPE)

1. Recognize and respect that every stakeholder has a legitimate interest in seeking better access for the immigrant with an engineering background to the engineering workforce in Ontario
2. Avoid advising other stakeholders about their roles or responsibilities and focus on identifying your own roles and responsibilities
3. Focus on building consensus
4. Aim at developing a joint understanding of roles and Responsibilities

