



IMAGINING SUCCESS: CANADA – INDIA ACADEMIC RELATIONS

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EXECUTIVE SUMMARY

The potential for mutually beneficial engagement between Canada and India in the field of education is unparalleled today, but Canada, its provinces and its higher education sector have approached India in a fractured manner, with no framework, resources or consensus for a national approach. Instead the approach is characterized by disparate provincial and institutional initiatives that pale in comparison with the resource allocations and aggressive and coordinated market entry of competitor nations.

Canada's home-made obstacles include a federal system where the provinces exercise a preponderant degree of oversight on education. This affects Ottawa's ability and willingness to act in support of global education overtures and in recent years has led to a marked lack of funding to such important global bilateral initiatives. The result is that Canada's window of opportunity is closing for deep and mutually-beneficial educational engagement with India and its teaching and research institutions. This engagement is time sensitive, to the limited ability of partners in India to engage with reciprocity, and perhaps most importantly to Canada speaking with one voice and pursuing a collective and resourced initiative.

This study provides a context for the opportunities and challenges inherent in engaging with India on higher education matters, including an analysis of the current state of education in India and a frank assessment of Canada's ability to coordinate action and then both fund and deliver it; Canada is in a unique position among suitor nations yet is on the cusp of squandering this opportunity. With determination and support Canada can still make considerable inroads in India. This paper articulates an ambitious scenario of these possibilities while providing objectives and activities that Canada might adopt to turn vision into reality.

Content and tactics toward a Canada-India Education Strategy are recommended and are not limited to student recruitment; it is strongly argued that any strategy also includes the trading of educational services; joint programming and models of engagement that include reciprocal co-operative education; bilateral and two-way mobility of students, staff and researchers; an urgent redressing of Canada's own curricular needs and interests at K-12 and post-secondary levels; and recommendations concerning disciplines best suited for engagement with India.

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INTRODUCTION

India is on the cusp of engaging as a peer with the economic and geopolitical global elite. Economic confidence has increased demand for better educational opportunities and enhanced the ability of the middle class to study abroad. Of the millions able to enrol in post secondary education across India, tens of thousands choose to study abroad in destinations such as the UK or US, with their historical attraction and high reputation, or others such as New Zealand and Australia, which have achieved enviable market penetration through well-funded, coordinated and savvy campaigns. Canada and its provinces have performed poorly in educational marketing in India. Still, with Canada's reputation for high standards and quality delivery, the Indian student market is still accessible at a number of levels. In addition, there are other possible activities, at least as valuable, including the provision of a quality standard to the burgeoning Indian private education sector as well as in the development and delivery of tailored programs for Indian multinationals in their own HR development.

The economic reforms of the early 1990's have lifted millions out of desperate poverty. They have supported India's rapid urbanization and the creation of its huge middle class. If the country maintains even approximations of current growth rates, average household incomes will triple over the next two decades and India will become the world's 5th-largest consumer economy by 2025.¹ Urbanization is fast paced and will rise from 28% to 40% (540 million people) by 2020, at which time it is estimated the population of India will have reached 1.3 billion. India is one of the youngest countries in the world, with approximately 65% of its population below 34 years of age and a median age of 25 years; compare this to Canada with a median age of 39 years, and China at 35 years. In 2007 India had 770 million people younger than 35 years of age; 550 million people under the age of 24; and between 250 and 300 million people between the ages of 6 and 16. This translates into extensive opportunities for educational partnership and marketing that, given the right investments over time, the right geographic and disciplinary choices within India, and due diligence to relationship building and cultural assets, is rife for consumption in all sectors. Boutique and niche markets in India can still be highly lucrative, and out of modest partnerships come big things.

It is a gross understatement to suggest that India is being courted; there is a veritable global stampede to visit and engage with India's government in private sector and higher education. India is also on Canadian minds in unprecedented ways. The transformation of the Indian economy has sparked much of the interest, with recent Canadian

governments attempting to reverse decades of calculated neglect from Ottawa. Indeed, the Harper Government has listed India as one of its three foreign policy priorities, in its role as an “emerging economy.”

Despite early technical and educational training programs developed through the British Commonwealth Colombo Plan in the 1950s and 1960s, education has not been a prominent feature of Canada’s bilateral relations with India. The impetus for Canada’s early higher education initiatives under the Colombo Plan was to keep India attached to the West during the Cold War. After India’s independence Ottawa and Delhi shared a brief bilateral romance that faded over Cold War divergences and India’s nuclear tests. With the frost from those incidents now thawed, both countries have expressed a desire for better political and economic relations. Higher education in particular is receiving more widespread attention as a means to support clean knowledge-based industries in Canada, to fill gaps in the labour market, and to generate connections and collaborations that transcend traditional political and trade ties with India.

Canada’s greying population and declining birth rate have prompted consideration that immigration might mitigate looming skills gaps and declining education enrolment rates. Not surprisingly, Canadian educational institutions are actively looking at India. Although both K-12 and English as a Second Language (ESL) programs are important components of Canada’s educational interest with India, higher education is receiving the primary focus due to the efforts of governments, institutions and the private sector. The latter is increasingly interested in developing training programs based on Indian human resources as a means to address skills shortages in Canada. India’s tradition of student excellence, married to Canada’s need for skilled workers, has reinforced the awareness that Canadian competitiveness depends on attracting more foreign students and workers to Canada. As early as 2003 almost 50% of Canadian businesses surveyed experienced difficulties in filling positions for entry-level employees, engineers, equipment operators, and sales and marketing personnel and said that “a shortage of qualified labour was one of the most important issues facing them^{2,3}”

EDUCATION IN INDIA

More than two million Indians graduate from secondary school annually, and the country cannot accommodate these numbers in post-secondary education or in the job market. In 2006, New Delhi and other cities faced unprecedented levels of education-related chaos with a shortfall in post-secondary places, leaving students scrambling for

education at second-tier and private institutes where quality is a concern. This trend will continue as the government has announced *reservations* (affirmative action spots) for not only public institutions but also for private institutions across the country, and has also extended these *reservations* to encourage private companies to secure employment places for people from less fortunate regions or demographics.

India's post-secondary system produces over 100,000 engineering and two million non-engineering graduates a year, equivalent to half of British Columbia's population graduating from the post-secondary system annually.⁴ Of India's 1.2 billion people, over 200 million are studying in some education system: the pre-primary, kindergarten, and primary levels in classes 1 to 5 (ages 6–11) have approximately 114 million students; secondary classes from 6 to 10 (ages 12–15) approximately 45 million; higher secondary classes 11 and 12 (ages 16–17) 35 million; and in higher education and post-secondary some nine million are studying, with over 90,000 studying abroad. Fewer than 6,000 of those are studying in Canada.

India boasts a small tier of world-class but under-funded institutions at the top – notably the Indian Institutes of Technology (IITs), the Indian Institutes of Management (IIMs) and a small number of other top and 'meritocratic' public institutions such as the Indian Institute of Science in Bangalore – tower above a swelling, over-burdened and under-funded public system of close to 300 universities of disparate quality, over 500 colleges offering engineering degrees and over 1,000 polytechnics offering diplomas that educate the large majority of those able to pursue post-secondary studies. Private education is encouraged but is in its infancy, and is as yet erratic in its ability to deliver quality education. While taking measures to address these problems, Prime Minister Manmohan Singh lamented that India has "a dysfunctional education system," that "can only produce dysfunctional future citizens,"⁵ and that India "was lagging behind" in education.⁶

The India government is taking impressive steps to reduce the resource gap in the higher education sector. Increased education spending was a key plank of the 11th Plan announced in the 2008-2009 budget in late February 2008.⁷ Spending for higher education will increase by nearly 90% over the next five years and the government intends to pursue a massive expansion of higher education. This includes work on 16 new universities, three new IITs, two new Indian Institutes of Science Education and Research, and two new schools of planning and architecture. The government also

intends to raise the Gross Enrolment Ratio from 10% to 15% between 2008-2012. This is in response to domestic pressures and Delhi's awareness of the need to fuel India's ascendancy through an educated work force. There is a growing desire from G8 and other economies to address their own skills shortages while simultaneously offering to offset pressures on the domestic Indian system through student recruitment campaigns and the cultivation of partnerships with Indian institutions. Australian, US, British, New Zealand and even German, Italian and French post-secondary institutions have developed significant profile in the Indian recruitment market and in establishing institutional linkages.⁸

Both Australia and the UK are using central governments to buttress their presence in the Indian educational market. In January 2008 British Prime Minister Gordon Brown announced an additional commitment of approximately £500 million for health education programs in India, for research, training and infrastructure.⁹ American universities are utilizing their researchers, their alumni networks and their solid reputations to promote connections with India. Even France, traditionally a bit player in the Indian market, is actively pursuing Indian students while forging linkages with post-secondary institutions. The French Minister of Higher Education and Research recently announced the establishment of the Indo-French Consortium of Universities that will initiate projects of joint research and enhanced cooperation at the Masters Degree level and the signing of 21 inter-university agreements. To help facilitate these linkages, visa rules for Indian students were recently liberalized to allow them to work part-time while pursuing their studies in France.¹⁰

Indian students are looking for quality education opportunities while employers in India continue to look favourably upon foreign qualifications, and the potential for permanent settlement in a Western country is also a continuing motivation for overseas study. That said, the Indian private sector is also attempting to reverse the flow of Indian students who stay abroad once their studies are completed.

India has largely followed the British model of education and there has traditionally been no college system. Recent government reforms and the liberalization of the economy have encouraged the growth of private institutions, including colleges and vocational training institutions, again of a diverse range of standards and in desperate need of collaboration and assistance in the design of programs that can withstand the much-needed implementation of quality assurance measures. The government priority has

been to improve primary education, so that higher education growth and support have been largely in the private sector, which has justifiably yet to win the confidence of students, parents and employers.

At the high end of the post-secondary spectrum is research, which dovetails so well with the India economic miracle. India plans to substantially increase its R&D expenditures, which are currently 1/60th that of South Korea, 1/250th that of the United States and 1/340th that of Japan. The country intends to establish over 50 academic and research Centres of Excellence by 2012, using a model of regional innovation clusters and creating an 'Ecosystem of Innovation.'¹¹ India is building these Centres around leading scientists and entrepreneurs. They in turn are supported by the growing reverse brain drain of a returning diaspora filling research and both senior and middle management roles in all sectors, where India's education system cannot fill these management positions with qualified locally trained nationals. Government is working to create an environment through targeted infrastructure investment and enabling public policies that encourage international partnerships to support science and technology R&D to facilitate the translation of research into commercial success.

OBSTACLES AND CHALLENGES

India's international education profile is following a path similar to that of China in the early 1990s. Domestic supply is not able to meet domestic demand – even before a discussion of quality – and growing pressure for post-secondary seats combined with growing affluence is creating opportunities for global providers. As in China, a growing middle class with a larger disposable income is exploring its options of institutions overseas. But India is not China and will never export the student numbers that China has done. There is greater indigenous capacity in India than there was historically in China, and where China had no 'logical' destination for those of its students who could study abroad, Indian students trod a well-worn path to the UK and US.

And India is not emulating the China model. In an April 2006 interview with Charlie Rose, Dr Kiran Mazumdar-Shaw (chair and managing director of BioCon), stated that India does not want to compete with China to be the world's factory; rather India wants to stand alone as the world's laboratory.¹²

Canadian actors must be selective in terms of programming objectives and deliverables, the institutional type and disciplinary focuses it puts to the fore, as well as where and how we focus in India's expansive geography. Our engagement might best be seen as

pursuit of a series of complementary but disparate opportunities for long-term investment and strategic alliances. Government and institutional leaders in India are already dismayed at being treated as a 'market;' we must engage with India as equals and partners and not purely as destinations for their students and revenue or as simply the purveyors of some program they need.

CANADA'S ABILITY TO DELIVER

There is no Canadian consensus on how to enter the Indian higher education market and compete as one of many suitors. Institutional players in India do not yet have the human or other capital to match the enthusiasm of so many suitors and are already over-worked while relying on a paucity of resources to meet existing mandates. However, India's labour force and brain trust require the infusion of ideas and innovation that partnerships can offer, and that returning diaspora can bring home with them. A tradition of innovation and an educated Non-Resident Indian (NRI) diaspora population play to Canada's advantage. Boutique programs and niche relationships in India can still be highly lucrative and Canada should now be laying the groundwork for a long-term and trans-generational engagement with New Delhi.

Since 2003 numerous Canadian federal and provincial trade missions have visited India. Most have included business and government representatives as well as educational representation from post-secondary institutions. Canadian institutions have participated in student recruitment fairs under a Canadian banner or in fairs with competitor nations. But the Canadian presence frequently remains lost in the throng of suitors, most of whom bring more to the table. Canadian missions often fail to deliver, mistakenly believing that once a visit occurs and contacts are made, the work is over. In fact, missions are only the beginning of a long process of building beneficial and sustainable partnerships. Canadian educational institutions and governments require imagination and a coherent strategy that deal with the arts and social sciences as well as in the sciences and both basic and applied research.

Few Indian families until recently have had the financial resources to send their children overseas for post-secondary education. Conversely, few Canadian institutions and school districts have regarded India as a potential market for student recruitment or collaborative research, or worthy of institutional partnerships. The number of viable exchanges, internships and study abroad programs available to send Canadian students to India is woefully small. Canada's efforts to recruit students from India are hampered

by budgetary timidity and constitutional wrangling. Sponsoring so many splintered initiatives in education, Canada has engaged in India almost solely as a market for student recruitment, encouraging both India's brain drain and the one-way flow of dollars to Canadian jurisdictions. Not surprisingly, these activities have not met with friendly support from all quarters in India. In approaching India as a market, rather than as a source of partnerships and strategic alliances, Canada has risked alienating the directors, vice chancellors and rectors of the very institutions it needs. Fundamental to Canada's successes in India will be the two-way flow of people, students, scholars and researchers. Canadian educators believe that the quality of education grows when a classroom includes students from varied national backgrounds, when discussions and laboratories include cross-cultural perspectives, when faculty and staff grow their skills internationally, and when students can study and work abroad.

Given the great potential of Indian industry and science, student recruitment should not be the only or principal focus of a Canadian strategy. But how should Canada define success in India? It will be advantageous to first articulate that vision, and detail required institutional and government resources to put it into practice.

IMAGINING SUCCESS

Canada has no tradition of pursuing country-specific strategies in the education sphere. The global education market place and a globalized research milieu have leap-frogged policymakers and exposed old school inertia. In some quarters it is unimaginable that Canada would have a targeted education strategy for any country, even with the US or China or France; so why India? The brief answer is that increasing competition in India is fast diminishing its ability to reciprocate; time is short, but India should not be alone; it should be prioritized at the outset as *sui generis*, and should ultimately be part of a comprehensive agenda that includes other target nations. There is no reason that education should not be at the fore of Canada's engagement with any nation. There is no reason why Canada's engagement with India, and involvement with its own Indo-Canadian diaspora in the initiative, should not be replicated with other jurisdictions. Once a model of federal-provincial cooperation is imagined and enacted upon for India, it will be a template for other jurisdictions.

A VISION

By 2015, Canadian students and researchers from research universities in every province will be working together with researchers from top institutions and laboratories in India and will be involved in cutting-edge research and market applications in basic and applied sciences; patents will be pursued by both Indian and Canadian partners. Funding will come from governments and the private sector.

Canada's post-secondary institutions will actively cultivate niche research and programming sectors.¹³ The research, academic and vocational sectors will have active co-operative work placements with key firms and in key industries. The service sectors across India will be placing large numbers of graduate and undergraduate students annually into enterprises there.

Canada's post-secondary institutions will boast dual, concurrent or joint degree programs with top Indian institutions, and will have active dual and joint degrees, with 2 + 1, 1 + 2 and 2 + 2 agreements in place. There will be a multitude of disciplines and destinations embedded in study abroad programs offered for Canadian students in India annually or biennially in partnership with top institutions as well as fledgling but mentored private institutions. There will be funded exchanges that move cohorts of students each way on an annual basis.

The number of Indian students on Canadian campuses will better reflect their global demographic, and India will be seen as a key and important study and research destination for Canadian students. Many of the best Indian students will be in Canada on generous scholarships from community, institutional, provincial and national sources. Canadian and Indian communities will be twinned in sister city relationships in support of educational and commercial ties. Indian and South Asian students will grow to be a vibrant visible presence and cultural core of Canadian campus life through clubs, activities, performances and volunteering involving both visiting students as well as a strong engagement from the Canadian Indian diaspora.

In Canadian high schools and on Canadian post-secondary campuses students will learn of Indian history and politics. Canadian undergraduate students will have opportunity to graduate with interdisciplinary certification in Indian or South Asian Studies, including the possibility of study in Urdu or Hindi, Tamil or Punjabi, as well as business and social science course offerings on India in areas as diverse as archaeology, anthropology, economics, political science and history. Even those students who are not able to travel to and study in India will be taught by visiting Indian faculty through active visiting scholars schemes.

Our institutions will have strengthened their expertise and academic breadth on India and will have successfully created and implemented mechanisms through hiring and fund-raising to support Endowed or Visiting Chairs on India. Indian content will be available in K-12 and post-secondary curricula across the country, and a well-funded research and technology agreement between Canada and India will see the steady flow of academics and researchers to each others' jurisdictions for extended periods, flying on direct flights available between key Canadian and Indian cities.

PLOTTING STEPS

A first pre-requisite is a national strategy. Current piecemeal approaches to India will not be effective in a competitive context in which France, the UK and the US walk away with aerospace and nuclear collaboration, dynamic alliances in business, manufacturing,

pharmaceuticals and the IT sector; and in which Australia is educating India's next generations of leaders, traders, researchers and service industry workers while addressing its own national skills and labour gaps. The window of opportunity for substantive Canadian engagement in India is closing, and with it Ottawa's chance to show leadership on the file and in fields as disparate as education, culture, media, service industries, the environment and biotechnology. In the vacuum, some provinces are engaging; where provincial capitals do not act with success, individual institutions and enterprises are pursuing their own agendas.

The national strategy cannot be articulated by educators alone, but together with the informed views of leaders from government, business, the arts, trades and services; most importantly a group of eminent persons must be involved that can uniquely draw from networks in both nations.

Awareness of the activities of other countries will be an advantage. Australia is doing an admirable job of marketing and recruiting large numbers of students from India¹⁴ and is engaged in offshore delivery and curriculum export. The US is achieving deep and broad research partnerships and continues to attract the most Indian students. Through imaginative programs such as the UK-India Education and Research Initiative, Britain has committed £500 million on its three primary platforms of engagement: Higher Education and Research; Schools; and Professional and Technical Skills. As its designers declare, this "presents an opportunity for high-level dialogue between the two countries on areas of mutual policy interest such as quality assurance, international standards and credit recognition schemes."¹⁵ Across the board education is a platform from which to develop other bilateral linkages.

PROVINCIAL INITIATIVE: AN EXAMPLE FROM BRITISH COLUMBIA

The example of British Columbia might be helpful. The province has a large immigrant population of NRI diaspora, primarily from India's agricultural heartland in the Punjab. Punjabi is the third most widely spoken language in Metro Vancouver. The province boasted Canada's first Indo-Canadian premier and there are many influential municipal, provincial and federal politicians from the community. There is a funded chair in Sikh Studies through CISAR at the University of B.C.,¹⁶ and the B.C. Regional Innovation Chair in Canada-India Business and Economic Development at the University of the Fraser Valley,¹⁷ both supported by matching provincial funds. Simon Fraser University's India Initiative is a comprehensive engagement with faculty, researchers, industry,

students, staff and the local diaspora community and is being held up as a model for 'town-and-gown' engagement.¹⁸ Other post-secondary providers have established offices or procured local representation in India and are engaged in their own diverse initiatives. One K-12 district has entered into a formal relationship with one of the largest private providers of K-12 education in India and is anticipating cohorts of secondary students from across India to B.C., and is further pursuing discussions of pathways programming to local post-secondary providers.

India is one of the five key priorities for the B.C. Government's Asia Pacific Gateway Initiative¹⁹; its report on India opportunities by the India Market Advisory Group identified five key sectors for provincial economic engagement in India, education among them.²⁰ Premier Gordon Campbell reprised his 2003 India Mission in December of 2007 with a week-long agenda that highlighted educational cooperation and opportunity and included 35 public post-secondary participants, 14 presidents among them.

The province has recently hosted India Calling; it is pursuing in-country trade representation in Bangalore and Mumbai and is considering representation in the Punjab; it is assessing the results of a commissioned education marketing report on opportunities in India. Albeit in modest terms, the province is supporting the private sector and public institutions in their forays into India, and constituents are responding.

GOVERNANCE: THE CANADIAN CONUNDRUM

In the absence of federal leadership on India, and as the example of B.C. illustrates, institutions and some provincial governments have been going it alone. They will continue to do so until Ottawa takes the initiative. The dilemma is that prolonged debate over jurisdiction will impede the efforts of individual institutions and provinces to move forward. This can be avoided. There are precedents for broader federal government involvement through bodies such as SSHRC, NSERC, the Millennium Scholarship Foundation or even a re-imagined Shastri Indo-Canadian Institute. Given sufficient funding and attention, even Canada's International Science and Technology Partnerships program (ISTP)²¹ could evolve into a model of federal engagement to support the initiatives of provinces and institutions. The centre must better respond to the realities of the global education market place and act upon its international responsibilities. There are safeguards built into the federal system so that the centre can encroach upon any constituent jurisdiction it deems worthy. Former Prime Minister Pierre Elliot Trudeau argued that there are times when encroachment upon jurisdictions

may be justified (albeit most where it would not be), but that it is “up to the voters to elect, at the federal level, a government that will do its duty as far as national defence is concerned, and, at the provincial level, men who will give education the priority it requires”.²² Depending upon who is buying the drinks, encroachment can be collegial.

MOVING FORWARD

The impetus for deep Canadian engagement in India is both economic and geopolitical; support for the academic mission as the primary thrust of Canada’s foreign policy agenda in India will achieve both ends. It will allow investment in India’s education and emerging technology industries; it will encourage more Indian students to choose Canada; it will necessarily foster increased awareness and tolerance from the Canadian side and will encourage broader involvement with the next generations of India’s ruling political, academic, science and business elites.

If it is felt that recruitment is our sole or even primary aim in India, there is no need to dialogue further. But for a truly comprehensive relationship to emerge with India, to mutual benefit, Canada must actively support – or encourage through tax incentives and the networks of the proposed Canada-India Advisory Council – a litany of activities, relationships, investments and partnerships.

The balance of this commentary offers narrative and makes recommendations on the creation, content and implementation of a Canada-India Education Strategy. These will necessarily include the following:

1. Identification of and Mandate for a Champion within the Federal Government
2. Drafting of Terms of Reference for a Canada-India Advisory Council
3. Base Line Research and Intelligence
4. Creation of a Canada-India Advisory Council, with Secretariat
5. Dialogue
6. Drafting and Costing of a Comprehensive Canada-India Education Strategy, including goals, targets, deliverables, actors, and budgets
7. Implementation and Oversight

DIALOGUE, RESEARCH AND THE CREATION OF AN ADVISORY COUNCIL

A mandate must be given to a champion within the federal architecture; this might be through DFAIT, through the CMEC, or perhaps through the Learning Branch of HRSDC. Provincial and institutional buy-in is essential at the outset. It will be necessary to convene a dialogue to establish parameters, objectives, priorities and instruments. Challenges will be to move quickly in establishing Terms of Reference for a Canada-

India Advisory Council as well as thoughtful discussion as to the composition of the Council itself, where it will be important to address the interplay of Canadian governments at all levels, as well as the private sector, institutions and associations. The tendency to blame dysfunction on Canadian federalism will be offset with political weight, a sound argument, and funding support.

Pivotal to the imagination, implementation and maintenance of this Canada-India Strategy will then be the creation of this body at arms length from government, a pan-Pacific and diverse Canada-India Advisory Council of eminent researchers and education leaders, education marketing elite, business leaders, politicians and senior members of the broad India diaspora in Canada, ideally with records of success, action and collegiality and the ability to harvest networks for common good; counterpart but like minds will be identified in India to support discussions at that end.

It will be important to give the Council a broad mandate, to support it with a modest working secretariat, to arm it with intelligence of current activities from competitor nations as well as Canada's own strengths and engagement, and to task it to make recommendations about a geographic focus for Canadian efforts in the sub continent.

Intelligence: A Base-Line Analysis

One immediate gap is base-line research to provide benchmarks for measuring success. This could include a study of inventories of existing relationships; student numbers, disciplines and programming in India and in Canada; joint and collaborative research; and immigration concerns. There is currently no national database covering higher education agreements, MOUs, or programs between Canadian and India. It will be useful to better understand the economic impact and economic potential of higher-education collaborations with India. Student recruitment is part of the equation, but perhaps even more important is the potential impact on Canada's labour force and economic competitiveness. Education is valuable in its own right but is also as a platform for meeting other economic objectives.

Second, it is essential to re-examine the scope and impact of existing federal programs focusing on India directed federal scholarship and fellowship programs, and the Shastri Indo-Canadian Institute. For example, there is concern from the university research community that the Canada-India Science and Technology agreement in its present form has limited potential to foster bilateral research projects in Canada and India due to intrinsic bureaucratic hurdles and historically modest funding. There is concern that the

activities of Shastri remain stuck in Old India and export old Canada.

In addition to mapping traditional social science linkages in fields such as literature, anthropology, gender and cultural studies, intelligence must address the new frontier of joint research and emerging industries where Canada shares strengths with India, in fields such as in biotechnology, nanotechnology and life sciences, immunology, interactive arts, animation and entertainment, especially the film industry.

Geography

India is large and diverse and Canada's strategy will need to identify a geographic focus for Canadian efforts, formulated upon an objective analysis of data. Recent economic discussion concerns the rise of 'super corridors,' the approximately 40 urban conurbations that dot the globe and increase in importance with the decline of centralized economic and geopolitical power in nation states. Examples offered include the Vancouver-Seattle-Portland corridor, Amsterdam-Brussels-Antwerp, Toronto-Buffalo-New York, San Francisco-Los Angeles-San Diego, and the east coast of China from Hong Kong to Beijing. These corridors are home to fewer than 30% of the world's population yet account for over 80% of wealth generation and close to 95% of global research innovations. The Chennai-Bangalore-Hyderabad-Mumbai corridor spans the breadth of India and is the largest, most educated and most affluent corridor in South Asia; it is anticipated to become one of the most important global corridors this century. Market entrance strategies might focus on this corridor. This is not to suggest, however, that a Canadian strategy should not be nuanced enough to also engage with important diaspora linkages in the Punjab and in Delhi.

CONTENT

Trading Education Services

Education is a service, and components of any strategy must recognize that recruitment and components of educational delivery will be viewed as a commodity. Following WTO definitions, services can be exported in several modalities. In the case of Canadian education in India, these could be the following:

- Indian students buying or consuming educational services in Canada.
- Indian students buying or consuming educational services in India.
- Indian students attending Canadian-accredited institutions in India.

Any one of these modalities, or a combination of them, must be thought through and supported by a clear strategy, thorough planning, and marketing materials that not only

promote Canada's strengths in the education field, but also address the needs of Indian students and provide them with information that will help them decide where to study, what to study, and how to study their chosen field.

Additionally, Canadian actors must also understand the great opportunity afforded our educational institutions by the private sector in India. Many Indian multinationals have set up their own bridging programs to educate new employees entering their ranks to ensure a higher level of quality or to transmit company-specific knowledge. With a deserved reputation for quality, Canadian institutions are positioned to benefit from this trend in tailoring business education in the form of short and medium-length programs. And there is an open invitation: Higher Education Secretary R P Aggarwal stated that "India is on the verge of a 'knowledge revolution' and if both countries work together . . . and Canada shares its excellence in higher learning with India, it will go a long way in strengthening bilateral relations."²³

Assessing Previous Knowledge

The increased mobility of students and workers is beneficial to those who have the ability to relocate as well as to the jurisdictions that can accommodate them, particularly at a time when Canada is coping with its own skills and labour shortage. Mobility has its challenges, however, particularly in credentials recognition and prior learning assessment (PLA) of educational attainment. If Canada is to be competitive in attracting graduates and students, the country and its provinces require agreed systems to assess foreign credentials. Such systems must be predicated on three principles: transparency, efficiency and simplicity. Alberta and British Columbia are engaged in discussions already on a mutually agreed foreign credentials recognition system; there may be room for federal involvement.

Joint Programming and Quality Assurance

Canada must articulate and export quality mechanisms to support the burgeoning private education sector, with a Canadian stamp of quality on joint initiatives that will be a drawing card in a field mired at present with mediocrity. The nascent education private sector in India is an opportunity that at the minimum needs to be researched; it is likely the future of education for much of the populace and is in desperate need of quality support. The identification, adoption and support of a select group of private schools will impart a quality brand and allow long-term mutual gain.

Curriculum at Home

Canadian provinces must ensure a better understanding of India by supporting curricular innovation across the country, including the teaching of South Asian languages and content in K-12 and post-secondary systems. Opportunities should be created for Canadian K-12 students, as well as for post-secondary students, to learn about India and to have the ability to visit and to study in India. Consideration must be given to the creation of vehicles and avenues through recruitment as well as more other innovative approaches such as joint and dual degrees, 2+2 programs, offshore delivery, faculty exchange programs and generous fellowship schemes that will allow Indian students to study and research in Canada and with Canadian children through a number of different interfaces.

Mobility

The importance of the flow of people and the encouragement of direct contact cannot be overstated; the mobility of students, staff, faculty and researchers is fundamental to success and generational engagement, especially as India remains hampered by an infrastructure that limits ease of technological contact. For those students who may never study in India, Canada must support faculty exchange programs to encourage visiting Indian lecturers and researchers into Canadian classrooms and laboratories. The strategy needs named chairs and endowed or funded visiting faculty schemes supported by the private sector, encouraged by innovative tax breaks that will open corporate coffers. It needs to support exchange and study abroad to India, through mobility scholarships for Canadians to study to India and entrance scholarships for Indians to study in Canada. The issue of immigration and student authorization looms large over mobility, especially but not limited to students from India to Canada. Dialogue and federal support for institutional and provincial initiatives in India must be encouraged.

Research and the Graduate Mission

Perhaps one of the most important planks in the strategy will be that of support for graduate education and the research mission. Canada's laboratories as well as India's need external support to move and fund the authors of our next patents and vaccines, to mentor the next researchers, to design the next wave of gaming and entertainment and to foster disruptive technologies. Support must be found from private or public sources for joint research and the exchange of researchers and faculty, reciprocal research fellowships, research seed funding, and graduate recruitment fellowships for

researchers, graduate students and post-docs to and from India corporations, institutions and research labs.

Internships and Co-operative Work Placements

One prominent report has suggested that Canadian institutions may be able to help India establish a co-operative education model? Canada must explore whether this is feasible and if Indian stakeholders are interested? There is need to support work, internships, service learning and cooperative and on-the-job education for Canadian students in India and their graduate students and researchers here in Canada. Reciprocal internships supporting strategic alliances with key corporations (TATA, Infosys, WIPRO, etc.), in key complementary sectors, especially at the graduate level, should be sought, with seed funding for partnerships and special projects.

CONCLUSION

Individual post-secondary institutions have by and large been taking care of themselves internationally, but recent experience shows they do better with provincial support and under a provincial banner; they would be world-beaters with a national program. There is currently no better laboratory than India in which to prove this. The distances are vast and there are no direct or easy connections. Funding and human resources both in Canada and in India are limited, and funding is crucial to nurture these partnerships. Can Canada harness sufficient resources to generate interest and to maintain institutional involvement? Can India? Is there a role for the private sector? What role should provincial governments or post-secondary institutions play?

The current movement between our nations of educators, leaders and business people is a mere trickle; the movement of information is virtually non-existent; and there is a mutual lack of awareness and understanding of each other and of each other's systems and potential, supported by unnecessarily thorny visa and immigration issues. Through increased dialogue and attention, and through the introduction of pilot programs and better dialogue, the flow of people can increase dramatically.

Finally, there is great need to focus our attention on what is achievable from a country of 33 million in a country of 1.2 billion. Canada cannot do everything, but it does some things very well. Higher educational collaboration is but one dimension of a strong bilateral relationship. But more than any other activity it has the capacity to solidify personal, trade and cultural linkages. It is time to follow up overtures with resources and attention. "The best way to predict the future is to invent it."²⁴

ENDNOTES

- ¹ <http://india-4u.blogspot.com/2007/03/india-is-fifth-largest-economy-in-world.html>
- ² <http://www.careersintrades.ca/media/default.asp?load=fact01>
- ³ Another recent report notes that Canada will need about 16,000 to 20,000 Information and Communication Technologies professionals per year over the next ten years.
- ⁴ Even so, large numbers of these engineers are unemployable due to the quality of their private education.
- ⁵ <http://www.tribuneindia.com/2007/20070731/edu.htm#1>
- ⁶ <http://www.thehindu.com/2007/06/02/stories/2007060215722000.htm>
- ⁷ http://planningcommission.nic.in/plans/planrel/fiveyr/11th/11_v1/11th_vol1.pdf
- ⁸ See 'Innovation in Higher Education Partnerships with India: Comparing Canada, Australia, the United Kingdom and the United States' by Ryan Touhey.
http://www.asiapacific.ca/analysis/pubs/listing.cfm?ID_Publication=663
- ⁹ http://news.bbc.co.uk/2/hi/uk_news/politics/7198546.stm
- ¹⁰ The Hindustan Times, "India, France sign 21 agreements in education", January 27, 2008
- ¹¹ "Developing regional clusters in India: The role of national laboratories." Roy, Santanu and Banerjee, Parthasarathi. International Journal of Technology Management and Sustainable Development. Vol. 6, Issue 3, December 2007. 193-210.
- ¹² <http://www.charlierose.com/guests/kiran-shaw>
- ¹³ By way of example, as the University of Waterloo has done through hosting workshops and establishing faculty relationships in specialized fields such as nanotechnology; such efforts have paid dividends as the University can boast 26 IIT alumni in its science and engineering teaching ranks.
- ¹⁴ Albeit not all are first-tier degree-seeking students.
- ¹⁵ <http://www.ukieri.org/>
- ¹⁶ <http://www.iar.ubc.ca/centres/cisar/people.aspx>
- ¹⁷ http://www.ucfv.ca/MarCom/newsroom/Canada-India_Chair_backgrounder.htm
- ¹⁸ For example, at <http://www.sfu.ca/sfunews/Stories/sfunews071008013.shtml>
- ¹⁹ <http://www.canadaspacificgateway.ca/en/index.html>
- ²⁰ http://www.gov.bc.ca/ecdev/popt/media_room/hansen/down/india_report_jan07.pdf
- ²¹ <http://www.istpcanada.ca/ProductsServices/IndiaProgram/IndiaPDA/index.html>
- ²² Trudeau, Pierre Elliot. Federalism and the French Canadians. Macmillan: Toronto, 1968: 81.
- ²³ The Economic Times, "India asks Canada to invest in Education Sector": June 14, 2008.
- ²⁴ Alan Kay: <http://www.quotationspage.com/quote/1423.html>