International Higher Education

“Seizing the opportunity for innovation and international responsibility!”

By Ron Perkinson

(This paper provides detailed notes of the Plenary Speech presented by Ron Perkinson to the ‘Global 2’ Education Conference held in Edinburgh on 7th & 8th December, 2006. Ron Perkinson is the Senior Vice President of Whitney International University System, USA and until November 2006 was the Principal Education Specialist for the International Finance Corporation, World Bank Group in Washington DC. This speech was made to the Global 2 Conference on behalf of both the International Finance Corporation, World Bank Group, and Whitney International University System, USA.)

Introduction

The Global Education Market

The global education market climbed past $2.3 trillion in spending early this decade, with only an estimated 15% of the market in the developing world. By 2005 education spending had grown to around 2.5 trillion.¹ This estimate does not take account of various capital expenditures in the development of private education, which are too difficult to track and are acknowledged to be growing substantially in many developing countries. Teachers are known to represent about 5% of the global labor force and about one third of global market is in the United States alone. Primary & Secondary Education are still mainly funded by governments – especially primary education. But the tertiary landscape is rapidly changing, with free provision diminishing – and with governments and regulatory environments becoming more liberalized to cater for greater private sector participation.²

Growth in higher education student numbers worldwide over the last 6 years has been rampant. In 2001 – there were over 90 million students enrolled in higher education. By the end of 2003 the world had passed the 100 million threshold with around 4 million of the 11% plus increase happening in China alone where 4.2 million freshmen were accepted in tertiary institutions – or about double the number of students in the 1998 freshman classes.³ By 2005 global higher education had reached around 110 million students and by October 2006 the numbers had swelled to around 115 million students.⁴

In China alone almost 7 million applicants in 2005 took the national college entrance exam, for 4.2 million places – or close to a 60% acceptance rate, putting an already enormous strain on the higher-education system. India was responsible for another 2 million of the global increase between 2002 and 2005 – and the numbers worldwide continue to climb. IFC’s staff estimates in April 2006 showed that the private higher

¹ Sources: Dahlman, Carl, and Perkinson, Ron, October, 2006 - * = total public expenditures but only takes account of current private expenditures – includes IFC staff estimates 2005;
² Sources: Merrill Lynch 2000; OECD 2002; World Bank; IFC;
³ China MoE, China Education & Human Resources Report, Higher Education Press, Beijing, 2003;
⁴ Based on IFC staff estimates, based on various Ministry of Education estimates available at the beginning of northern hemisphere enrollments at the end of September 2006.
education market is estimated to be worth approaching $400 billion worldwide and is playing a critical role in advancing development of higher education and lifelong learning in many of the more developed countries.

**The Six Converging Forces of Change**

There are six converging forces of change – or a ‘perfect storm’ that is impacting on higher education globally:

1. **The increasing demographics across the world**: Most of the unmet demand and supply of higher education in the world today is in the developing world, where more than 80% of the world’s next billion people will come from. Except for Central and Eastern Europe where a gradual decline in secondary school graduates is expected over the next decade, the rest of the world will face increased pressures on their systems of higher education and training – more so than ever before. Developed countries will not escape the impact of these changes, especially from our most populous nations that include China, India and Indonesia. With rising visa difficulties, increased security requirements in more troubled times, coupled with rising improvement of institutional quality in a number of developing countries, student preferences are changing and an education at home is now becoming more appealing for many. This will place greater pressures on existing places in local higher education. More innovative thinking will therefore be needed to show how developed countries can make a positive impact on reaching the underserved groups and constituencies in a growing developing world where the demand and supply gaps are widening.

2. **The global decline in public financing** is impacting all levels of education. Governments around the world are balancing the needs of their education systems with fiscal realities. Over the last 20 years while public financing of higher education has been declining, increasing demographics in many parts of the world have continued. As fiscal pressures occur with perpetual funding constraints, rising costs, accompanied by unpredictable government support, the burden for financing has shifted to the institution level – which invariably gets passed on to the student in the form of tuition fees or similar charges.

3. **The increasing importance of knowledge** makes it a major driver of economic development today. But to create, advance and disseminate knowledge we need appropriate regulations & frameworks that will accommodate education and training systems that will cater for lifelong learners in more diverse societies. Governments are fast realizing the importance of becoming more the ‘enabler’ rather than the ‘controller’ of higher education and training. They can no longer entertain funding these areas on their own and are fostering private sector financing and provision to cater for new and more diverse kinds of learners.

4. **The further impact of Globalization**: We are seeing a rise of market forces in tertiary education and emergence of a global market for both higher education and training. We are seeing an increase in cross border education models that will hopefully have the potential to help developing countries fill the demand gaps left by their national education systems. As a result of globalization and the rise in private university numbers, we are seeing the impact of increasing demands from local and regional markets for more market-led and economically relevant programs - both
within and across borders. This gives rise to the emergence of new providers of tertiary education and changing borderless education models.

5. The growing impact of **Internationalization** is growing cross border activity in faculty exchange, international students and student exchange programs. There are increasing institutional relationships that share and support curriculum development and research – and research networks are becoming more international than local. And we are seeing growing interest and demand for the transferability of educational credits and qualifications, both national and across borders.

6. The continuing **Information & Communications Technologies (ICT) revolution** is creating a demand for employees who are capable of attaining new skills constantly. Use of technologies can impact on pedagogic strategies as they create new opportunities to expand access to education. Growing effectiveness in the use of ICT’s can advance conventional delivery models and supplement traditional modes of instruction. Governments in developing economies are openly fostering creativity in delivery models through the use of ICT’s and web-based delivery, to deliver mass education initiatives to underserved groups.

**Changing Demographics**

World population growth is forcing change in the way we have always thought about providing access to higher education. Between 1800 and 1930, it took the world 130 years to grow from 1 billion to 2 billion people. Between 1988 and 2001, or over 13 years, about one tenth of that time – the world grew from 5 billion to 6 billion people. Around 80% of this increase in population has occurred since 1950 and most of the increase occurred in Asia where half of the world’s population lives. Indicators also predict more than half of the next billion people will come from Asia.

More obvious cases include countries like **Indonesia**, which has 81 public and 2,236 private higher education institutions (HEI’s). In 2004 it enrolled around 900,000 (32%) of its students in its public universities and around 2.1 million students (68%) in its private sector institutions. Demand is increasing with around 2 million students annually graduating from high school. The gross enrollment rate (GER) in higher education is around 10% for the 18 to 14 years age group with little or no additional capacity in the public system to create more places for worthy students. As state university enrolments decline they remain highly oversubscribed, where in 2004 there were around 344,000 students who applied at the state universities for around 80,000 places – a decline from 398,589 in 2002. The reason for the decline includes increases in admission fees at state universities and an effort to improve quality of private universities. Around 15,000 new Indonesian students study overseas each year. Australia is the more popular destination where around 20,000 Indonesian students are currently enrolled.5

In **Malaysia** around 60% of the population is under 30 years of age. Around 10% of 18 to 24 year olds are enrolled in universities with another 24% enrolled in tertiary non-university institutions. The private higher education institutions enroll 12% of university students and 51% of tertiary non-university enrollments. Another 30% of population is

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still in school and the demand for places in higher education will increase substantially in years ahead.\textsuperscript{6}

**Vietnam** has similar challenges with a population of 81 million people, where the population is expected to increase to around 120 million by 2030. Around 65\% of the population is under 30 years of age, where the GER in higher education currently sits at around 10\%. In 2004 there were around 1.2 million school leavers for only 100,000 university places in the public system.

Around 60\% of **India**’s population is under 30 years of age. The country has struggled to raise its GER to around 10\% today, with 75\% of students enrolled in private colleges and universities. Some universities are known to receive over 5000 applications per place in a rigid and unfriendly regulatory environment for foreign investment in the higher education system.\textsuperscript{7}

**Pakistan** poses even higher challenges. It has a population of 160 million with only around 475,000 students in higher education today. The government expects this number to increase to 1.3 million students by 2010 (29\% CAGR). Approaching 60\% of the population is under 30 yrs of age and student enrollments represent only a 2.6\% GER in higher education. The country predicts around 30\% increase in in its workforce by 2015 and the country has welcomed more innovative approached to mass education in recent years.\textsuperscript{8}

Looking ahead in **China**, the estimated enrollment numbers in higher education by 2010 and 2020 are of another magnitude. There were 23 million students enrolled in 2005. Over the last 6 years the annual growth rate in student numbers has been 16\%. If one was to be very conservative and predict an annual growth rate of just 5\% (instead of the recent 16\%), higher education enrollment would total 27 million by 2010 and around 44 million by 2020.\textsuperscript{9} How will China finance such predicted numbers, even based on understated predictions? Alternative forms of financing will be necessary as China faces increased demand for places in the world’s largest higher education system.

\textsuperscript{6} Source: Malaysian Educational Statistics, ‘Quick Facts 2003’ – Ministry of Education, Malaysia:
\textsuperscript{7} Sources: - www.marketnewzealand.com - Sept 04; Mann M. RMIT Vietnam, 2005; India MoE 2004; IFC 2005 staff estimates:
\textsuperscript{8} Sources: Pakistan Higher Education Commission, 2006; Asian Development Bank, 2005; IFC staff estimates:
\textsuperscript{9} Sources: Business China, 14th March 2005; IFC 2005; Weifang Min, 8th May 2006, Washington DC:
A Time For Innovation

The continuum towards innovative and alternative financing

Reflecting on China’s situation again, compared with OECD country spending the challenges ahead it faces will be significant. In 2003-04 global education expenditures as a percentage of global GDP were estimated to be a little above 5%. OECD countries spent 6.1% of GDP on education in 2004, compared to China’s 3.2%. If China adds around 1.6% of current expenditure from its private sector, it means that China has a total expenditure, both public and private, amounting to around 4.8% of GDP. This means that China needs more than 50% increase on public expenditures alone to reach the world average, which is unlikely to be achieved. As total funding per student decreased from Yuan 6,178 in 2002 to Yuan 5552 in 2004 – and non salary funding showed similar trends, reducing from Yuan 2,453 in 2002 to Yuan 2,298 in 2004. China is facing up to its fiscal realities by asking students and their families to pay a greater share of the over all costs for higher education.  

Even in the European Union (EU) where many countries have tried to hold to the notion of free higher education for those who are academically worthy, all member countries invest on average around 1.2% of their GDP on higher education, compared with 2.6% in the US. Recent reports are now recommending that EU state-supported systems start introducing tuition fees. Higher education systems globally are having to balance the needs of their education systems with fiscal realities – forcing universities and HEI’s to become more reliant on future financing from non-state sources.

The trends in World Bank lending over the last four decades paint a similar picture. The Millennium Development Goals and Education for All have more recently taken precedent over borrowing by developing countries to fund education development. Between 1962 and 2002 World Bank lending for higher education dropped by 50%, to around 22%. Then over the three years of 2002 to 2004 it dropped further to around 12% of all education lending. Across the world the share of income from non-state sources for higher education is increasing, with heightening pressures on the private sector to increase its participation in both financing and provision.

Spending has not kept pace with increasing demographics

In 40 of the world’s largest developing countries, enrollments in higher education increased by an estimated 170% between 1991 and 2001. Public spending over the same period struggled to keep pace with the rising demand for places and from 1997/98 onwards, actual spending remained flat. Based on constant 1995 US dollars, the average spending per student across the 40 countries was an estimated US$618 per student.

10 Source: Weifang Min, 8th May 2006, Washington DC;
11 Sources: OECD Education at a Glance 2003; SweDevelop, 2003, Minban Education in China, 2003; Chronicle, 23rd June, 2006;
12 Source: IFC staff research and estimates, 2004: *Developing 40 includes: Angola, Argentina, Bangladesh, Bolivia, Brazil, Bulgaria, Cambodia, Chile, China, Colombia, Dominican Republic, Ecuador, Egypt, Ghana, Guatemala, Hungary, India, Indonesia, Jamaica, Jordan, Kenya, Madagascar, Malaysia, Mauritius, Mexico, Mozambique, Pakistan, Peru, Philippines, Poland, Romania, Russia, Senegal, South Africa, Thailand, Trinidad & Tobago, Turkey, Uganda, Uruguay, and Vietnam:
compared to US$7,712 per student averaged across all OECD countries.\textsuperscript{13} But if one considers the eight most populous Asian countries,\textsuperscript{14} the demographic picture is even more startling where student enrollments over this period increased by a staggering 260%. Most of this exponential growth was absorbed by the private sector! (see Table 1 below:).

### Table 1:

<table>
<thead>
<tr>
<th>Country</th>
<th>Enrollment in Private Higher Education (as a % of total)</th>
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<tbody>
<tr>
<td>Sth Korea</td>
<td>80</td>
</tr>
<tr>
<td>Japan</td>
<td>77</td>
</tr>
<tr>
<td>India</td>
<td>75</td>
</tr>
<tr>
<td>Brazil</td>
<td>69</td>
</tr>
<tr>
<td>El Salvador</td>
<td>68</td>
</tr>
<tr>
<td>Philippines</td>
<td>64</td>
</tr>
<tr>
<td>Indonesia</td>
<td>58</td>
</tr>
<tr>
<td>Colombia</td>
<td>38</td>
</tr>
<tr>
<td>Belgium</td>
<td>33</td>
</tr>
<tr>
<td>Chile</td>
<td>28</td>
</tr>
<tr>
<td>Paraguay</td>
<td>18</td>
</tr>
<tr>
<td>Portugal</td>
<td>19</td>
</tr>
<tr>
<td>Peru</td>
<td>16</td>
</tr>
<tr>
<td>Mexico</td>
<td>13</td>
</tr>
<tr>
<td>USA</td>
<td>8</td>
</tr>
<tr>
<td>Argentina</td>
<td>2</td>
</tr>
</tbody>
</table>

Sources: EdStats; World Bank; IFC staff assessments and statistics; OECD 2002; Government Statistics; Chile includes 1 publicly funded Private Catholic University.

**Increasing Importance of Private Higher Education**

In the United States evidence shows that private higher education provision has thrived over many decades, achieving higher results with rigorous regulatory standards, while also serving a disproportionate share of minority and lower income students.\textsuperscript{15}

Recent trends also indicate that public and private higher education are recognizing the benefits of working more closely together to optimize the gains in internationalizing higher education with the developing world. Evidence of this is in the internationalized activities of Australian higher education where the public universities have engaged in numerous ‘Public Private Partnerships’ to promote their offshore programs. The number of Australian offshore programs has risen from just 25 in 1991 to almost 1,600 in 2003, with most of them in Asia. International students enrolled in Australian university offshore programs alone exceeded 70,000 in 2004 with more than 85% of these programs in China & Hong Kong, Singapore and Malaysia. Australian offshore higher education varies from twinning programs, to distance learning, joint degrees and foreign campuses of different types. Over 70% of the partnerships Australian universities have developed with foreign HEI’s are with private universities and colleges, as well as with a small number of local private training entities (PTE’s).\textsuperscript{16}

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\textsuperscript{13} Sources: World Bank Development Indicators; World Bank Edstats; UNESCO Global Education Digest; OECD Education at a Glance, 2000 to 2002; IFC staff calculations.

\textsuperscript{14} The eight Asian countries are Bangladesh, China, India, Indonesia, Malaysia, Philippines, Thailand, and Vietnam.

\textsuperscript{15} Source: NCES; NPSAS:2000 Undergraduate Students 05/12/03; The Futures Project 2002; Kallierekos, Kosmo, 2004 – presentation to IFC Higher Education International Investment Forum, Washington DC.

More Innovative Ahead For International Higher Education

How will global higher education finance its future development? Higher education itself will have to seek out more innovative and realistic non-state alternatives, rather than continue to be reliant on state-based solutions alone. The International Finance Corporation (IFC), the private sector arm of the World Bank Group, recognized this conundrum in Yr 2000 and set a course of pioneering new and more innovative models for financing projects in developing countries, some of which have caught on and are being replicated on a wider scale.

**Structured Bonds/Loans** have emerged as one future alternative for both public and private higher education. Bond issues are typically suited to stronger and larger type higher education institutions that can show they have stable tuition cash flows and have a strong experience and track record of sound governance and management. Bond issues can strengthen market awareness of the institution and of the local higher education industry as a worthy sector for future investment.

In the case of Universidad Diego Portales (UDP) in Santiago, Chile – UDP launched in 2003 a local 8 year Chilean bond with a face value of US$23 million. IFC provided a partial guarantee ($7m) and the bond proceeds were used to finance the university’s expansion and modernization. UDP wanted to improve the quality of its operations by constructing three new buildings and refurbishing six existing buildings. The additional space catered for growth from 9,300 students to 14,000 students by 2010. The project accommodated the construction and refurbishment of the neighborhood in downtown Santiago, helping to also preserve the district’s heritage.

**Chart 2: The UDP Bond Structure**
The outcome of the UDP bond issue was highly successful in a number of ways. The bond received an AA- rating by the rating agencies, compared to the University’s own A rating. The issue was oversubscribed by around 38% in the local market, raising the interest for education sector investment among domestic investors, including pension funds, insurance companies and local mutual funds. Within six months of the UDP bond issue, another bond was launched for a second university in Chile, highlighting the demonstration impact that new financing initiatives can have across the higher education industry.

**Financing Facilities:** FINEM in Mexico is another education-specific initiative – a financing facility for higher education institutions with typical loan sizes of between US$100,000 to around $1 million, or slightly higher. The purpose of these loans can cover the purchase of new technologies, computer equipment and software, capital purchases of small plant and machinery, lab equipment, construction of new campuses, new programs, upgrading or development of EMIS platforms, R & D projects for entrepreneur incubators, as well as potential leveraged buyouts of other educational institution operations. Recent development is likely to also extend FINEM’s activities into student financing for financially disadvantaged students. In the case of FINEM – one education-specific financing facility supported by IFC can cover many institutions who would otherwise have limited or no access to capital for their expansion.

**Philanthropy/Grants/Donor Aid** - are also capable of leveraging their resources more effectively today, compared to what is happening in developing countries – and perhaps developed countries also. To support higher education around the world it is a time for greater innovation in the way donors, foundations and aid organizations leverage their resources. There is no better example than the Sampoerna Foundation in Indonesia, which is one of the largest education-specific foundations in South East Asia. The Sampoerna Foundation was established on 1st March, 2001 in Jakarta by Bapak Putera Sampoerna and PT. HM Sampoerna Tbk Shareholders. Today the foundation is a professionally managed organization with a focus on innovative education programs.

The foundation has become a pioneer by using its resources to leverage private sector investment in education financing. Graduates working in capital markets in developed industrialized countries have known and applied the theory of risk sharing and securitization for some time – taught in many well know universities where they studied. In Indonesia’s case, the Sampoerna Foundation is from a developing country – where it saw the need to innovate and seek IFC’s assistance to pioneer a risk sharing structure and mobilize private sector investment for financing students into higher education. It would not have been unreasonable to expect innovative financing of this kind to originate from a developed country first! Perhaps Sampoerna Foundation’s motivation was driven by Indonesia’s low level of public funding of its higher education system – and as a result have something to teach universities and donors from developed countries about future innovative financing possibilities in international higher education.
The Sampoerna Foundation initiative led to the establishment of a risk-sharing facility involving Sampoerna Foundation, Bank Internasional Indonesia (BII) and IFC. The facility extends loans to parents and students who have difficulty affording tuition and/or university entrance fees. An international first – the financing facility uses a risk sharing mechanism to leverage contributions from an education foundation into a portfolio of student loans. IFC’s total risk is up to US$10 million equivalent based upon a maximum facility size of around US$22.75 million. It was Sampoerna Foundation’s contribution of US$2.8 million to a special cash reserve to cover any first losses in the facility that provided IFC with the opportunity to participate in and structure the US$20 million+ facility.

**Chart 3: An Illustration of the Structure**

<table>
<thead>
<tr>
<th>Sampoerna Foundation/IFC Partnership</th>
<th>Student Financing Facility Structure - 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Bank &amp; IFC Share Senior Loss</td>
<td>17%</td>
</tr>
<tr>
<td>Local Bank</td>
<td>IFC</td>
</tr>
<tr>
<td>Foundation Covers First Loss</td>
<td>Local bank lends 7 x first loss reserve, to students</td>
</tr>
<tr>
<td>$2.8m loss reserve</td>
<td>Total &gt;$20m</td>
</tr>
</tbody>
</table>

**The Increasing Importance of Knowledge**

Knowledge is a key driver for economic development. Rising labor productivity accounted for half of GDP per capita growth in most OECD countries between 1990 and 2000 and systems of education, training and lifelong learning have become a pre-determinant for the health and development of knowledge societies today. If international and cross border higher education will add value to and advance knowledge in the developing world, it must also develop national and cross border curriculum strategies and delivery models that are more innovative and robust – and where internationalized affiliations are both ‘two-way’ and ‘market-led.’

A more highly skilled workforce is not just about the needs of big firms and government. It is also not just about putting more highly qualified people in to higher paying jobs. A proven impact on economic development comes from increasing skills literacy in the workforce, with mid and higher level skills that are not just necessarily about degrees only. In fact some indications give the opposite picture. A vibrant economy of larger firms, small to medium enterprise (SME’s), micro-enterprise and individuals, all need to be part of a more highly skilled workforce, with skills of economic relevance that will make the workforce more productive and competitive. New skills training and

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knowledge dissemination need to reach SME’s, the self employed, groups of individuals and the unemployed. Increasing skills literacy in the workforce is key to turning a country’s human resources into a strategic advantage.

**Lifelong Learning**

The impact of lifelong learning is changing student profiles. In OECD countries the proportion of adults with tertiary education qualifications has almost doubled over the past 25 years, rising from 22% to 41% today.\(^{18}\) Approaching 40% of all undergraduates in the United States and around 30% of Canadian undergraduate students are all over the age of 25 years.\(^{19}\) In Australia, New Zealand, Denmark, Norway and Sweden, over 20% of first year university students in 2000 were over 27 yrs of age.\(^{20}\) Lifelong learning is attracting new kinds of learners. They are becoming more diversified, older, and many of them are part time.

Developing a Lifelong Learning Framework requires some fundamental changes to the education system. Higher education institutions need to adapt, to change their missions and adopt different learning models, to cover formal education, on-the-job training as well as learners at home. With these changes, the role of technology can expand access and can give rise to new modes of delivery. The framework will enable more constant updating of skills, to develop a more highly qualified and flexible labor force with new sets of more relevant skills and competencies.

**Growing Importance of TVET & Information Technology Sectors**

There has been a resurgence of demand in the global ICT sectors that is putting increasing pressure on institutions of higher learning internationally. World wide jobs in the IT Industry totaled around 6.7 million at the end of 2004 and were predicted to grow to around 10.6 million by 2008. Employers in Europe and the US have reported shortages in some IT jobs, eg. Systems Architecture, Biotechnology, Bioinformatics, Nanotechnologies, amongst others.\(^{21}\) This has allowed new players to enter the university sector to fill the demand gaps that are growing across the globe. APTECH with over 3000 IT Training Centers in 52 countries, and NIIT, the other India IT training giant, have both taken steps to gain university status.\(^{22}\)

These shortages have served to highlight once more the importance of ‘technical and vocational education and training’ (TVET) sectors, where many countries have moved to blend TVET with academic education and recognize a greater diversity of programs in their formal systems of higher education. To enhance greater employability of graduates and to enhance learning outcomes, many leading universities have recognized that it is no longer practical to leave the growing and constantly changing higher-end areas of TVET outside of the formal higher education system of credentials and qualifications. In a

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\(^{18}\) Source: OECD, “Education at a Glance,” 2003:

\(^{19}\) Source: The Brave New World of Higher Education – an ACE/EUA presentation 2002, Madeleine Green & Peter Eckel, ACE & Andris Barblan, EUA;

\(^{20}\) Source: OECD, “Education at a Glance,” 2003:

\(^{21}\) Source: Economist January 2005 – The World In 2005 – McKinseys:

\(^{22}\) Hindu Business Line - September, 2004:
world of constantly changing technologies with shorter life cycles of new products and services, many OECD countries already fostered wider TVET courses in their formal systems of higher education, both tertiary-university and tertiary non-university. Such initiatives have also helped to overcome ‘stigma’ issues relating to vocational courses. They have fostered awareness of the importance of learning pathways and career pathways and we are seeing new growth for course-credit transfer across institutions, as well as across state and national borders.

TVET programs are becoming more ‘blended’ with academic programs across university systems that are fostering career pathways. In Australia for example, foreign student enrollments have surged in vocational education in recent years. In 2006 the Australian universities experienced around 5% growth over its 2005 foreign student numbers. But this was small compared to the TVET and TAFE (Technical and Further Education) institutions where the enrollments in 2005 increased by 13% over 2004 numbers – and then increased again by a further 21% in 2006 (April). In 2003 there were also 18,300 foreign distance students studying from 24 countries that were enrolled in TAFE programs, which included joint programs. Around 10,000 of these enrollments were in China alone.23

Advancing Vocational Education in China’s Workforce Poses Challenges

By looking deeper inside China’s changing landscape – between 1990 and 2001 participation in China’s higher education sector increased by a staggering 840%+ in both the tertiary university and tertiary non-university levels. This compares with basic education which increased by only around 2% - mainly due to the impact of the one child one family policy. But China needs to go far beyond its formal education system which enrolls approaching a quarter of a billion people today. It needs to also cater for an additional 750 million people in the workforce – three times the number of students enrolled in the formal education system. It is this workforce that needs to be kept up-skilled and productive to make China more competitive in today’s world of changing technologies.

China has had to get serious about advancing the development of its TVET sector. Many university graduates today are out of work, despite their qualifications. Many don’t have relevant skills and lack employability in China’s growing and changing economy. Many cities report that they badly need high-caliber skilled workers and technicians. But this conundrum is not in China alone. All countries across Asia and Oceana are reporting a lack skilled workers and technicians, forcing tertiary systems to embrace vocational education in different and more relevant ways. This new emphasis on TVET is a departure from the university-only obsessed mentality of the past and to highlight the importance China is placing on advancing its TVET system, in November 2005 the Chinese Premier Wen Jiabao announced that the State Council would earmark 10 billion Yuan (approximately US$1.23 billion) over the ensuing five years to develop its TVET sector.

23 Sources: Australian Dept of Trade, VTA Conference, Melbourne, Australia, 21 April, 2005; Australian Education International, April YTD 2006:
**Fostering Career Pathways**

'Career Pathways' is a term that is used to describe a pathway throughout one's working life that can include a range or groupings of careers that share similar characteristics and where parallel disciplines or employment requirements call for either similar or common skills and competencies. Career Pathways should cater for lifelong learners and allow for student or learner choice to align different career opportunities in the workplace. Typically career and learning pathways will allow students to become lifelong learners and advance up the qualifications ladder at different points in their working lives. Systems that accommodate career pathways and learning pathways will particularly accommodate adult lifelong learners wanting to re-enter the formal education system and upgrade their skills and qualifications to advance their careers – and to heighten their employability.

**Chart 4: Seamless System for Career Pathways**

Education systems in OECD countries typically accommodate career pathways (as can be seen in the chart that follows). However, when OECD countries engage in internationalized affiliations with higher education institutions in developing countries, a minority appear to be structuring the programs they offer to also accommodate career and learning pathways in similar ways to how they offer them at home.

**Chart 5: System That Accommodates Career Pathways**

Create New Learning & Career Pathways

- Universities
  - Degrees
    - bachelor
    - postgraduate
- Polytechnics/ Colleges
  - Degrees / Diplomas
  - Short Cycle Courses
    - units of learning
    - educational credit
    - certified training
- Senior Secondary
  - Matriculation
  - Vocational
- Vocational Education
  - Vocational Schools
    - apprenticeships
    - technical training

- different pricing strategies
- improved affordability
- can increase access and scalability
- improves links with private sector and local markets
Australia’s education system accommodates the development of career pathways and learning pathways for its students, both national and foreign. In 2004 around 58% of Australia’s full-time TAFE/TVET students and 19% of the part-time students were enrolled in Australian Qualifications Framework (AQF) Certificate IV or higher qualifications. Over all, around 7 in 10 TAFE/TVET students undertook AQF qualifications and nearly half of all TVET students were enrolled in AQF Certificate III qualifications or higher.24

**Tertiary Non-University Growing in Popularity - for Greater Employability**

Systems that foster both tertiary-university as well as tertiary non-university students and programs are on the rise. Mexico for example, provides a typical picture that is found in many developing economies where the numbers of tertiary non-university enrollments (3.3 million or 56%) exceed those enrolled in tertiary university education (2.6 million or 44%).25 For many students from socially disadvantaged backgrounds, it is also about obtaining qualifications to improve their employability. Tertiary non-university / TVET courses can typically be shorter cycle, lower cost and more affordable.

**Table 6: Mexico**

<table>
<thead>
<tr>
<th>Tertiary University System</th>
<th>2.6 million</th>
<th>44%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary Non-University System (TVET)</td>
<td>3.3 million</td>
<td>56%</td>
</tr>
</tbody>
</table>

By contrast India’s formal and informal TVET sectors pose huge challenges for the government and its formal system of education and training. India has only 8% or around 28 m students enrolled in its formal or organized TVET sector, with around 92% or 369 million enrolled in the informal TVET sector. Systems of training, re-skilling or upgrading qualifications are also not readily available. This means that current knowledge economy and economic strategies preferred by India’s Knowledge Commission are under pressure where the state is unlikely to execute on its own, the required changes in financing and provision it requires, at least not without the help of the private sector. India needs to change existing restrictions for external commercial borrowings for its education trusts and foundations and find new ways to introduce and inject regulated foreign quality-based investment in its higher education system – and more actively foster internationalized support from recognized foreign higher education institutions.

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24 *Source: NCVET 2004 and Australian Government 2005, “Australian Vocational Education & Training Statistics,” Published by NCVET.*

25 *Sources: AT Kearney, Mexico, 2004; Ministry of Education data, 2005:*
systems and providers. If we consider there are around 110,000 students from India studying abroad that spend $1 billion on their higher education, this is a high amount for a country starved of education resources.  

*Alternative Learning Pathways - Problems in Europe*

The Commission of the European Communities has also recently criticized European universities for failing to open up other kinds of learning pathways and career pathways to the changing economies – where the criticism includes the lack of short-cycle non-degree type TVET programs for adult learners or for traditional students not studying via the traditional routes. Today less than 25% of Europe’s working adults have a university degree – this compares with 38% in US and 36% in Japan. Germany has recently dropped to a ranking of 20th among 30 OECD countries for reading and mathematics, it is now 23rd for number of College graduates it produces – and companies are having difficulty finding workers with relevant skills, despite 4.5 m registered unemployed. The European Union’s complex social and political order of cultural, ethnic and linguistic diversity already poses challenges for achieving the objectives envisioned by the Bologna Accord – to provide a Europe-wide framework of degrees and qualifications for students from its member countries.

Today the development of knowledge societies is putting greater pressure on systems of higher learning - more so than was the case prior to the awakening of internationalized higher education in the early 1980’s. Today local markets are demanding more of a say in what is taught in higher education programs, calling for a greater diversity of programs that will produce graduates who are equipped with knowledge and skills of economic relevance that will heighten their employability when they enter the workforce. Limiting the development of alternative learning pathways has served to stifle the development of adult education in some European countries. It has impeded access to higher studies for many worthy individuals – and importantly it has also served to slow innovation in curricula and teaching methodologies, especially with respect to entrepreneurship.

Across the world in systems of education, training and lifelong learning, there is a growing demand for more flexible and relevant curricula and qualifications (short cycle, Bachelors, Masters, Doctorate programs) at all levels – that will correspond to the needs of local, regional and international markets. To increase access and improve affordability of vocational and academic education for the growing numbers of worthy students, higher education providers and the systems in which they operate are becoming more innovative and practical about the more scaleable ways that quality programs can be structured, priced and delivered.

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27 Sources: This paragraph is drawn from the Paper for the Commission of the European Communities; “Delivering on the Modernization Agenda for Universities: Education, Research & Innovation” Brussels, 10th May 2006; Eurostat, 2005:
**Growth in Credit Based Higher Education**

Many developing countries have tuned-in to the benefits of credit-based higher education, where learning pathways and credit transfer will allow students to climb qualifications ladders at their own pace. In 2005, the Ministry of Education in Vietnam introduced credit-based education and training, providing flexibility for students to earn credits towards degrees at their own pace and thereby phasing payments in smaller amounts to improve the affordability of higher education programs for students who may not have enough cash or access to funds all at once to pay full-time tuition fees at local universities. In Singapore, Informatics offers its “Through Train” Program where students can climb the qualifications ladder from ‘O’ Levels (13 to 16 yr olds) through to post-graduate programs. In China CIBT fosters education credit transfer from automotive training schools, to universities in Korea as well as with US universities. In India, Aptech offers the first 2 years of a bachelor degree program, where the final 2 years of provision are transferred to Manipal Academy of Higher Education in Sikkim, to University of Sunderland (UK) or to Southern Cross University (Australia).

**The Paradigm Shift – More Innovative Structuring, Pricing & Delivery Required**

To begin to reach the magnitude of worthy students in the under-served societies in the developing world, we must be prepared to entertain new systems of mass or distributed delivery that take us outside of the paradigm of traditional campus-based delivery. There are growing examples of universities that are championing different and more innovative ways to reaching wider audiences in more distant or disadvantaged locations. Tec de Monterrey (ITESM) in Mexico is a university with around 101,000 students, of which around 83,000 students study one or more of their courses on-line through Universidad Virtual (ITESM’s virtual university). ITESM and its variety of programs have successfully demonstrated how to make the use of new technologies and mass/distributed delivery systems co-exist, despite variable infrastructure existing in many of its target markets.

Cross border delivery and internationalized affiliations require host country institutions to adapt and structure pricing astutely, to customize and package delivery of programs to meet the context and needs of local markets – while at the same time, comply with and assist education authorities to meet their local policy objectives. However, in many developing economies, students and families with lower and non regular income tend to respond to ways they can ‘buy smaller’ as cash becomes available.

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**Innovation in Course Structuring & Pricing**

More innovative pricing strategies that can break course work down in to learning ‘units’ and earn credits, is typical of how programs and courses are beginning structured in a growing number of countries. By lowering the cost thresholds to make repayment of tuition financing easier, it also creates potential for delivery models that co-exist with available technologies, to become more scalable and economic.

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28 Sources: Credit Based Education & Training - Vietnam News 8th July 2005 and 29th July 2004:
More innovative pricing strategies that can break course work down in to learning ‘units’ and earn credits, is typical of how programs and courses are beginning structured in a growing number of countries. This is also becoming characteristic in many internationalized affiliations and joint programs that are on the rise between universities in developed and developing countries. Credit-based study is perceived and used to help increase access, create greater affordability by allowing students to study at their own pace, and to work while they study. By example – if 4 x pieces of coursework in one semester can earn (say) 6 x credits, how many internationalized or affiliated programs structure their courses so that students can also choose to purchase 2 x pieces of coursework that earn 3 credits? By lowering the cost thresholds to cover tuitions or make repayment of tuition financing easier, it also creates potential for delivery models to become more scalable and economic.

A Time For International Responsibility!

Preparing the Next Generation for an Internationalized World of Work

Approaching 10% of Australia’s adult population today is made up of foreign born graduates. The figure is 7% in Canada, 5% in Switzerland, around 3% in the United States, with the UK falling just below this. Higher education is helping to prepare the next generation of students for a growing world of work.

However, as other sectors of the global economy engage in globalization and cross border trade, international higher education has in reality barely scratched the surface in optimizing the gains that both globalization and internationalization can do to help build capacity and increase coverage of higher education in our less developed countries.

Since Yr 2000 there has in reality been very little cross border trade in higher education, despite the hype that exists in the press and in the many OECD countries that compete in similar markets and have become more reliant on the income they earn from foreign students than was the case in past decades. Today barely 2.5% of global tertiary enrollments are students that enroll in foreign universities – and although this number continues to grow, it is very small when one considers the unmet supply and demand that exists in the global higher education sector.

Since 2000 Apollo Group (through Western International University) have invested in India, Holland and China; CIBT of Canada, the University of Nottingham and Napier University of Edinburgh have made investments in China; Jinan University is the first

Chinese university to open a branch campus outside of China, in Thailand; Raffles Education (Singapore) has campuses in Australia, Malaysia, Hong Kong and India; the University of New South Wales is establishing its own campus in Singapore; Manipal Academy of Higher Education (India) has invested in Nepal, Malaysia and Antigua; Estacia University Group in Brazil has invested in a campus in Paraguay; Laureate Education Inc. in the US has around 240,000 students in 15 countries; the Netherlands Business School (Universiteit Nijenrode) recently opened a branch campus in Nigeria; and Royal Melbourne Institute of Technology (RMIT) with assistance from IFC has invested in campuses in Vietnam (Ho Chi Minh City and Hanoi); and Whitney International University System based in the USA has made investments in Latin American Countries.

Need For High Quality/Lower Cost Models
In terms of higher quality and lower cost cross-border higher education, UNISA (South Africa), Manipal Academy of Higher Education (India) and Whitney International University System (US) appear to be the more obvious providers using scalable delivery models that make access to their programs more affordable. Whitney International University System (Whitney) is a recent start-up with operations in the US and in Latin America, its mission is: “to provide universal access to the highest quality and lowest cost higher education throughout the developing world.” All of Whitney’s programs are linked to academic credentials and qualifications and they have used leading international experts in their fields who have come together to design, develop and establish a model that is customized to the context of each country. Whitney’s model is also open to partnerships between both public and private sector providers – where its objective is to work alongside its partners to help them develop their own high quality / lower cost models in compliance with local regulations and to blend with local education policy objectives. It is not if - but when others will follow in the UNISA, Manipal and Whitney footsteps and optimize the social and economic gains that await scalable future cross border investment that are high in quality and lower in cost.

Cross Border Models - Some Reputational Issues
Perhaps one of the reasons why cross border provision is still ‘at the beginning of the beginning’ – relates to earlier unfortunate attempts by diploma mills and fly-by-night operators who did little to advance the coverage and quality of higher education in the countries where they offered their programs. Based on lessons learned and as cross border provision grows, the reputation of the education system in provider’s home country will be all-important. A provider’s ‘quality at home’ is now also becoming a decision making issue for students as well as for local partner institutions. Some low quality programs and the unfortunate actions of a few, both public and private, will inevitably impact on the reputations of many. In India there were around 114 cross border providers – both public and private, offering programs in 2004, of which over 30% were not accredited or recognized in their countries of origin, causing reputational backlash, uncertainty and a growing lack of confidence about ‘value for money’ for these qualifications.31

31 Source: John Daniel & Asha Kanwar (Commonwealth of learning) & Stamenka Uvalic-Trumbic (UNESCO) April 2005
Education industry commitment to establishing quality systems – both national and cross border, will only serve to enhance the quality and relevance of programs and serve to preserve the Industry’s reputation base internationally.

**Students Studying Abroad**
In 2003 there were over 2.1 million foreign students studying abroad in OECD countries alone, and over 2.5 million across the world. The largest student numbers came from China, India and across South East Asia.

In 2004 foreign students studying in the USA dropped to around 576,000 (or around 27% of OECD country total) – and the growth also remained flat in other OECD countries in 2004 and 2005 except for Australia where foreign student numbers increased by around 13% in 2004 and 2005 – and 6% by April 2006. Of the total 2.1 million students, most originated from the higher Human Development Index (HDI) countries. Foreign students from the world’s poorest countries remained a very small percentage of the total.

However, developing countries have also seen the benefit of competing for the foreign student market. China enrolled around 141,000 foreign students in 2006, up from 60,000 in 2002, where 75% came from Asia, around 11% originated from Europe and around 9% were from the USA. In 2002 Russia enrolled around 100,000 foreign students, 40% coming from CIS countries – and Malaysia enrolled 37,000 foreign students in 2003. Worldwide the international student market is a US$30 billion industry. Some estimates are that the industry could grow to around 8 million students by 2025 – but how students will engage in foreign studies will change over time, as more innovative distance, technology-assisted and distributed learning models take hold.32

International students are big business for OECD countries. In 2003 they were 13% and 8% respectively of Australia’s and New Zealand’s total exports in services.33 They were 4% and around 3.5% respectively of the US and UK’s total services exports in the same period. In Yr 2001 the annual trade in international higher education was around $30b, or about 2% of total services trade in OECD countries.

**International Student Trends Are Changing**
Australia in 2003 became the second most expensive country to study in after the United Kingdom, with tuition costs more than doubling since 2001. A study in 200434 compared five English-speaking destination countries (United Kingdom, Australia, United States, Canada and New Zealand) with emerging Asian countries (China, Hong Kong, Singapore, Malaysia, Thailand and India). Annual living costs for students in popular English speaking countries were – United Kingdom (US$11,152); Australia (US$9,519); Canada and United States (just under US$9,000); and New Zealand (US$8,686).

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32 Sources: OECD Education At A Glance, 2002 & 2003; IFC, 2005 & 2006; AUSTRADE 2003; NZ Trade 2003; China Cbnet 2004 & China Education Yearbook, 2002;Education World 2003; Malaysia MoE 2004; Foreign Policy, September 2004:
33 Source: OECD, Education at a Glance, 2003; Bashir, World Bank 2005
34 Sources: “Comparative Costs of Higher Education for International Students 2004” – IDP, Australia
Increasing competition from Asian countries included - Hong Kong (US$7,081) and India (US$1,515). Australia was impacted by an Australian Dollar FOREX increase plus a 12% per annum increase in tuition fees and living expenses – plus other factors. But despite these findings, Australia continued to maintain the highest growth of foreign students in all OECD countries, which suggested that Australia must be offering value add beyond the ‘cost of study’ – implying perhaps the higher value that foreign students place on other perceived benefits, like program relevance, qualifications and career pathways – and how they can create better value for money.

**Internationalization Is About Building Two-way Enduring Relationships**

Internationalization is not just about foreign students traveling to OECD countries to study. In today’s world higher education is expected to prepare its graduates for a new and more complex world of work. It is these graduates who will be the future leaders that will help to make our countries become more productive and internationally competitive in the changing globalized world of international trade. All students will benefit from the opportunities that come from cultural immersion where internationalization fosters two-way enduring relationships internationally amongst institutions of higher learning. The growth in joint programs and degrees is already evident – and will continue to grow, fostering international transferability of credits and qualifications. No better example of this exists than in China, where its public universities alone had about 720 joint degrees with western HEI’s in 2003. This grew to more than 1100 by April 2006 - and this trend continues to grow.\(^35\)

Singapore is another interesting case to highlight. The government has openly fostered private sector financing and provision in higher education. In 2003 there were 170 private tertiary providers with 119,000 students – 75% of them studied in foreign joint/affiliate programs. In addition, 35% of them were over 30yrs of age and 30% were 25yrs to 29yrs of age – indicating that most of them were lifelong learners. Although the United Kingdom and Australia held the lion’s share (90%), some of the joint foreign partners were amongst the world leaders (including Wharton, INSEAD and others).\(^36\)

Many private HEI’s across the region are becoming a force to be reckoned with – and higher education can no longer ignore the future potential of the private sector to advance new and more innovative higher education investment, accessibility and quality across the region.

To further amplify the China case – British universities also rely heavily on the Chinese market to make up the losses incurred in teaching British undergraduates. By 2003 the UK’s foreign student numbers grew to around 200,000, bringing in more than £1.25 billion pounds or $2.4 billion per year in fees, which is around 10% of the total universities’ income.\(^37\) By 2005 applications had fallen by 5.3%. China accounted for about 25% of the United Kingdom’s foreign student numbers in 2004. Some of the reasons for the changing trends include noticeable improvements in institutional quality.

\(^35\) Sources: Business China 14 March 2005; China Ministry of Education, 2006; IFC 2006;
\(^37\) Source: Economist - March 2005;
in some HEI’s in China. The Chinese labor market is also no longer putting such a large premium on having just a foreign degree. Local qualifications, joint degrees, twinned qualifications and local work experience are starting to count for greater employability. ‘Certified’ training and lifelong learning programs are also growing in appeal. How are higher education institutions from OECD countries really tuning in to - and matching their offerings with China’s changing needs?

In 2003, British universities had in place around 160 joint program affiliations with Chinese HEI’s. They see the southern hemisphere as strong competition for foreign partnerships in the Chinese higher education market – but in reality is this the case? China has over 20 million students in higher education, the largest College population in the world – but if we put all the students studying joint programs together, they will barely represent 1% of those enrolled in higher education. In India, our second most populous nation, it is much less than this again. In reality the meaning of the word ‘competition’ in the context of international higher education – is more about choice and less about competition as it applies to other sectors. Putting the efforts and experience of all OECD countries together, the Industry has barely scratched the surface in becoming a globalized and internationalized industry. The opportunities ahead for international higher education, in social, commercial and economic terms – are huge! And there remains little argument that in the near term, higher education, both public and private, should be collaborating and working together more effectively to help extend quality higher education to within the reach of our global underserved societies.

**Internationalized Networks, Intellectual Pursuits & Innovative Delivery**

Australia has been one of the leaders in varying its delivery portfolio of offerings to foreign students – away from campus-based enrollments only, with around 40% of the total studying in post graduate programs. Universities are responding everywhere to the pressures of a more globalized world where innovation and research are no longer isolated activities. International networks for research and innovation are transcending cultures, where solving problems now go beyond traditional disciplinary structures and borders. As research environments and innovation become more competitive – so too do they require greater global reach and cross border interaction.

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38 Sources: Australian Dept of Trade, VTA Conference, Melbourne, Australia, 21 April, 2005; Australian Education International, April, 2006; AIEA Fact Sheet & NCVER Australia 2005:
A Time of Opportunity

Options for International Students Are Increasing
As the markets we work in dictate more about what should be taught, there is a trend where some foreign degrees are being challenged by many local and regional options. Employers will continue to demand that graduates and workers can fit and adjust to constantly changing markets, equipped with more up to date and relevant skills. Both the private sector and governments are realizing the importance of qualifications and skills of economic relevance, where new and smarter lifelong learning initiatives will provide greater promise of reaching underserved groups and workers. The rise in quality of local and regional higher education in developing countries is beginning to make study close to home more appealing to many. Partial international study is also perceived to be an acceptable alternative for providing cultural immersion. Universities used to hold the high ground for attracting foreign students – and although their importance will always remain high - the need for new systems of education, training and lifelong learning in our less developed nations will continue to demand wider choice and flexibility of programs, both vocational and academic. Effective international relationships and affiliations are working to accommodate this.

As yet however, the real gains from cross-border University & TVET/Polytechnic/College partnerships are yet to be optimized. Navigating the converging changes ahead, the most successful countries and institutions that export higher education services will be those that establish the longer term and enduring relationships – where knowledge transfer and cultural immersion will become part of a two-way relationship that supports mutual social and cultural development, while promoting stronger political and economic harmony.

Open & Distance Alternatives
Open and distance education has the chance of increasing access and opportunity for many of the marginalized populations in the world today. China and India alone account for around 25% of the world’s tertiary enrollments and this combined percentage could easily exceed 30% by 2010 if government objectives are achieved. But despite these predictions, both countries will struggle to achieve half the gross enrollment rates of developed countries where age participation rates of 40% to 50% and above, are becoming the norm.

Tertiary distance education is the fastest growing sub-sector in education today. It represents around 15% of all higher education students worldwide. Asia had about 4 million tertiary distance students in 2004, of which around 2 million were in China alone. Looking at other regions, around 30% of all tertiary courses in Russia are distance;³⁹ plus Latin American countries have over one million distance tertiary students mainly in Brazil, Mexico, Colombia and Venezuela. The European Assn of Distance Teaching Universities has 18 members from 14 countries, providing distance education to around 1

³⁹ Source: SweDevelop Report 2003 – Market Study for IFC
million students.\textsuperscript{40} And in Australia, over 50\% of foreign students enrolled from Singapore and Hong Kong in Australian campuses are distance. The University of Phoenix is the largest private university in the United States with more than 300,000 students. Distance courses enrolled around 35\% of its students in 2003.\textsuperscript{41}

\textbf{Only Modest Growth in On-Line Higher Education}

In the US there were 1.9 million students studying on-line in 2003. In 2004 this figure rose to 2.6 million students, or around 16\% of all higher education students, which was a 24\% increase. Approximately 40\% of these students were fully on-line students, which was an 18\% increase over the previous year.\textsuperscript{42}

However, web-based education has still been slow to develop across the globe – most of the delivery is commercially-based and the majority of it is private. In 2004 there were estimated to be one million students studying on-line in China.\textsuperscript{43} Tec de Monterrey in Mexico enrolls over 100,000 students and provides a blend of campus-based and on-line learning to more than 5000 students studying from outside of Mexico in Latin American countries. But after this – the numbers are modest and on-line learning has yet to fulfill its promise of increasing access and coverage of higher education in the developing world.

\textbf{Corporate Sector On-Line Growth Continues}

Between 2000 and 2002, training in US companies delivered via classrooms dropped by almost 10\% while training delivered via learning technologies increased by 12\%.\textsuperscript{44} The Corporate Training sector is a space where e-learning will continue to grow. In 2002, approaching 20\% of corporate training in US was on-line, more than twice of what it had been three years earlier. Many of the large corporates in recent years have become more dependent on advancing e-learning for in-company training. Motorola is estimated to have at least 30\% of its training on-line today. And many large US corporations have web-based knowledge management and proprietary learning programs in place and are putting greater demands on HEI’s to produce graduates who can adapt to the use of new learning technologies (e-learning and e-training) in the workplace. Some estimates forecast that the on-line / e-learning space will be a $150 billion industry by Yr 2025.\textsuperscript{45}

\textbf{PPP’s – The Realities Ahead for International Higher Education}

Future opportunities for both public and private higher education are becoming brighter, as both realize the gains that can come from public private partnerships (PPP’s), working more in partnership for the public and private good. Higher education in today’s world has become both a public good, as well as potential market for commercial interests.

\textsuperscript{40} Source: The Brave new World of Higher Education – an ACE/EUA presentation 2002, Madeleine Green & Peter Eckel, ACE & Andris Barblan, EUA – since updated by IFC staff assessments in 2004; \hfill \textsuperscript{41} Source: Company 10-K Report 2004 \hfill \textsuperscript{42} Source: Sloan Consortium Report 2004 \hfill \textsuperscript{43} Source: IFC staff estimates over 2004 and 2005: \hfill \textsuperscript{44} Source: World Bank Institute, 2004 - Xiaonan Cao – Workplace Learning & E-Learning Adoption \hfill \textsuperscript{45} Source: IDC
Opportunities also exist for regulatory authorities in higher education to advance non-state financing in the higher education industry. Recent experience demonstrates that quality-led private sector providers welcome even-handed regulations and strict quality standards. Generally, achieving higher quality standards and delivery from private providers is pre-determined by the regulatory environments in which they operate – and the framework and quality standards that makes them what they are.

The potential of non-state/private sector investment in higher education is far from realized in most countries. This will need to change if international higher education is to stand any chance of meeting its obligations to create true social equity. In the following chart – history shows us that it is the private sector that invests more than double what the public sector invests across all sectors of developing economies.

### Table 7: Public & Private Investment

<table>
<thead>
<tr>
<th>Year</th>
<th>Private Investment</th>
<th>Public Investment</th>
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<tbody>
<tr>
<td>1970</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>1974</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>1978</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>1982</td>
<td>0.00%</td>
<td>0.00%</td>
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<td>0.00%</td>
<td>0.00%</td>
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<td>0.00%</td>
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<td>1994</td>
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<td>1998</td>
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<td>1999</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>2000</td>
<td>0.00%</td>
<td>0.00%</td>
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</table>


In the education sector however, the trend is quite the opposite (see the chart that follows). With the convergence of tightening fiscal, demographic and market-led pressures, governments can no longer afford to fund the future changes that are necessary, on their own. As an industry we have yet to fully optimize the gains of public private partnerships in both financing and provision of higher education.
Table 8: Education Spending – Public & Private

Education is the opposite!
How do we mobilize underutilized resources?

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Public Expenditure</th>
<th>Private Expenditure (current only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>87%</td>
<td>13% *</td>
</tr>
<tr>
<td>2005</td>
<td>83%</td>
<td>17% *</td>
</tr>
</tbody>
</table>


It is difficult to identify any Industry over 20 years old that has not reached at least 50% of the world’s population – except for the higher education industry! It is difficult to identify any Industry over 20 years old that has not reached at least 50% of the world’s population – except for the higher education industry! Combined the global industry barely reaches 19% of the world’s 18 to 24 year old population – which in today’s world of growing demographics, is unacceptable – and would be deemed as failure in most other sectors.

Creating Cross Border Harmony & Understanding

Higher education should be a conscience for our societies in these difficult times of social and political conflict.
Internationalized higher education is becoming more essential in promoting cross border social, economic and cultural harmony – and for nurturing our future generation of tomorrow’s young visionaries and leaders.

Challenges Create Opportunities

As clear as the challenges are – the higher education industry is also riding on a wave of huge opportunities, where opportunities abound for developing and internationalizing in more affordable and practical ways, whilst not compromising the drive for intellectual pursuits. Without future non-state / private investment, global higher education will fail to break the 20% GER threshold that is in sight. Further change is required in the ways the higher education sector is financed and regulated. In today’s world of social tensions and international conflict, the higher education industry must also play its part to continue to internationalize and grow our academic relationships and affiliations across borders. Internationalization of higher education can do much to promote understanding and cross border social, economic and cultural harmony – which is all important for nurturing the learners who will be our future generation of tomorrow’s young visionaries and leaders.
Seizing the Opportunity for Innovation and International Responsibility

To summarize -

• **Financing** of education systems will tighten, forcing governments to balance the needs of their education systems with fiscal realities. Financing of higher education will become more innovative, with much of it coming from non-state sources. Public universities will continue to commercialize and seek to fledge off selected academic operations into new business entities.

• **Demographics** will also outweigh fiscal realities, forcing governments to seek more innovative ways of pricing and structuring the delivery of education and training.

• There will be improved systems and curriculum developed to accommodate **lifelong learners**, in changing economies where education and training will become more market-led and of economic relevance.

• **Knowledge societies** will continue to be all important for economic development, fostering innovation and competitiveness through a more educated and skilled workforce.

• **Globalization and Internationalization** are changing the future landscape of higher education, both national and cross-border, in ways that will challenge older modus operandi. Transferability of credits and qualifications, both national and foreign, will continue to grow, promoting stronger two-way enduring relationships across borders.

• And **Information and Communications Technologies and the Internet** will continue to challenge the industry about optimizing the use of new technologies – and changing the ways we have always done things in higher education. Better use of new technologies will help the industry to devise newer and better models for advancing quality-based mass education delivery, to reach constituencies and settings that we have not yet reached.
### Abbreviations:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAGR</td>
<td>Compound Average Growth Rate</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GER</td>
<td>Gross Enrollment Rate</td>
</tr>
<tr>
<td>GNI</td>
<td>Gross National Income (average per capita)</td>
</tr>
<tr>
<td>HDI</td>
<td>Human Development Index (a UNDP Index)</td>
</tr>
<tr>
<td>HEI</td>
<td>Higher Education Institution</td>
</tr>
<tr>
<td>ICT</td>
<td>Information &amp; Communications Technologies</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation (World Bank Group)</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technologies</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic &amp; Cultural Development</td>
</tr>
<tr>
<td>PTE</td>
<td>Private Training Entity (or Establishment)</td>
</tr>
<tr>
<td>SME</td>
<td>Small to Medium Enterprise</td>
</tr>
<tr>
<td>TAFE</td>
<td>Technical and Further Education (Institute)</td>
</tr>
<tr>
<td>TVET</td>
<td>Technical &amp; Vocational Education &amp; Training</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>VET</td>
<td>Vocational Education &amp; Training</td>
</tr>
<tr>
<td>WIUS</td>
<td>Whitney International University System</td>
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