

Impending Changes in Global Higher Education: Cataclysm or Smooth Transition?



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Introduction

It is an honour to address to this Tenth Anniversary event of the Teaching in Higher Education Forum. I congratulate you all on what has been achieved in the decade and I thank Barbara Danos for remembering my contribution to the launch event in 1997 and inviting me back.

My title today is: *Impending Changes in Global Higher Education: Cataclysm or Smooth Transition?* I shall heavily draw on a paper that I published last year in *Change Magazine* with my colleagues Asha Kanwar at the Commonwealth of Learning and Stamenka Uvalić-Trumbić at UNESCO (Daniel, Kanwar & Uvalić-Trumbić, 2006). I begin, therefore, by thanking these two esteemed colleagues.

We argued there that while Europeans lament that their universities lag behind those in the US and Americans worry that complacency threatens their academic leadership, both groups are missing the tectonic shift that will transform the map of higher education worldwide. That shift is the growth of universities in the developing world.

Spreading connectivity, allied with the accelerating creation of open educational resources based on open-source technology, may soon allow the radical reduction in costs necessary for higher education to serve the four billion poor people at the bottom of the world economic pyramid.

For two decades enrollment growth in higher education has exceeded the most optimistic forecasts. We passed the milestone of 100 million enrollments some years ago and the earlier forecast of 120 million students by 2020 looks likely to be reached by 2010. There are already 130 million tertiary students if we count part-timers. Growth is actually accelerating as more developing country governments see expanding higher education as the key to attaining developed country status.

China has been a pacesetter. Enrollments doubled between 2000 and 2003 and, with 16 million students by 2005, China had overtaken the US to have the world's largest higher education system. Since then China has slammed on the brakes for fear of creating unemployed graduates. But meanwhile higher education continues to expand briskly in India, which, as a democracy, cannot limit access by fiat. Its numbers too will overtake those of the USA within a decade.

There is rapid growth in other developing countries too - often from a very low base. There is a massive disparity in the higher education participation rates of students in the 18-23 age group (known as Age Participation Rates) across the world. APRs of 50 percent or more are now the norm in developed countries, whereas in countries in South Asia and Sub-Saharan Africa they languish below 10 percent.

This creates a major catch-up challenge for developing countries, where low APRs are compounded by demographic profiles with median ages in the low twenties or below. A tidal wave of poor youngsters is heading towards tertiary education. Apply a 35% APR to the four billion people in the poorest countries to understand the scale of the challenge. It yields 150 million additional students; far more than today's global total.

How can developing nations respond to the massive emerging demand for higher education? Are new approaches needed? Since developing countries will soon account for most of higher education worldwide, their answers to this question will effectively define the global profile of higher education.

The profile of higher education seems likely to change in three ways. First, private, for-profit institutions will play a greater role. Second, distance learning, in all its rapidly evolving forms, will account for a growing proportion of provision. Third, seeing the opening of a massive market, first-world institutions will expand their cross-border activities.

In these remarks I shall focus particularly on the situation in India with some comments on China and the USA.

Public Good, Private Provision

Higher education is a private good, with direct benefits to those who participate, but also a public good. Although having a fire brigade at hand if your house catches fire is a more obviously useful public service than accessible higher education, the proportion of people with higher education does correlate well with a society's state of economic and civic development - and its potential for innovation.

Until recently numerous developing countries have assumed that identifying higher education as a public good requires that the state be its sole or main provider. In reality practice, principle, and pragmatism all argue against treating higher education as a public monopoly.

Past practice reveals that private bodies were providing higher education long before governments took an interest. The purpose of state involvement was to widen access to higher education.

The challenge from principle holds that apart from services like defense, government is most effective when it monitors and regulates the provision of public services by others, rather than controlling them directly.

Demography and demand present pragmatic challenges. There are burgeoning numbers of young adults in the developing world and an increasing proportion of them will want education at all levels. But in this era of lifelong learning, there is no way that governments can provide, at no cost, all the education that people will need throughout life. No government has the resources to pay for basic education for all from the public purse and fund all of higher education as well.

A choice must be made between inadequate provision of higher education by a public-sector monopoly or meeting the demand by a combination of public and private institutions. This is a political dilemma for many developing-country governments.

Comparisons are often made between pairs of countries such as South Korea/Ghana and Malaysia/Zambia that had similar levels of GNP forty years ago but have developed very differently since then. One reason is that the Asian pair promoted the rapid development of higher education sectors with strong private-sector participation, while the African countries relied only on the state sector and kept tuition free.

How can developing countries best take advantage of for-profit higher education? How do they achieve a balance between accessibility for students and quality of provision, along with returns for the investor?

The Price of Higher Education

The heart of the issue is fees. In the US, where all higher education students pay tuition, it is hard to appreciate what a hot issue they are in the rest of the world. Indeed, there is a tremendous contrast between the US, where fees are too high, and the rest of the world where they are, in general, too low.

If there is to be a cataclysm in US higher education it will be created by tuition fee inflation. How much longer can the price of American higher education defy the laws of economic gravity? The figures are startling.

Taking the long view, I understand that the average cost of tuition in US postsecondary institutions has risen by inflation plus 2.8% annually since 1910 - that is to say for almost a hundred years. Looking at a shorter and more recent timescale, the average cost of tuition has risen by 385% in the last 20 years.

The consequence, of course, is that these escalating costs are putting higher education out of the reach of poorer Americans. Today only 10% of Afro-American boys and 7% of Hispanic-American boys go on to college. These are the kinds of participation rates you would have found in Europe in the 1960s, before the great expansion of higher education took place. You are better placed than I to predict how the US tuition fees bubble might burst and what would be the consequences.

Fees are a quite different problem for countries that made higher education free - that is to say totally subsidized by the state - when only a tiny proportion of the population went to university. At that time entry to higher education was highly competitive and many believed - and still believe - that combining competitive entry with free tuition would produce equitable participation from across society.

Abundant research now shows that this is simply not true. The socio-economic profile of students in countries that charge fees while providing scholarships and loans for poorer students is more broadly

based than in those that do not charge fees. This is a very important finding, and one that governments are only gradually finding the courage to act on.

In this respect China is making the transition more easily than India, partly because it is not a democracy but also because of the one-child policy. Chinese parents are eager to spend money to give their 'little emperors' a good start in life.

Changing fees policy is important, because what the public sector does in relation to fees clearly constrains the private sector. Having a free public sector alongside an expensive private sector does not create an effective higher education system. As countries gradually introduce fees in the public sector, either because of a conviction that it is more socially equitable or because there is no financial alternative, the private sector finds itself on a more level playing field. This in turn makes it easier for the private sector to build arrangements for need-based scholarships and loans into their fees regimes.

Within a decade or two, private, for-profit provision, already estimated at \$385 billion worldwide, is likely to account for a larger proportion of higher education in the developing countries than it now does in the industrialized world.

How might the first-world private sector help to provide higher education to the developing nations? Much of it will likely follow traditional patterns of classroom teaching, but two other related forms of provision will have a higher profile: cross-border offerings and distance learning.

Cross-Border Higher Education

UNESCO and the OECD, in their Guidelines for Quality Provision in Cross-Border Higher Education, describe cross-border higher education as:

"Higher education that takes place in situations where the teacher, student, programme, institution/provider or course materials cross national jurisdictional borders. Cross-border higher education may include higher education by public/private and not-for-profit/for-profit providers. It encompasses a wide range of modalities, in a continuum from face-to-face (taking various forms as students traveling abroad and campuses abroad) to distance learning (using a wide range of technologies and including e-learning)."

Those providers include not just conventional or open universities but also media companies, multinational companies, corporate universities, networks of universities, professional organizations, and IT companies.

Nearly all cross-border higher education is effectively for-profit in the receiving country. Even when the originating institution is a public institution in its home country, it must generate a surplus on its operations in other countries in order to sustain them.

In the West we usually think of Erasmus as the pioneer of international student mobility, but the honour should really go to Huen Tsang, a Chinese scholar who studied in India nearly a millennium earlier. Academic exchanges between China and India thrived in the middle of the first millennium, notably around Nalanda University, a centre of Buddhist scholarship near Patna in India.

Today's term 'cross-border' implies an acceptance of national borders that might have seemed strange to these academic nomads of ancient Asia and medieval Europe. The border is a symbol for the special political, social, and cultural identity found within the national space. Accepting borders implies recognition of the roles and responsibilities of national governments within their jurisdictions, not simply for deciding whom to let into their country but also for overseeing the national higher education system.

National sovereignty over higher education has been reinforced by the General Agreement on Trade in Services (GATS) of the World Trade Organization (COL/UNESCO, 2006). The GATS recognizes four modes of supply. The first two are *consumption abroad*, where students travel to another country to study, and the *presence of natural persons*, meaning visiting scholars or teachers. Here we are more interested in the other two forms of supply, defined by the GATS as *cross-border supply* and *commercial presence*, but better known as distance education and the establishment of branch campuses.

Distance Learning

Distance education is a good way of reaching large numbers. Take the example of India. India's higher education system provides access to less than 10% of the 18-23 age cohort despite massive growth in distance education. Note that in India increasing the age participation rate by just one percentage point means adding one million more students. Therefore moving from a 7% to, say, a 37% APR will add 30 million more students.

Two months ago India's Knowledge Commission called for the number of Indian universities to grow from 350 today to 1500 by 2015 - and that is only to cope with a doubling of the current participation rate from 7% to 14%.

Distance learning is already a significant component of Indian higher education. Today 24 percent of all enrolments - some two million students - are in distance education - specifically in 13 national and state open universities and 106 institutions that teach both on campus and by correspondence. The government's target is to have 40 percent of all higher education through distance education by 2010.

The Indira Gandhi National Open University now has 1.5 million students and the state open universities are growing fast. For example, the Netaji Subhas Open University in West Bengal had fewer than ten thousand students in 2000 but will likely achieve 100,000 students - and mega-university status - sometime this year. The Tamil Nadu Open University, created only in 2003, already has 60,000 students.

Recently I met Professor Rajan Velukar, Vice-Chancellor of the Yashwantrao Chavan Maharashtra Open University. He told me that he was confident of taking it from its present 200,000 students to 400,000 in the next four years. Such numbers put the cross-border provision of distance education into perspective.

In another paper with Asha Kanwar and Stamenka Uvalić-Trumbić we showed that the current numerical contribution of cross-border higher education in developing countries is negligible (Daniel, Kanwar & Uvalić-Trumbić, 2005). Cross-border providers focus on countries at a relatively high level of development as measured by the UNDP's Human Development Index, that is to say places like Hong Kong, Singapore and Malaysia.

The most active cross-border providers in developing countries are from other developing countries. The Indira Gandhi National Open University is already active in 26 other countries. The University of South Africa (UNISA), a distance-teaching university created back in the 1940s that now has a quarter of a million students, has long had students all over Africa. Nelson Mandela and Robert Mugabe are both graduates, having studied in prison.

However, private cross-border provision will be part of the answer in future. Locally owned private institutions already account for over 75 percent of professional education in India. Meanwhile, the number of cross-border providers in India increased from 27 in 2000 to 114 in 2004.

But in the light of India's potential student numbers, their role is still negligible and their quality is problematic: a third of the institutions are not accredited in their country of origin, and an equal proportion of their Indian collaborators are not part of the formal higher education system either. Even when the foreign providers are universities, they are not in the premier league and have mediocre reputations at home. Neither branch campuses nor franchise agreements have had much success, with the exceptions of 61 twinning and articulation arrangements that allow students to go to the source country in the final year and stay on for employment purposes.

An additional market of tens of millions of students should be tempting for serious providers of distance education. But will students want what they have to offer? Providers must address the five A's of affordability, accessibility, appropriateness, accreditation and acceptability.

Affordability, Accessibility, Appropriateness and Accreditation

Affordability is a major challenge. India is trying to transform higher education from an elite to a mass system aimed at the needs of a vibrant democracy. Providers of distance learning must devise a business model that can take them beyond the elite to reach out to the masses.

New technologies for education have always attracted private providers. When Britain introduced the penny post in 1840, Isaac Pitman almost immediately started offering a correspondence course in shorthand, and private providers subsequently dominated the correspondence education industry.

The next wave of distance education, led by the large multi-media open universities, was dominated by the public sector. In addition to widening access dramatically, these institutions showed that distance learning can be of higher quality, as well as less expensive, than conventional higher education. That is because it has to be developed and delivered in a more systematic way.

For this reason it also has the potential to foster the spirit of innovation on a large scale. No delivery mode can guarantee a particular educational outcome by itself. However, distance learning tends to foster the innovative spirit because it lends itself to presenting different points of view and obliges students to construct knowledge for themselves.

In at least two developing countries earlier authoritarian regimes shut down open universities because they were perceived as subversive. The students decided that it might be nice to innovate by choosing their own government!

The current wave of distance learning, often called eLearning appeals to the private sector because it has a cost structure in which a higher upfront investment is rewarded by lower marginal costs when volume is achieved. Moreover, providers wishing to use eLearning now have available a rapidly growing body of open educational resources; freely available learning materials that can be adapted to particular local needs. I shall return to this crucial innovation.

The combination of expanding connectivity and the swelling reservoir of open educational resources is potentially revolutionary for its capacity to cut costs and diversity provision.

Accessibility is not just a matter of cost. Higher education also requires access to the technology through which education is delivered. Internet connectivity is important, yet the proportion of people online is only 4% in India, 1% in Africa (half of them in South Africa) and 0.1% in Bangladesh. But this is changing fast. Communication links are already beginning to alter the way that poor villages in the developing world function.

Cross-border providers often fail the test of **appropriateness**. Their subject offerings are limited, and liberal education often loses out to more market-driven programs such as business and information technology. Students from a variety of cultures and linguistic backgrounds have to follow the curriculum of the country of origin, baseball analogies and all, with no recognition of social, cultural, and ethnic differences.

Cross-border provision will become fully relevant only when it responds to country priorities, which is best done through strong partnerships between the overseas provider and local institutions to develop curricula and methods of delivery and student support.

The next 'A' is **accreditation**. In fact, students' requirements go beyond formal accreditation to the more informal fifth 'A' of **acceptability**. Students like the convenience and flexibility of distance learning. Furthermore, those students who thought that they might miss the human contact associated with face-to-face instruction often find that, when distance learning has an effective student support system, contact is both more personal and more effective than in conventional systems.

Students want the academic titles that they earn to be not only recognized, but also to have a good reputation. The reputation that the public accords to institutions changes slowly: rightly in my view. It takes time to build up an institutional reputation and, barring egregious mistakes, it also takes time to lose one.

The oldest of India's open universities is barely twenty years old; so they have barely had time to acquire a reputation for quality. Furthermore, they have had to contend with the poor reputation created for distance education by the correspondence courses offered by India's conventional universities. These longstanding operations, which enrol hundreds of thousands of students were, and mostly still are, poor quality operations with shoddy learning materials and minimal student support. The universities use them as cash cows to subsidise their campus operations.

Cross-border providers should be inspired by the findings of C.K. Prahalad in his book *The Fortune at the Bottom of the Pyramid* (Prahalad, 2004; Prahalad & Hart, 2002). Addressing himself to multi-national corporations, he points out that there are four billion poor people in the world who aspire to better lives.

By making radical innovations in technology and business models and creating highly distributed, small-scale operations married to world-scale capabilities, some companies are beginning to serve this huge market profitably. In doing so they are "helping people improve their lives by producing and distributing products and services in culturally sensitive, environmentally sustainable and economically profitable ways."

I see few signs of people taking up this challenge in education. Indeed, the only example I know is American. Best Associates, a merchant bank in Texas, is attempting to re-write the script for private, for-profit education. Its Whitney International University System is expanding rapidly, both by acquiring universities in other countries or creating joint ventures with existing universities. Having begun its expansion in South America it is now launching ventures in Morocco, Jordan, Saudi Arabia, India and Indonesia.

It uses distance learning that blends the remote-classroom and asynchronous approaches. Lectures from senior professors are carried to remote classrooms by satellite and these are underpinned by supporting professors who interact individually with relatively small groups of students online. The lectures give the symbolic and psychological impression of a 'normal' university, whereas the close individual support keeps students on task and progressing.

Unlike conventional remote-classroom teaching this model should be scalable because of the network of supporting professors; an essential feature for achieving a low price point.

What About Quality?

Within two decades the global higher education enterprise could have more than doubled in size, be predominantly based in what today we call developing countries, and present a greater diversity of both providers and provision.

How will the world ensure the quality of such a vast enterprise? How are governments to protect their citizens from fraudulent providers and bogus qualifications, especially when they emanate from another country? Cross-border higher education makes students particularly vulnerable to scams. How can we create an international ethic of integrity and quality assurance?

As higher education expands, governments' role will increasingly be to monitor and regulate it, rather than to provide it. Many developing countries currently lack quality-assurance mechanisms, and where they do exist, as in India, they are not always properly equipped to cope with diversifying types of provision.

However, countries realize that, even if it happens slowly, the GATS has created an inexorable trend to increasing cross-border education supply. Governments will best respond to this trend by building strong frameworks for regulation, quality assurance, and accreditation that cover all higher education provision within their borders.

This is the context of recent UNESCO/OECD collaboration on Guidelines for Quality Provision in Cross-Border Higher Education (UNESCO/OECD, 2006).

The guidelines recognize the importance of national authority and the diversity of higher education systems. They present higher education as a vital means for expressing a country's linguistic and cultural diversity, nurturing its economic development, and strengthening social cohesion. Their effectiveness largely depends on strengthening the capacity of national systems to assure the quality of higher education.

Conclusion

It is time to conclude. We usually overestimate the short-term impact of major changes while underestimating their long-term effects. In the coming decades, most higher education provision will gradually shift to the countries of the global south where the large majority of people under 25 live.

American colleges and universities, public and private, non-profit and for-profit, that wish to be part of this trend must first get down their costs by partnering with institutions in the developing world to develop scalable models of provision. Such partnerships will be forged in the context of a growing trend towards south-south collaboration. Sustaining north-south cross-border higher education will require a competitive edge.

So, second, costs will be critical. Only by targeting the massive numbers of people at bottom of the pyramid, not just the elites, will economies of scale be achieved.

Third, making open educational resources available to the developing world, as MIT has done, will accelerate capacity development and create links with local institutions to yield academic benefits.

Fourth, the growing availability of telephone and Internet connections is starting to unite the world's rich and poor and to transform the digital divide into a digital dividend. In previous eras the use of technology in developing countries usually resulted in a transfer of wealth to the developed world: the rich got richer and the poor got poorer. Those days could soon be over. Because of their lower costs, developing countries may gradually reverse the direction of cross-border relationships so that their providers serve students in richer countries.

As more economic activity shifts away from the US into the emerging economies, American universities might find that their most important role is to shape these developments by exporting their research strengths and training many of the millions of new Ph.D.s required.

I realize that much of what I have said may be a long way from the day-to-day preoccupations that have brought you to this forum on teaching in higher education. However, I think my role was to alert you to some of the major changes taking place in higher education internationally which present both challenges and opportunities to you. Thank you for inviting this distance educator to speak to you at a distance.

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