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Turbulent Times in Tertiary Education: Lessons for Bangladesh

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Introduction: The New Dynamics of Higher Education

I am delighted to be visiting Daffodil University for the first time. Thank you for inviting me. It is a pleasure and an honour to address this significant *International Conference on Tertiary Education: Realities and Challenges*.

I have prepared this address with my former UNESCO colleague Ms. Stamenka Uvalić-Trumbić and our title is *Turbulent Times in Tertiary Education: Lessons for Bangladesh*.

Stamenka was the Executive Secretary to UNESCO's 2009 World Conference on Higher Education and that event will be our starting point. The full title of the conference was *The New Dynamics of Higher Education and Research for Societal Change and Development* so we shall begin by enumerating some of the new dynamics that are determining the evolution of higher education around the world.

Since that conference in 2009 some of the 'new dynamics' that it identified have proved to be even more dynamic than expected. This explains our title: *Turbulent Times in Higher Education: Lessons for Bangladesh*.

We shall identify eight trends – or new dynamics – and then attempt a synthesis of some of their practical consequences.

Rising demand and massification

The first trend is rising demand for higher education now that all acknowledge its role in constructing the knowledge society and yielding higher incomes for individuals. University degrees and diplomas have become passports to a good future and the demand for higher education has been growing rapidly.

Massification is the name for this dominant trend. Globally, age participation rates in higher education have grown from 19% in 2000 to 26% in 2007. There were 150.6 million students enrolled in tertiary education worldwide in 2007, which represents a 53% increase over 2000. In low-income countries these percentages were much smaller and rose from 5% in 2000 to a modest 7% in 2007.

This means we can expect continuing rapid growth in those countries because some consider a 40% Age Participation Rate in higher education as the springboard for development – the target that China has adopted. Globally, enrolments have increased

fivefold in less than 40 years. It is now predicted that the global demand for higher education will expand from 97 million students in 2000 to 263 million students in 2025.

Diversification of providers and methods

The second trend or dynamic is the diversification of providers. It will not be possible to satisfy this rising demand, especially in developing countries, by relying on traditional approaches based solely on public universities. A multitude of new providers of higher education is emerging covering the whole range of higher education provision.

At one end there is a small number of institutions that like to call themselves ‘world-class’ universities. Some governments, notably China, South Korea and Malaysia have active policies to get some of their universities labelled as world-class by coming out well in the university rankings.

Such rankings are another new trend – although one that may have already peaked.

At the other end of the range, as an increasing proportion of the population seeks higher education, transition programmes between schools and universities, such as community colleges, are attracting more attention. Community colleges provide access for non-traditional students, offer flexible curricula – include skills-based training, and allow progression to university.

One of the conclusions of the WCHE was that countries should avoid following fads for emphasising particular types of institutions but to aim instead at creating good higher education *systems* that respond well to the full range of local needs.

Private provision

The third new dynamic is that corporate structures of higher education are also changing. Daffodil University is a good example. Private higher education is now the fastest growing sub-sector of higher education and some 30% of students are enrolled in private institutions globally. Some countries (Japan, South Korea) enrol 80% of their students in private higher education institutions and in parts of Latin America these percentages reach 50%.

Private higher education conducted for profit is also growing and developing specific business models. Partly because some of these institutions operate in an opaque and secretive way the higher education literature has not fully caught up on this development.

The World Conference stressed the importance of including the private sector in all quality assurance arrangements.

Distance education

Modes of teaching and learning are also changing and applications of ICT are impacting higher education significantly.

Open universities are multiplying around the world and some have broken through the reputation barrier to be powerful players in national higher education systems not only because of their size but also because of their quality and their leadership in the use of ICT. These institutions are an important response to the challenge of scaling up higher education in response to growing demand. Some countries are strengthening their open universities because of their potentially important role in advancing the technological revolution in higher education.

Cross-border Higher Education

These trends come together in a steady increase in cross-border higher education (CBHE). As defined by the 2005 UNESCO-OECD Guidelines for Quality Provision in Cross-border Higher Education, the term designates higher education that occurs when ‘the teacher, student, programme, institution/provider or course materials cross national jurisdictional borders’.

CBHE can take different forms, ranging from branch campuses, such as this one of the UK’s Nottingham University in China, and franchises of universities offering courses abroad to eLearning across borders. If regulated properly it offers great opportunities for capacity building at institutional level both in teaching and learning.

However, in the absence of regulation CBHE easily lends itself to fraud and low quality provision, the most striking example being degree mills that sell diplomas for money. The Internet is an attractive tool for these bogus providers. One used Blenheim Palace, Winston Churchill’s birthplace, on their website to imply that it was their campus. Others misuse UNESCO’s name to appear legitimate. Fortunately, quality assurance provides some protection against spurious providers.

Quality assurance

Quality assurance – and especially the internationalisation of quality assurance – is one of the most striking new developments to occur between UNESCO’s previous World Conference on Higher Education in 1998 and the 2009 conference. This new emphasis on QA was reflected not only in the 2009 conference Communiqué but also in both political and academic debates during the Conference.

The internationalisation of quality assurance is a response to the growing policy challenges facing higher education systems and institutions as a consequence of the trends we have identified, such as private higher education, cross-border higher education, eLearning and ODL, and the growing role of the Internet.

UNESCO has prepared the ground for this process of internationalisation through its Conventions for the Recognition of Degrees and the 2005 Guidelines for Quality Provision in Cross-Border Higher Education. It has also published, jointly with the US

Council for Higher Education Accreditation (CHEA) a guide entitled - *Toward Effective Practice Discouraging Degree Mills in Higher Education*.

Teacher Education

The growing challenges of teacher education within higher education were highlighted as one of the global trends, underlined in Conference Communiqué in these words:

“Our ability to realise the goals of EFA is dependent upon our ability to address the worldwide shortage of teachers. Higher education must scale up teacher education, both pre-service and in-service, with curricula that equip teachers to provide individuals with the knowledge and skills they need in the twenty-first century. This will require new approaches, including open and distance learning (ODL) and information and communications technologies (ICTs). (Article 11)”

The teacher shortage is the core challenge. According to UNESCO’s Institute of Statistics, a global total of 10.3 million teachers should be recruited between 2007 and 2015 although actual needs vary greatly from country to country. The 96 countries that have not achieved Universal Primary Education will need to recruit 1.9 million teachers for this purpose alone.

Academic profession

The teaching force in higher education was naturally a particular focus of the WCHE. The stresses on HE systems and their academic staff caused by rapid expansion are manifest in various ways.

First, pressure of student numbers has required the hiring of less qualified faculty. For example, in China only 9 % of academic profession has doctorates, while in India it is 35%.

Second, the use of part-time professors is becoming more widespread. For example, in Latin America and the Caribbean, up to 80% of the faculty have part-time status.

Third, part-time faculty seek adequate salaries by working in several institutions. In particular, private higher education institutions tend to rely heavily on part-timers, some of whom are moonlighting from public institutions, which can cause tensions between the two sub-sectors.

Fourth, the academic labour market is now global. Academics migrate from poorer to richer countries. Singapore, the Gulf States, Western Europe and North America tend to import faculty whereas regions like the South Asia, the Caribbean and Africa are exporters.

Fifth, one side effect of the rapid spread of technology is that young people who are used to using digital devices in everyday life expect to use them as students – whereas many faculty continue to teach in traditional ways.

Sixth, however, ICTs provide new opportunities to expand access to quality learning and facilitate the tasks of teachers. In particular, the growing trend to develop Open Educational Resources means that academics and students will be able to draw on a worldwide pool of excellent teaching and learning material that can be fully adapted to local needs.

UNESCO is working with COL to empower HE institutions, ministries of education and quality assurance agencies to take full advantage of these resources. A major goal of this work is to ensure multidirectional flows of Open Educational Resources so that developed countries use resources from developing countries as well as vice-versa.

A New Business Model for Higher Education

We have listed some of the new trends at work and we noted earlier that they are indeed creating a very dynamic, even turbulent, situation for higher education. It is not so much any single one of these new dynamics, but the way they are combining to create eddies, that is causing disruption. There is much talk of the necessity of a new business model for higher education, but no one seems clear what form it will take. Let us try to analyse the factors at work.

First, we now live in a world of easy access to knowledge. The content of university education is widely available – much of it freely available for adaptation and re-use as open educational resources. Stamenka and we spent much of the first part of last year working to alert governments to the importance of Open Educational Resources in preparation for the World OER Congress that was held at UNESCO in Paris last June.

In the six months before the Congress we surveyed all governments about their attitudes and policies concerning OER. A hundred countries replied and we then held policy forums in all UNESCO regions so that governments and practitioners could discuss the implications of OER. These meetings were also a chance to consult them on a Declaration on OER for presentation to the Congress.

To give you the local example, the forum for this region was held in Bangkok after nineteen countries in the region had responded to our survey. At least five have clear policies about OER.

The Paris Declaration on OER was approved by acclamation at the Congress, partly because it reflected such a thorough process of global consultation. Declarations of UNESCO's expert meetings like this Congress are not binding, but many governments use them as guidance.

Already there are signs that they are taking notice of the 10 proposals in the Declaration, not least the key recommendation that educational materials produced with public funds be made available under open licenses.

We note two jurisdictions that decided to implement this recommendation following the conference. My own home province of British Columbia recently announced that it will offer students free online, open textbooks for the 40 most popular post-secondary courses.

Half a world away from there, in your neighbour India, NPTEL, a very large creator of educational materials, decided to make their material formally OER under an open license. This amounts to some 20,000 lecture-hours equivalent.

University teachers see OER either negatively or positively implications depending on their openness to change. OER mean that university lecturers are no longer the sole – or even the main – source of knowledge for their students.

No doubt many Daffodil University students, like millions around the world, enrich their studies by using the OER created by institutions like MIT and the UK Open University. Of course the teachers can improve their courses by doing this too, but it does require a change of mind-set. So OER are the first current creating turbulence and little whirlpools in higher education.

The second current is the growing preference of students for online learning. We do not have figures for Bangladesh – perhaps you do – but higher education is such a global industry that trends in one country quickly appear in another.

My fellow Vancouverite Professor Tony Bates conducted a study of online learning in North America last year (Bates, 2012). We pick up two key points from his report.

First is the rapid growth of eLearning. Enrolment in fully online (distance) courses in the USA expanded by 21% between 2009 and 2010 compared to a 2% expansion in campus-based enrolments. Bates notes that over 80% of US students are expected to be taking courses online in 2014, up from 44% in 2009.

A second point about this rapid growth in eLearning, which should worry public and private-not-for-profit sectors higher education, is that in the USA the for-profit sector has a much higher proportion of the total online market (32%) compared to its share of the overall higher education market (7%). Seven of the ten US institutions with the highest online enrolments are for-profits. For-profits are better placed to expand online because they do not have to worry about resistance from academic staff, nor about exploiting their earlier investment in campus facilities.

Tony Bates concludes his report by alerting Canadian institutions to a growing market that is not well served by campus-based education. In his view Canadian public colleges and universities are not moving into online distance learning fast enough to meet the demand. "If public institutions do not step up to the plate, then the corporate for-profit sector will".

In Britain a government report encourages public institutions to partner with the private sector to expand online learning and we recommend that approach for Bangladesh. We shall return to that in a moment.

The Costs of Higher Education

But at this point we need to say something about the costs of higher education, which are clearly a key consideration in the emergence of any new business model. Once again we will start in the USA where the costs of higher education are a very touchy issues.

Why does higher education cost so much?

In the US, since 1986, college fees there have risen by 467% compared to inflation of 107% in the economy overall. This is an extreme case but other rich countries where fees used to be zero or nominal have either introduced or raised them. You will be aware of the turbulence created in UK higher education by steep fee rises - and also the silly unrelated policy of a clampdown on student visas.

In the US parents and students use to seem remarkably relaxed about these steady fee increases, but the recession has changed all that. In view of the debate Robert Archibald and David Feldman (2010) attempted to justify high fees in their book *Why Does College Cost So Much?*

I can only give the briefest summary here. The nub of their argument is that whereas the prices of manufactures have gone down in real terms and those of many services, such as hair dressing, have stayed roughly constant; the prices of personal services by professionals with high training requirements have risen. They cite academics, dentists, horn players and stockbrokers as examples of such professionals.

In essence they are argue that there are no opportunities for increasing productivity in higher education with technology. This is nonsense. I have spent part of my career in three open universities and we know that by offering distance learning at scale you can cut costs and improve quality at the same time.

Massive Open Online Courses

Today, however, we shall not use open universities as my example but talk briefly about the higher education sensation of the year in 2012, the Massive Open Online Courses, or MOOCs, that are being offered free worldwide, but just those universities where the fees for campus study are rising out of the reach of ordinary people.

MOOCs are a new phenomenon that will now evolve rapidly so we shall just give you some highlights of this development that I explored in a recent paper entitled *Making Sense of MOOCs: Musings in a Maze of Myth, Paradox and Possibility*.

Last year MIT, the Massachusetts Institute of Technology, offered its first MOOC. This online course, 6.002x, *Circuits and Electronics*, was free and open to anyone, anywhere

in the world with no admission requirements. It attracted 155,000 registrations from 160 countries. Of these 155,000 learners only 7,157 passed the course as a whole.

Anant Agrawal, who heads the programme, said the exam was ‘very hard’. To criticisms of the extraordinarily high drop out rate of more than 95%, Agrawal replied, ‘If you look at the number of passes in absolute terms, it’s as many students as might take the course in 40 years at MIT’.

Since MIT announced its first MOOC at the end of 2011 many other US universities have launched similar ventures. There is a herd instinct at work. Coursera, a for-profit company that helps universities do MOOCs, now claims nearly 1.4m registrations and is presently offering 200 courses with 33 partner institutions.

Both the first MIT course and the Coursera courses have all had terrific drop-out rates, which MOOC providers have been trying to defend, although the media and bloggers have given Coursera the rougher ride. One reporter found that ‘some classes were so rife with plagiarism that professors have had to plead with their students to stop plagiarizing’. One reason is that in order to handle the challenge of scale, Coursera asks students to mark each other’s work.

MOOCs in perspective: quality

Let us try to put MOOCs in perspective. There is plenty to criticise and we shall do that, but there are also possibilities and, either way they are an important element of the turbulence that is the subject of this paper.

We start with some myths about MOOCs. First, since most of the universities offering MOOCs are well-known US institutions, a first myth is that university brand is a surrogate for teaching quality. It isn’t. The universities gained their reputations in research. Nothing suggests that they are particularly talented in teaching, especially teaching online.

Most countries now have quality assurance agencies for higher education and one of the criteria quality auditors usually look at is the rates of course and degree completion. They take the view that students seek not merely access, but access to success, which institutions should do everything to facilitate while maintaining standards. In this context MOOC completion rates of less than 10% are a disaster.

The problem is that MOOCs universities have scarcity at the core of their business model. They measure institutional prestige by the people they do not admit, so they are relaxed about high drop out and failure rates.

MOOCs in Perspective: Certification

This brings us to the central paradox in MOOCs. In most MOOC institutions, success in the course exam, which MIT called ‘very hard’, does not lead to credit, but to a certificate. Therefore what determines whether a student can get a degree is not their

mastery of MOOC courses, but the admissions process to the university for regular students.

This is disreputable. If we were Bangladeshi students who had passed a MOOC that was the same as the course offered on campus in the home university we would be upset if we did not get credit for it. My late Athabasca University colleague Dan Coldeway called this practice of basing reputation on tough admission requirements the principle of ‘good little piggies in, make good bacon out’.

MOOCs in Perspective: Pedagogy

Let’s look at pedagogy. A reporter who took a Coursera course found it had little pedagogical input.

Professor Tony Bates stresses that MOOCs are not a new pedagogy. He notes that the teaching methods ‘are based on an old and out-dated behaviourist pedagogy, relying primarily on information transmission, computer-marked assignments and peer assessment’.

MOOCs in Perspective: for what purpose?

A key question about MOOCs is why they are being offered. The tension is between the ideal of sharing knowledge freely and the need to make money. No one yet has a clear strategy for making money out of MOOCs for the universities involved.

One MOOC provider claims that they are the answer expanding higher education in developing countries.

A promotional video for MOOCs showed this stampede for admission at the University of Johannesburg with the implication that MOOCs are the answer to the massification of higher education.

But Bates (2012) comments bitinglly: ‘these elite universities continue to treat MOOCs as a philanthropic form of continuing education, and until they are willing to award credit and degrees for this type of programme, we have to believe that they think this is a second class form of education suitable only for the unwashed masses’.

Online teaching models that work

However the very large-scale MOOCs we have talked about are only part of the story. There are now examples of partnerships between universities and private companies to offer online learning in which both parties are making money and students are graduating with degrees. For example, the 50 universities associated with the organisation *Academic Partnerships* are extremely pleased with the way that it has been able to expand their impact and reputations. They are dealing with thousands of students rather than tens or hundreds of thousands – but these students are graduating from their online programmes at the same rate as on-campus students.

MOOCs in Perspective: Possibilities

So much for o criticisms of the hype and the contradictions now associated MOOCs. But they are a fascinating development. So many institutions are involved that they will not just peter out. They could chart new paths for higher education by improving teaching and cutting the costs of higher education.

Although current MOOCs pedagogy is out-dated, this will now change fast. Competition will produce a great diversity of approaches and much healthy experimentation. Soon the media, student groups and educational research units will start publishing assessments of MOOC courses that will quickly be consolidated into quality rankings. Placing courses in the public domain before a global audience will force MOOCs institutions to pay more than lip service to importance of teaching and put it at the core their missions. This is the real revolution of MOOCs.

Implications for Bangladesh

We began this address by listing eight new dynamics that were changing higher education and went on to focus on three of their consequences: the appearance of abundant academic content freely available as Open Educational Resources; the trend for students to opt for online learning; and the combination of these factors in the strange phenomenon of massive open online courses, or MOOCs.

You know Bangladesh much better than we do, so it is up to you to determine how these trends will affect higher education in Bangladesh. But let us offer a few pointers.

We were impressed by a review of Bangladesh's development that appeared in *The Economist* newspaper on 3 November last year. Entitled *The Path through the Fields*, the headline summary was: 'Bangladesh has dysfunctional politics and a stunted private sector, yet it has been surprisingly good at improving the lives of the poor'.

Just one example given was that in the last 20 years life expectancy here has risen to 69, which is four years longer than your neighbours the Indians, even though they are twice as rich. You have also made huge gains in education and health as well as cutting infant and maternal mortality dramatically. The report puts your success at development down chiefly to your empowerment of women and the role of BRAC and other NGOs.

Unfortunately the article says nothing about higher education.

Although you have had great success in increasing school enrolment *The Economist* notes that 'the dropout rate is exceptionally high, with only 60% of children finishing primary school. Only a quarter of eleven-year olds have reached the required standards of literacy and numeracy'.

No doubt Bangladesh will solve this problem, just as it has addressed other development challenges so well in the past. That will mean a steep rise in the number of young people seeking university education.

Bangladesh will account for a significant share of the 80 million additional students who will be entering higher education by 2025. By then, of course, your country will have much more widespread Internet connectivity and electrical power, so these students will expect to study online. They will also be used to finding learning materials on the web. So an important question is whether most students will rely on Bangladesh's universities for their studies or whether many will take courses coming in from overseas.

We don't know how many Bangladeshi people were among the 155,000 people taking the first MIT MOOC that we mentioned, but since India and Pakistan ranked among the top ten of the 160 countries whose nationals took part, we imagine there were quite a few.

What does Daffodil University do if a student presents a certificate of completion for a MOOC course and asks to have it included a credit in her transcript? MOOCs are evolving fast. Right now MIT does not give MIT credit for MOOCs, which is a scandal, but other universities do.

Moreover the Open Educational Resource University, which is a consortium of nearly 20 very credible universities on all continents, has been set up to offer assessment, credit and degrees to learners who have studied through Open Educational Resources, MOOCs and other manifestations of this world of abundant free content.

We are moving into a new world which will challenge existing universities in many ways, not least with the increasingly insistent questions students will ask about the value they are getting for the fees that they pay. Higher education will never be completely free, because valid assessment and credentialing has a cost – as does personal tutoring if students need help in studying the materials that they find online. But as higher education becomes unbundled, with different aspects of the learning journey being provided from different sources, it seems inevitable that costs will drop dramatically.

Conclusion

We shall conclude there. It is not for us to tell you how Daffodil University and the other universities in Bangladesh should respond to the new dynamics of higher education. What we have tried to do is to describe the new dynamics of higher education in general terms and then focus, in particular, on the abundance of quality content, students' taste for online learning, and the startling development of Massive Open Online Courses.

We live in interesting – and increasingly global – times. We wish you well as you rise to the challenges and seize the opportunities that they present.

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