Drivers for Change in Higher Education

Video Presentation

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Drivers for Change in Higher Education

by
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The presentation focuses on the key technology developments globally and their implications for both the institution and student. The presentation will note developments in massive open online courses (MOOCs), open education resources (OER), increased access to devices and other technology applications and will identify emerging trends for institutions and students.

The Honourable Minister of Education, People's Republic of Bangladesh, the Vice Chancellor, Bangladesh Open University, the Secretary, Ministry of Education, People's Republic of Bangladesh, honoured Guests and workshop participants, please accept my sincere apologies for not being able to deliver my presentation in person. Unfortunately travel issues have prohibited me from attending this important workshop. I hope this video and my full paper will offer workshop participants useful information and analysis that will set the basis for a successful workshop. More importantly, the outcomes of this workshop should enable the leadership of higher education institutions to address the issue of how ICTs can be used to improve learner outcomes and attainment.

Higher education has been a hall-mark of the education landscape and is a vital requirement for economic and social development of countries. As the Asian Development Bank puts it: higher education institutions "operate as incubators of the innovation and creative thinking needed for an economically competitive society." Increasingly technology is being integrated into the higher education systems, a factor that brings challenges and opportunities. Perhaps the greatest opportunity is to reach many learners – millions globally, and the chance to accelerate learning as never before. This makes the role of higher education institutions … like those represented here today … more important than ever.

UNESCO has identified higher education as being critical to addressing the sustainable development goals that the UN and other global and local organisations are setting for post-2015.

It may seem obvious on one level how education in general and higher education in particular, benefits people: It equips individuals with competencies and skills that are needed in the labour market.

But consider this, from the World Bank, in its Education Strategy 2020: Not only do "investments in quality education lead to more rapid and sustainable economic growth and development" but "Educated

individuals are more employable, able to earn higher wages, cope better with economic shocks, and raise healthier children." So the value of higher education goes beyond skills and competencies needed for a livelihood, it also contributes to the health and well-being of society.

My presentation today will focus on some of the challenges in the higher education environment today and what the implications of these are. In particular, I will focus on three key developments that are changing the face of higher education and its use of technology:

1. shifting economic and social demands
2. rising costs of tuition and of learning resources
3. constant and rapidly changing technology.

So, what are the global developments that are influencing higher education?

Let me start with those three key developments I mentioned.

First are shifting economic and social demands. In all countries, **labour market needs** are rapidly evolving. Automation and digitisation of industry, agriculture and the knowledge economy are changing what is taught, how it is taught and when and where learners are likely to want to be taught.

According to a study from Oxford University, "47% of occupations are at risk of being automated in the next few decades." This means that as many jobs change and others become obsolete, it will be essential for higher education to also change to meet new knowledge and skill demands.

At the same time, of course, graduates consistently need to upgrade their skills and companies need to top up their human capital.

A 2013 OECD report points to the importance of higher education, especially in light of the 2008 economic crisis that hurt many countries. The data illustrates a not-so-surprising fact: that a great deal of the economic and social hardship caused by the crisis fell chiefly on less-educated individuals. The unemployment gap between well-educated young people and those who left school early widened during the crisis.

These kinds of statistics were, and remain, much worse in many the developing countries in Asia and Africa, given the already high levels of unemployment.

The implication here is clear: a person's education and field of study, especially at the post-secondary education level, will determine the level of risk she or he faces during times of economic and social crisis.

Coming back to the World Bank and its Education Strategy 2020, I quote:

"The stunning rise of the middle-income countries, led by China, India and Brazil, has intensified the desire of many nations to increase their competitiveness by building more highly skilled workforces.

"Persistently high levels of unemployment, especially among youth, have highlighted the failure of education systems to prepare young people with the right skills for the job market ….

"Expanding and improving education is key to adapting to change and confronting these challenges".

This quote illustrates the changing economic and social demands that are being placed on higher education institutions and as leaders from such institutions, how we respond will be critical to whether we meet these demands. It further highlights the need for higher education institutions to work with the private sector, government and communities to increase opportunities for students to learn relevant skills and gain knowledge that will support their livelihoods.

Let us look now at the second key development changing the nature of higher education today: **the rising costs of tuition and of learning resources** – costs that are being increasingly felt by students and society.

In Asia, tuition fee inflation is approximately 5% for the past five years and this has raised fears of higher education increasingly becoming unaffordable to the poor, lower middle class and minority groups. This pressure of costs also impacts on those learners that require retraining and continuing education as learners strive to stay relevant in terms of the skills and knowledge.

Besides the basic nature of the higher education sector driving costs higher, the fact is *the demand* for higher education is exploding.

From 150.5 million students worldwide seeking tertiary education in 2007, demand grew to 165 million in 2012. It is expected to reach 263 million by 2025 – just 10 years away.

The average age of the learners is also rising as a substantial proportion of them now come from the workforce looking to re-learn .The rapidly changing workplace has made lifelong learning more important than ever. Higher education therefore needs to enable individual learning pathways that can help prepare individuals to lead productive lives and equip them with 21st-century skills.

All these factors place further pressure on countries budgets and their allocation to higher education. Bangladesh is no exception. A World Bank feature story on the Higher Education Quality Enhancement Project in Bangladesh notes that 2.1% of Bangladesh's GDP is allocated to education and of this, 0.12% is for tertiary education. The leaves little funding for research, technology, books, equipment, etc. that are essential for a high performing higher education system.

The third key development changing the nature of higher education today is also the most disruptive one: **technology**.

Rapid advances in information and communications technology (ICT) and other related developments are now constantly changing job profiles and skills demanded by labour markets. Yet, these advances also offer possibilities for accelerated learning and improved management of education systems.

From Massive Open Online Courses (or "MOOCs") and Open Educational Resources (OER), to mobile technologies, learning management systems, learning analytics and the proliferation of educational apps, these developments have radically changed how we understand both teaching and learning.

Let me say a few words about MOOCs.

Tony Bates, in his online open textbook 'Teaching in a Digital Age' focuses on the strengths and weaknesses of MOOCs and offers an analysis that essentially states it can be a very good development or it will wither away in its current form. Bates notes MOOCs offer the opportunity to increase access to high-quality education and access to global leaders in fields of study, all with minimal to no costs. Importantly, it is valuable for developing basic conceptual learning and for creating large online communities. This potentially becomes a great form of lifelong learning and continuing education – important for developing countries to consider.

But there are some down-sides of MOOCs too. As UNESCO has summed it up, they can be: (1) costly and time-consuming to produce, (2) most participants are already well-educated, and (3) only about 5% of registrants actually complete their courses. Importantly, we have yet to see successful business models emerging to cover the costs of course development and delivery.

For motivated learners who have appropriate technology and Internet bandwidth, MOOCs provide an opportunity to participate in global learning and possibly earn credits from globally renowned institutions.

Yet, what about those learners who lack the technological and bandwith requirements? Several MOOC providers are looking at ways to address these barriers. COL, for example, has run MOOCs with various partners in the developing world with a view to research and understand the opportunity this kind of learning platform offers.

In Asia, we are already seeing official government policy that is enabling MOOCs to be set up in support of education, at the university level. Countries like India and Malaysia have already taken a policy position that encourages the use of MOOC models to enable widespread education of their citizens. India has plans to create a platform that will host massive open online courses. In Malaysia, MOOCs are being rolled out for all public varsities. The intention is to improve learning and teaching method as well as lessen class time. Students of public universities can access the subjects anywhere and anytime through a web portal. The variety of MOOCs is increasing, and in the future they are likely to be more targeted at specific audiences.

MOOCs are also likely to increasingly offer credentials of economic value, such as college credits, badges or certificates of competency. Then, if employers begin to consider such credentials for hiring and promotion decisions, we anticipate that participants will be more willing to pay fees to cover the costs of MOOCs production, which will help ensure the sustainability of MOOCs into the future.

An important component of effective MOOCs and underpinning the model is the availability of the course materials and learning resources as Open Educational Resources – or OER for short.

COL recognises and promotes OER as central to its agenda of learning for development. COL has adopted the widest definition of OER, describing them as: "materials offered freely and openly to use and adapt for teaching, learning, development and research." Such materials are mainly in digital formats (both online and via offline formats such as DVD or CD-ROM) and in printable formats.

The NMC Horizon Report on higher education and technology noted 6 trends that it believes is and will continue to have an important influence. While the authors correctly state that some of the trends are already playing out in developed world institutions, the implications for the developing world higher education institutions could be more impactful. The growth in social media and the increased access, especially via mobile phones would impact on how learning (both peer and student-lecturer/tutor) takes place. This has implications for the leadership of higher education institutions, enabling greater engagement with stakeholders in more effective ways, thereby ensuring the voice of communities, labour, government and business is heard and shapes the policy and learning environments.

The use of online, hybrid or blended methods is already blurring the distinction between open, dual mode and face-to-face universities. This blurring offers unique opportunities to University Leadership and Faculty to see learners as creators of knowledge and perhaps more importantly for developing countries, to harness the creativity and innovation of the young student to develop big and small ideas that address real world problems.

In my paper I note two further developments that are influencing higher education, namely mobile learning and private higher education.

I would like to conclude with a few positive notes on why the changes I have outlined should be positively embraced by the leadership of higher education institutions:

- The changes are inevitable and therefore it is important to understand how to turn the challenges into opportunities. This requires gathering data, doing careful analysis and developing strategies.
- Higher-education institutions have unique opportunities to engage in partnerships with industry, government, NGOs and other bodies to better understand the needs of learners within the economy and society.
- Technology offers many ways to improve research, teaching, increase independent learning by students, and widen access to global resources (via MOOCs, OER, etc.). Perhaps, most important of all, though, it offers a means for a greater number of people wherever they are in the world to gain the skills and knowledge they need to live productive and meaningful lives.

Thank You