## A Study of the Creation and Use of Open Educational Resources in Some Parts of Asia

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Ladies and gentlemen, good morning, and Professor Larson, thank you very much for this invitation to be here as a fresh face. I'm really delighted, and terribly impressed, by both the diversity and the richness of the conversations that have been taking place since yesterday. It's absolutely wonderful to be part of this very eminent community. Professor Larson said that I have vast experience in e-learning. I just wish to make a slight change to that. It's more to do with distance education than e-learning. I am a neophyte in terms of e-learning, and that probably will explain why I am a little bit nervous, both with the technology that I'm using, as well as the audience I'm talking to.

Clearly, where I am coming from this morning is to look at e-learning, or OER, in the context of the bigger picture. For me, for a lot of years the "bigger picture" has been access and equity in distance education. This presentation will have just three parts to it: an introduction that gives you the background to the situation for some parts of Asia, and then a research proposal that we are currently working on. I would be enriched by commentary that you may have on the proposal itself as we begin to understand this phenomenon called OER and its practice in Asia.

Asia's deprivation in terms of education, especially amongst its rural communities— that is, perhaps about 60% of our continent of about four billion people— still continues to be very, very high, despite significant gains during our first nine years, and now our tenth year, since the launch of the EFA and MDG targets. This deprivation exists in educational provision both in the formal and the non-formal— or informal— sectors, especially so in the context of education itself. Education has been changing dramatically, requiring expansion and reshaping, as many of the countries position themselves to sustain growth and raise productivity and performance, resonating with what Dr. Bakary Diallo just said about Africa. The change is brought about by the pressures of a globalized market, direct foreign investment, greater and transparent participation in government, and democracies.

The nations that make up the big continent called Asia, putting aside Japan and maybe South Korea, in order to get themselves to the next level of economic and social development, do accept the principle that providing lifelong learning— the theme at this particular conference is one aspect of this— for all levels of society, especially with the focus on the deprived part of our society, to less-skilled and low-income groups, is critically important. Although there are about 50,000 or 60,000 institutions of higher education across the continent, unfortunately, most of them are conventional, face-to-face systems, and lack the capacity to respond to this call to provide lifelong education to the larger parts of our communities. This is perhaps due to the size of the population itself, the demography, economic or social barriers, gender barriers, geographic barriers— you name it, it's all of that. This is particularly so in many of the transitional economies or countries: Bangladesh, Nepal, Cambodia, Laos, and to a certain extent, Thailand and the Philippines. While on the one hand, that demand for access and equity has been increasing along with provisions for quality education, on the other hand, the pressures on governments have been increasing. This process is both economic and social. An outcome of it is that many of the countries are beginning to say, "We better start looking at expansion in the context of what some years ago the ILO— the International Labor Organization— declared as four approaches to lifelong learning." These four approaches are as follows:

**One**: To expand access to lifelong learning opportunities to all groups of people, with special attention to the poor, women, young workers, low-skilled, long-term unemployed and older workers, and people with disadvantages. That's a very big canvas to address.

**Two**: To utilize — perhaps sensibly leading from one to the other — information and communication technologies as well as distance education. There seemed to be a separation on that point in 2003, but going by what we heard yesterday, and certainly today, that line in the sand differentiating ICT from distance education is clearly beginning to disappear. Consequently, we are looking at distance education using the tools of ICT in a much more effective and efficient manner. Such approaches using technology may, we hope, revolutionize lifelong learning and training, especially in the non-formal sectors.

**Three**: To look at developing innovative partnerships within public and private institutional enterprises such as universities and industries, and at the same time, look at approaching and providing access to learning or training in the workplace itself. These are conversations that are beginning to happen, and beginning to happen in a fairly serious manner throughout the continent. These approaches clearly would suggest— and as an advocate of distance education, I'm really thrilled with it— that distance education supported by ICT opens up the potential for most Asian countries to boost education. They can do this by, on the one hand, overcoming the problems of access to lifelong learning and training faced especially by remote communities, and on the other hand, by reaching out to people with various disadvantages and those who for various reasons could not participate in conventional learning settings.

Distance education itself is not necessarily a panacea to solve all of the challenges confronting the provision of education, but it is a valuable tool, amongst many other such tools. Over the last 40 years or so, distance education in Asia generally has been moving perhaps from the sidelines to center stage as an educational resource, and I'll come to that in a minute. There are many good reasons for this. A most important factor is its propensity to achieve economies of scale. This has been a very attractive feature. The outreach power of distance education seems to be an important element in distinguishing it as a strategy or tactic.

While in many instances, the application of distance education on the continent that I come from has been mostly in the higher education sector— and in some instances, in perhaps basic and primary education— educational innovators are now beginning to say, "We can test this. We can test distance education in the context of lifelong learning, including areas such as health and agricultural extension, the education of women and girls in especially vulnerable communities, teacher training, as you have just described in sub-Sahara, and the training of professionals in radio and television." The new ICTs themselves have all been applied in experimental ways, or in some cases, in substantive ways, in countries like India.

The range of experience and research results confirm for now that distance education, in the context of lifelong learning, has many capacities. These would include, and certainly, we are reiterating the point, reaching out to marginalized groups, which can be very much learner-driven, or learner-centric— allowing the person to decide when, how and where she wants to learn— as well as reaching out to remote villages and nomadic tribes in places like Mongolia. As the herds move, education can travel with them to support families. This is happening. Also, distance education can facilitate greater interaction between learners and learners, learners and mentors, as well as learners and content. The promise of these various experiences is beginning to show that there is a value. This value in distance education can be enhanced by the tools becoming available for our use literally every other day.

Despite the many accomplishments of distance education, there still remain considerable concerns and challenges. The concerns have to do with quality — Naveed spoke about it this morning a little bit — and the effectiveness and efficiency of using technology for lifelong learning and training, especially in that the rapid development of ICT-supported distance education requires very robust frameworks for quality assurance in various settings, including the non-formal sector. The challenges for us have to do with increasing access, reducing cost to the user, ensuring availability of hardware and software support, improving institutional abilities and staff skills to deal with a new type of teaching, and administering the phenomenon. Further, as new technologies keep emerging, we have a great capacity to reach out, reach far, and improve the quality of educational innovations required to test them, in almost a perpetual quest. It's almost something we must continue to do all the time to make quality lifelong education available to all.

The progress of distance education as a method for human resource development in Asia is fairly well-recorded. There is considerable literature on the subject. With over 56% of the global population there, it's not surprising that distance education has found itself a niche, or inroads to the sector. Asia has about 70 or so dedicated distance education institutions of one kind or another. Some of you may recollect an earlier comment that seven out of the eleven mega open universities of the world are located in that continent. A mega university is something that's described as having a population of over 100,000. We have at least two or three universities that claim to have enrollments of about 1.2 million or 1.3 million students. That's mind-boggling for someone who comes from Malaysia, but not so much so for someone from India, or even Turkey. Yesterday, I heard

that they, at university alone [ the Indhra Ghandi National Open University ] have about 1.6 million students. These mega institutions, along with their counterparts, have something like six million to seven million active students. Along with them, there are also a large number of dual-mode institutions, which handle both on- and off-campus students. It's not to the extent and the degree of sophistication of Monterrey, but in many different ways, they are serving a purpose. That purpose is to provide access.

Increasingly, cross-border education, especially via e-learning, is becoming possible throughout the Asian region. Some of the biggest intrusions are perhaps from Western Europe, especially the UK, from Australia, and in a selective way, from institutions in the US, which see Asia as a potential source of market growth via e-learning. A third factor that is beginning to also help enhance the role that distance education - and now, elearning- can play is the development of formal, professional associations, both intergovernmental, and inter-institutional. These organizations are all identifying distance education as an important area of support. As I mentioned earlier, distance education efforts in Asia have always involved the use of technologies. The earlier technologies were mostly analog- print, radio, broadcast television- but they had severe limitations in terms of a lack of interactivity, difficulty in repurposing content, updating content, and restricting collaboration. The advent of the Internet and the transformation of information into digital format have made it possible to overcome most of these limitations. The emergence of newer technologies such as Wikis, blogs, podcasting and mobile phones has also begun to influence many dedicated distance education institutions in Asia, as well as their counterparts in conventional institutions, to consider an even more important role for ICTs.

Until very recently, these developments have mostly been seen in the high population countries like Pakistan, for example, and India, China, South Korea and Japan. This is changing. Lately, many other countries with smaller populations, such as those in transitioning economies— Bhutan, Cambodia, Laos, Tibet, Nepal, the Philippines, Mongolia, and of course, Vietnam, where you had your conference not too long ago— have all begun to explore and experiment with innovations, with a very serious purpose: how do we now scale this up? Learning from the experience of city-states. Urban economies like Hong Kong and Singapore have shed some light as to how you can actually utilize— in a very Asian context, with its traditional views about teaching and learning— these technologies for effective access and equity.

From its very beginnings, the business of education practiced in Asia has had many things to cope with. Some of these issues are related to policies, and others to outreach, together with quality and technology. It would not be incorrect for me to state that given that Asia is not a homogeneous entity, you will see different challenges in different contexts in different countries. For instance, policy clarity on technological media and education is not forthcoming in many South Asian countries, except maybe India. The access to and ability to apply new and emerging technologies, both at the provider end and the user end, has challenged many South Asian and Southeast Asian countries, except maybe Malaysia and Singapore. Countries like India have started using distance education quite successfully, at the pre-tertiary and non-formal level. Those in Southeast Asia are beginning to realize the potential now while they are using it in the tertiary sector. Instructional design and pedagogic quality have been a problem in China, while management efficiency and technology reliability has been a problem in South Asia. All of these are examples that are simply meant to show that while it's an exciting niche, it's a niche that is also complex in many ways.

It is perhaps in this very complex situation, that a group of people who call themselves PANdora- the Pan Asian Network on Distance and Open Education- organize themselves to tease out, in very broad terms, the necessary conditions at policy and practice levels, to establish, develop, manage, and deliver effective distance education. The doyen of the group, Naveed Malik, presented a paper this morning to you on assessment. Naveed is my current boss in terms of this particular project that I'm describing. From 2005 to 2008, they looked at about seven or eight side projects that were carried out on a wide range of research topics encompassing policy, pedagogic, and technological questions. They were also looking at the impact of technology-based distance higher education by mapping the acceptability and accessibility of provision, including reviewing policies on distance education in the developing economies of Asia. Some of these studies involved the development and testing of software and content in particular need areas, such as localized technology-based learning management systems, short message systems and technologies, e-assessments, and repositories of learning objects, as well as capacity building. This specifically addressed the challenges of instructional design.

The findings of PANdora are as follows: There is a lack of access to institutional infrastructure. If you are a remote learner, how do you access, say, the Virtual University of Pakistan's programs? That has certainly marginalized many people. It's not just access to the technology, but the capacity to use the technology effectively as a learner that is the problem. While I think emerging and newer technologies are beginning to provide solutions for addressing these barriers, wireless communication and personal handheld devices are relatively new. They may have a wider appeal, but I think cost is certainly very much an issue.

Certainly, the quality of distance education programs is seen as a bugbear. I think it has been bothering distance education in Asia, right from the late 1960s, and it still continues to be a bother. People are pressured to do more, to do it fast, and to do it cheaply. Sometimes these three things do not come together well, and I think we suffer as a result of that. Finally, we advocate the use of the new instructional information arrangements: granulation of course content, reusable learning objects, and creating and participating in an open educational resources arrangement. Those are the PANdora findings. I think out of those earlier studies, new research questions started emerging.

Countries needed to know whether barriers to using technology for learning lie in educational underachievement due to economic, social, political or geographical factors. They needed to know what knowledge and skills are required of the institutions themselves: what collaborative partnerships can be arranged? When these questions were raised by policymakers, we started asking some new research questions. Research

question one: How best can the newer technologies and arrangements such as OERs be applied to design, develop, and check curriculum, and at the same time, to review methods of assessment and evaluation? Research question two: To what extent could ICT support of distance education be a viable solution to the problem of expanding openness and access again, especially in the tertiary education sector and access to lifelong learning? Of these, perhaps, I think the first question is probably more relevant to this particular group of discussants.

I thought I'd share with you the broad framework of what we are hoping to do, in terms of our study of OERs in the subcontinent. There are about six or seven objectives that we hope to achieve. Firstly, to determine the demand for OERs clearly is a case that we need to establish first in many parts of Asia. There are sporadic and certainly episodic instances of the use of OERs, but how many are there, how far, and where, and when? Then, we have to examine which capacities we need to develop to promote and enhance the application of open educational resources. Thirdly, we must determine, list, and describe the range of OER activities in the region. Fourth, we must list and describe the methods adopted for the creation of OERs. Fifth, we must enumerate and describe the use of OERs by providers and users of learning. Sixth, we must examine policy issues, legal issues and technological issues. Lastly, we must determine the quality requirements in the OER environment, and along with it, organize capacity building workshops for the region, the first of which will actually take place in Hanoi in another two weeks. That is a background and a quick sketch of what we hope we can report when we meet again, if you should invite me to participate in the coming years. Thank you very much for your tolerance.