Open distance learning: managing change building capacity

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Open Distance Learning: Managing Change – Building Capacity

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Abstract

Global economic and development changes and challenges are fast and furious. The pace of change is requiring nations to produce a faster, smarter, better caliber of human being, not just a few in numbers but entire communities of such individuals. Our current systems of human development are impeding the rate at which this should be happening. Future education systems, some of them already in the making, will have to be designed exploiting the full potential of technologies. At the same time those in charge of these systems will require new skills, knowledge, and insight. They also need to develop new partnerships and be prepared for greater accountabilities and transparencies. This paper deals with the inevitability of global changes and challenges in the practice and provision of education generally and distance education particularly especially in the context of higher education.

Introduction

We are just beginning to understand how much more we need to know and understand about the effects of globalization on the economies of the world and the well being of the world's peoples; about the complexities and influences of cultures and religions, and the differing if not conflicting perspectives of our enemies and even our friends. In the aftermath of the Asian financial crisis of 1997-98 and the more recent financial calamities of 2008, the September 11, 2001 terrorist attacks, the continuing concern of corporate greed, the uncertainties of the good and the bad of genetically altered food, the challenge of continued abject poverty, the unscrupulous use of child/slave labor, the danger of communication limitations, unhappiness over international monetary and debt policies, the fear of major and unknown health crises, the callous abuses of the ecosystem, worries about an unsustainable development, concerns about social inequities, racial, gender and ethnic discriminations and the continuing conflicts in many parts of our neighborhoods requires citizens to be engaged with the rest of the world more than ever before. In this our schools, colleges, universities and all other institutions of our educational systems must play an important role in a variety of ways because global changes and challenges and educational policies and systems are inextricably joined. Yet our current education system is a throwback to the methods of schooling developed during the Industrial Revolution. In many cases, the techniques our teachers use to interact with and impart knowledge to our students are embarrassingly outdated as are the substance and design of our curriculum.

The Inevitability of Change:

Our traditions of learning and teaching have always been about two fundamental elements with an overemphasis on teaching. The transfer of information from the teacher to the learner has been done on a person-to-person basis. The "sage on stage" stands in front of a room and imparts the information for a student to learn. The teacher is expected to be an expert on every topic that is taught. By and large, except for few hundred distance teaching institutions the lecture-style teaching has been used for centuries to build today's literate and competent society. We know these systems are expensive and some would even call them "highly inefficient". For any new topic to be taught, a new expert needs to be created, and this universal need for more and more experts has become a serious chokepoint for learning. There is also the other problem with the way we have handled educational provisions; I am speaking about the constraining character of the classroom which simply means that if a person cannot get into a classroom there is no way such a person can get an education. Correspondence and later distance education using elements of technology and postal systems was an early twentieth century response to remove those constraints. Since then this innovation has gone through changes some significant and others somewhat modest. The significant changes have mostly been about the bringing in of newer and newer technologies; the modest ones have been about system changes particularly in management and governance.

Open and Distance Education began being a growing phenomenon over the last four decades, globally. Some would say that it has revolutionized our thinking on education and its delivery including issues of costs, access, quality and benefits. Many nations in the Asian continent have successfully established very large 'dedicated' distance teaching universities e.g. Pakistan, India, Sri Langka, Thailand, Bangladesh, Indonesia; others, such as Malaysia, Vietnam, Singapore have in place much smaller scale operations. Most of these are, fairly mature systems and therefore have in place infrastructure, processes, people and financial resources to operate well functioning distance education operations. Most of the systems are also at a stage of development which can best be described as 3rd generation distance education environments, meaning they rely extensively on older technologies of print, radio, television and to a limited purpose and extent the internet and WWW.

Meanwhile with the emergence of fast, intelligent, inexpensive and high capacity learning technologies the practice of open distance learning, in the developed world, has been moving towards 4th and 5th generation technologies where multimedia courseware embedded in a comprehensive web enabled learning management systems provide both synchronous, asynchronous and highly interactive learning environments. Among the many new opportunities that these new technologies present is one where collaborating in and sharing of curriculum, learning materials and associated tools/technologies becomes easily feasible.

It is becoming clear that twenty-first century education systems will witness further changes seeing an even greater transition from a heavy emphasis on teaching to a heavy emphasis on tearning. This will be brought about by a much more demanding and knowledgeable population of learners who would be more familiar and adept at using a whole range of technological tools available to them. In parallel to the advancement of the new technologies there has also been a global desire of many individuals and institutions to share especially learning materials free of legal as well as logistical restrictions. There are many reasons for this interest but most importantly six elements seem to have had a significant influence. In an interesting discourse on the future of education Futurist Thomas Frey highlighted some eight trends in his personal blog that he foresaw for this interest. I list six of these that have a relevance to your conference and this subtheme. These are:

The Changes in the Educational Environment

Information Explosion: The amount of information that is moving about today through some 60 million blogs, about 4 million entries in the Wiki, over 4 million books in Amazon, over 100 million accounts in MY SPACE and some 6 million videos in U Tube will continue to overwhelm. Information is exploding around us in every possible form. Yet, we do not have an easy way to translate these blocks of information into courseware or solving the problem of managing and transforming the information into knowledge. New and enhanced skills are required by our teachers for a new pedagogy that would see them as collaborators and navigators in learning rather than experts teaching a subject. Coupled with a new generation of students brought up in a world digital entertainment the 'lecture or lesson' as we know it will have to change form, substance and style of delivery.

Technology explosion: There is promise out there that we can, within our life time have a [wireless] connected world which has the potential to make every single human being a partner in almost any human endeavor – learning is one of them. There are already technologies currently available such as virtual reality, holography, compression technologies which can bring a distant classroom into one's neighborhood. This is only the beginning. These technologies can bring home the dreams of many internationalists who have aspired for the borderless movement knowledge.

Learning drivers: Maslow's Hierarchy of Human Needs is a theory in psychology that Abraham Maslow proposed in his 1943 paper A Theory of Human Motivation. That theory contends that as humans meet 'basic needs', they seek to satisfy successively 'higher needs' that occupy a set hierarchy. Why do people need to learn? Why do people want to learn? What are their motivations? What are the drivers that control a person's desire to fill their minds with knowledge and information

Maslow's initial hierarchy was based on two groupings: deficiency needs and growth needs. Within the deficiency needs, each lower need must be met before moving to the next higher level. Once each of these needs has been satisfied, if at some future time a

deficiency is detected, the individual will act to remove the deficiency. The first four levels were:

- 1.) Physiological: hunger, thirst, bodily comforts, etc.;
- 2.) Safety/security: out of danger;
- 3.) Belonginess and Love: affiliate with others, be accepted; and
- 4.) Esteem: to achieve, be competent, gain approval and recognition.

According to Maslow, an individual is ready to act upon the growth needs if and only if the deficiency needs are met. Maslow's early thinking included only one growth need self-actualization. Self-actualized people were characterized by: 1) being problem-focused; 2) incorporating an ongoing freshness of appreciation of life; 3) a concern about personal growth; and 4) the ability to have peak experiences.

Maslow later added a new dimension to the growth need of self-actualization, defining two lower-level growth needs below self-actualization and one above that level. They were:

- 5.) Cognitive: to know, to understand, and explore;
- 6.) Aesthetic: patterns, symmetry, order, and beauty;
- 7.) Self-actualization: to find self-fulfillment and realize one's potential; and
- 8.) Self-transcendence: to connect to something beyond the ego or to help others find self-fulfillment and realize their potential.

Our motivations for learning form similar patterns. Maslow's basic concept is that the higher needs in the hierarchy come into focus only once all the needs that are lower down in the pyramid are mainly or entirely satisfied.

Maslow's concept of self-actualisation relates directly to the present day challenges and opportunities for employers and organisations - to provide real meaning, purpose and true personal development for their employees. For life - not just for work.

Maslow saw these issues fifty years ago: the fact that employees have a basic human need and a right to strive for self-actualisation, just as much as the corporate directors and owners do. Increasingly, the successful organisations and employers will be those who genuinely care about, understand, encourage and enable their people's personal growth towards self-actualisation - way beyond traditional work-related training and development, and of course way beyond old-style X-Theory management autocracy, which still forms the basis of much organised employment today. The best modern employers and organisations are beginning to learn at last: that sustainable success is built on a serious and compassionate commitment to helping people identify, pursue and reach their own personal unique potential. When people grow as people, they automatically become more effective and valuable as employees. In fact virtually all personal growth, whether in a hobby, a special talent or interest, or a new experience, produces new skills, attributes, behaviours and wisdom that is directly transferable to any sort of job role. The best modern employers recognise this and as such offer development support to their staff in any direction whatsoever that the person seeks to grow and become more fulfilled.

Transition from consumers to producers: As we transition from a predominantly passive society to a more active one, people no longer want to just sit on the sidelines and watch. They want to participate. And a whole new generation of tools and equipment are allowing people to shift their role from consumer to producer.

This transition began with the introduction of comment sections at the end of online news posts. People began to voice their thoughts on whether or not a piece of news was accurate, timely, or in any way news-worthy. Many commenters added additional information.

When Evan Williams and Meg Hourihan's company, Pyra Labs, launched Blogger (later purchased by Google) in 1999, a major shift began in the world of user-generated content for the Web. Suddenly it became easy for anyone to create a blog site, and millions of people began to experiment.

In July of 2003, MySpace was founded by Tom Anderson, Chris DeWolfe, and a small team of programmers. As a site that allowed users to generate their own website and connection to friends, MySpace quickly became the dominant player in the emerging category of social networking with the 100 millionth user account created in August 2006.

Similarly, when Chad Hurley. Steve Chen, and Jawed Karim launched YouTube in February of 2005, it became very easy for people to produce and post videos online. As an enormously popular and free video sharing website, YouTube lets users upload, view, share, and rate video clips. As a result, millions of people have transitioned from video consumers to video producers with an average of 65,000 new video clips uploaded onto YouTube every day.

White these are examples of runaway success stories, the world of user-generated content is not without its own set of problems. Each has managed to handle the challenges in their own unique way. But what these examples best illustrate is the public's driving need to participate and lend their own thoughts and ideas to the world around them.

Courseware vacuum: Information is exploding around us in every possible form. Yet, we do not as yet have an easy way to translate these blocks of information into courseware. However, with the emergence of fast, intelligent, inexpensive and high capacity learning technologies we are seeing the beginnings of a new approach to practicing ODL. These new technologies present us with opportunities where collaborating in and sharing of curriculum, learning materials and associated tools/technologies become easily feasible. Such collaboration brings with a whole host of advantages and opportunities from cost to academic credit sharing. In parallel to the advancement of the technologies has also been a desire of many to share especially learning materials free of legal as well as logistical restrictions. The OER movement is a

product of these developments and over the last five years has excited and motivated many, for whatever reason, to be part of it.

The Open Courseware [OCW] facility of the Massachusetts Institute of Technology¹, in the United States of America has drawn global attention to the OER phenomenon of how high powered and quality curriculum can be made portable, under certain conditions, from institution to institution, across national and geographical jurisdictions. The conditions include appropriate legal environments that almost free IPR restrictions through arrangements such as Creative Commons. From about early 2000 the OER movement has grown exponentially with more than 2500 open access courses and growing becoming available from about 200 universities world wide. Geographically these breaks down to about 1700 in the USA, 450 in China, 350 in Japan and about 180 in France More OER projects are emerging at educational institutions in Australia, Brazil, Canada, Cuba, Denmark, Hungary, India, Iran, Ireland, the Netherlands, Portugal, Russia, South Africa, Spain, Sweden, Thailand, the UK, the US, and also Vietnam. There are already claims that some 800,000 courses are already resting on Moodle platforms from around 20,000 institutions with the potential to become Open Courseware. It would not be wrong to say that many are probably in their very early stages of development and may not go beyond individual enthusiasm rather than institutional commitments.

Interestingly according to a recent study by the OECD3, there are also a number of projects underway to make these higher education-based materials available in multiple languages, including Universia's Spanish and Portuguese translations, CORE's simplified and traditional Chinese translations, and Chulalongkorn University's Thai translations. These translation projects currently represent approximately 52% of all open coursewarestyle courses. Adding to this is also development at the non institutional sectors where articles, individual curriculum units, modules, and simulations - are also growing at a rapid rate. The English language Wikipedia contains over 1,300,000 articles. Math World contains 12,632 entries. Rice's Connexions project currently hosts 3,461 open learning objects available for mixing and matching into study units or full courses. And Textbook Revolution contains links to 260 freely available, copyright-clean textbooks. MERLOT offers almost 15,000 resources; European based ARIADNE offers links and federated searches in several networks and repositories. UNESCO/IEP hosts a wiki containing a listing of OER useful resources" with links to portals, repositories and open content projects. Even more difficult than to list the number of initiatives would be to estimate the quantity of available resources, even with a much narrower definition of OER.

The promise of OER, in many ways not only resides in the resources themselves, but also in developing the conceptual framework and methodological approaches that organize, manage and ascribe meaning to them. Until there is clarity around these issues the OER will remain of limited interest in the developing world. It is this that is going to challenge leadership and management as they take their institutions into the 5th generation.

Building Capacity to Meet the Challenge.

The availability of these new technologies as well as the desire of governments to increase access to learning opportunities has prompted many new actors in Asia to launch distance education programmes for one reason or another. These recent providers of distance education services in nations like Cambodia, Laos, Bhutan, Mongolia, the autonomous region of Tibet as well as conventional face to face teaching institutions, commercial raining providers, have started or are starting to explore ways to apply the new technologies for purposes of teacher training, girls' education, language instruction, health education, skills training, just in time workshops and many more. While these initiatives are laudable there is however, the danger that these proponents of high technology driven distance education may be underestimating the range of knowledge, skills and insight that are essentials in a well functioning sustainable distance education system.

The skills required to establish, manage, finance and operate a well functioning open and distance education system are well documented in the literature over the last four decades i.e. ever since the British Open University demonstrated the enormous benefits of using an industry like environment to conceptualize, design, develop, deliver and assess learners for formal qualification on a massive scale. The twelve or so open and distance teaching universities of Asia often referred to as the Mega Universities have also created system capabilities to handle hundreds of thousands of students annually. Besides these mega universities there are about a hundred or smaller open and distance teaching universities around the world. Most of them are located in the developing economies of the world where the pressure to increase higher education provisions has been on the increase and the resources to support this demand on the decrease.

Notwithstanding the size, whether big or small, distance-teaching universities all require a few basic essentials to function effectively. These essentials include among other things the following:

- A clear and purposeful vision for the venture, recognizing especially its weaknesses
- Knowledge of systems planning and administration
- Pedagogical skills and know how in curricula transformation
- Material design and Production
- Establishing and managing Learning Management Systems
- · Processing of and Complying to IPR requirements
- Learner support systems
- Programme, curriculum and Instructional design assets.
- An effective student information system
- · A well designed mentoring provision
- A good communication infrastructure
- A well tested Quality Assurance System
- · A well functioning IT infrastructure

All of the above simply says that Distance Teaching Institutions are complex beasts that require experienced and expert hands in many fields working as a team. Very rarely, in the latter part of the 20th century have distance education efforts been successful without most, if not all of the above, listed provisions. This is especially the case in the context of developing economies where because distance education is perceived as a cheap alternative to brick and mortar environments, cash strapped ministries of education and or training have embraced DE as a panacea to all their educational challenges without making adequate resource provisions to support the venture. Managing the 3^{td} or even the 4th generation ODL institutions, though presented additional challenges, skills acquired to handle them would seem inadequate given the many new options that are becoming available today.

Managing Change - Challenge to Leadership

Like the other technologies before, the new technologies do change things; sometimes these changes are simple and at other times, profound. As we consider the impact of these technologies on the planning of e learning ventures, it is worth remembering what Neil Postman⁵, said about it all in his book: The End of Education, [Vintage Books, New York,] in 1996. These are: that the new technologies bring both advantages and disadvantages. These advantages or disadvantages are not evenly distributed among the population. This means every new technology benefits some and may sometime harm others. We need to find ways to reduce the latter and increase the former. As Postman points out further, a new technology do not merely add something, it changes everything. In order to benefit from the new opportunities technologies bring to our environment without compromising on our mission to be socially inclusive we have to reassess our methods, means, structures and the use of our resources. For me seven elements, besides technology, require the reassessment. These are:

- Student catchment: Taking the cue from Maslow as asian societies move beyond their basic needs will they begin to clamour for higher needs responding to their self actualization hungers. This opens are whole new dimension to the size of the catchment that education will be expected to serve. It is almost becoming an axiom that education and more education is where asian populations make their biggest investment. In managing the change leadership will have to consider:
 - The size and character of the new catchment
 - The context of the educational provisions to be made available
 - The barriers to be breached
- Curriculum: You may recollect the landmark Delors Commission report⁶ to UNESCO that clearly and eloquently described the need to reform curriculum at all levels of education to prepare citizens of and for the new millennium.

Learning to know, learning to do, learning to be and learning to live together are all ideals that are achievable within the framework of basic and post-basic education. These recommendations clearly recognize that today's learners, both young and old, will spend their lives in a century that is information rich, knowledge dependent and global in character. They need the skills to cope with this dynamic period. The growth of online library systems, the easy access to expert knowledge through the Web, the variety of sources of learning and the frequent change of careers and location of residence during a person's productive lifetime will mean having new skills and refreshing old skills. In all these areas the new technologies are an extremely invaluable asset. The Web more than any other tool that we know of has the power to make available at the click of a button enormous amount of information from its original source. This information in its multimedia form provides the teacher and learner with information to support and enrich a curriculum in a modern classroom.

- Finance: The application and level of cost of new technologies is likely to lead a search for more funding. Where new technologies increase costs there is likely to be a tension between attempts to take advantage of their capacity to widen access and the search for ways of funding them access may be possible at a price only for those who may be privileged to pay for them. A consequence that has to be avoided to shift the responsibility from the provider to the user. Leadership will be expected to be creative in the way they unravel these tensions and at the same time keep the inclusive nature of their missions.
- Partnerships: The technologies allow for lot more creative partnership than
 hitherto possible especially in matters relating to curriculum, learner support,
 staff development and innovations. The challenge is to design partnerships
 that bring benefit while at the same time maintain that competitive edge. Such
 partnerships will be guided by shared values, institutional compatibilities and
 a purpose.
- Learning materials, copyright and intellectual property: At the heart of all learning in distance education are materials, specially designed to exploit the full potential of the technological assets. The aforementioned new technologies like OERs, Wiki educator, WWW are all changing the ways courses are developed and delivered. They pose enormous legal issues which require addressing.

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