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Sustaining Knowledge Societies Through Distance Learning: 
The Nature of The Challenge

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All civilizations are knowledge societies; they have used knowledge formally and informally in economic growth and in social development. The ability to invent and innovate, that is to create new knowledge and new ideas that are then embodied in products, processes and organizations, have always served to fuel development. However what is new is today's environment where intellect coupled with creative, innovative and inventive ideas have been recognized and leveraged to become a primary source of advantage and wealth.

Knowledge societies, as we understand and describe the term today, refer to a community characterized by that famous management guru Peter Drucker in the early 90's as being societies that treat KNOWLEDGE as its key resource and KNOWLEDGE WORKERS as the dominant group in its workforce. Drucker went further to describe such societies as:
1. Borderless, because knowledge travels even more effortlessly than money.
2. One in which upward mobility was available to everyone through easily acquired formal education.
3. Having the potential for failure as well as success. Anyone can acquire the "means of production", i.e., the knowledge required for the job, but not everyone can win.

There have also always been organizations and institutions capable of creating and disseminating knowledge say from the "guilds" of medieval times through to the corporations of the 20th century. In whichever way one would wish to define a knowledge society including the variants described by gurus like Peter Drucker and Daniel Bell, the fact of the matter is, the organizations that those of you assembled here are a part of and manage, are at the centre of such societies. This is not new. Many modern universities were created for utilitarian purposes. The formal mission of the land grant colleges of the USA was to improve the performance of agriculture and the mechanical arts. For much of the last century, the sciences and technology

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1 Drucker, P. (1994): Knowledge work and knowledge societies. The social transformation of this century. Goldkin Lecture, Harvard University, USA.
studies have dominated our universities. To invest in science was to invest in economic growth. The university under these circumstances has become more than just a creator of knowledge and a transmitter of culture. It has also become an engine for economic production through its Research and Development work and as we move more and more into knowledge economies, an incubator of ideas.

Knowledge societies offer both significant opportunities and real risks. These societies require fundamental changes in learning and teaching habits, a new organization of content and structure of learning provision and a new appreciation of learners' intellectual, emotional and social needs. The skill levels required in the labour market of societies that are knowledge based are high and they all face the challenge of raising their educational performance. Many of us gathered in this assembly know very well, from personal experience, that individuals who develop and maintain high skill levels achieve considerable social and economic success. Those who do not are at more risk than ever of marginalization with little prospect of finding sustained employment and the means that it provides for full engagement in other aspects of social and cultural life.

By and large nations wanting to create knowledge societies or their variants of it seem to have put their emphasis on the education and training of younger people preparing to enter the workforce. This is justifiable, but in a global environment where more than one billion youth and a similar number of adults have less than 10 years of school, paying attention only to the young does not support the creation of knowledge societies. In the new knowledge society, at least in economically well-developed nations, learning can no longer be the monopoly of the 18–25 age groups nor will it be limited to full-time study. An increasing number of students can be expected to be part-time, employed, above 25 and making a late entry into higher education. On top of this number, many who are non-participants in education today need to be brought into the fold if we are serious about giving all of our people equal opportunity. Such a diversity of learners will require courses to be organized so that they are flexible, can be studied off-campus and the credits thus received portable. These students arrive at study with skills (to learn by themselves), knowledge (of themselves and what they want) and experience (to enrich curriculum and the learning environment). In other words, they are very much contributors to the learning as they are receivers of knowledge. In this (knowledge) society, everyone will participate in education or training (formal or informal) throughout life. It would be a society characterized by high standards but with low failures. Such a society will offer a seamless canvass for individuals to start their learning anywhere in the canvass and exit at any point on the ladder of continuing attainment.
It is in this context that lifelong learning is a high priority for all. Based on the four pillars of learning to know, learning to do, learning to be and learning to live together, it provides the enhanced opportunities that are essential for full citizenship in the knowledge society. It is fundamental to the development of a nation. It builds the base for economic and social development, develops the capacity of individuals to contribute to and benefit from that development, sustains and enriches both individual and overall culture of a nation and builds mutual respect and understanding that transcends cultural differences.

Therefore, policies on education cannot be developed nor practice shaped in a compartmentalized environment where age becomes the basis of such compartmentalizing. There must be consistency and connections between primary, secondary and tertiary education, resulting in true lifelong learning systems. There must also be consistency and connections with other policy domains such as employment, science, technology and information and communication. There must be engagement in implementation with society as a whole and with local communities.

As interdependency between knowledge and economic activity increases they inevitably impact on the speed at which the knowledge and skill in the workforce becomes obsolete. Ten years ago, it was not uncommon to hear of an engineer becoming obsolete within a decade. Today, it is more likely to be about five years or less. In order to benefit from investments on research and development, it therefore becomes necessary to also constantly invest in human development in order to benefit from those investments. This has simply meant looking at universities for another purpose as well. The purpose was for them to be mechanisms through which a nation could augment its “human capital” to better compete in the global economy. Furthermore, in the new economy, enterprises based on information technology are becoming smaller and more dependent on the high levels of skills from all employees. These enterprises demonstrate that they are more flexible than the big corporations in their ability to respond to changing market possibilities. In such enterprises, more and more jobs require employees to make decisions and solve problems. To be able to continuously do that requires learning and training that is lifelong and continuous. All of these lead me to make an observation in the context of delivering education in knowledge societies. This observation relates to the nature of learners in a knowledge society:

The nature of learners is changing: Some 75 million young people, mainly between the ages of 18 and 25 populate our campuses today. Except for a small proportion, most others are full-time students. Their life styles allow them to adjust to the demands of the institutions they study in and the call of faculty as to when and where learning could occur. Those lucky

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ones among these students are able to express a limited choice in the courses that they can
do during the three- or four-year period they spend on campuses. The not so lucky mostly
found in the developing countries may not even have that choice. They are prescribed as to
what they can study within a window of time. They are expected to subject themselves to a
set of assessment sessions whether they are ready or not for such assessments; and if they
fail to meet some unstated requirements will be considered failures. This tradition is a long-
standing one, say about a thousand years old. The 75 million or so young people who
subject themselves to this process are a small proportion of the age cohort [15-24 year olds]
which globally may number as many as one billion.

If the future task of higher education is to provide for a vast majority of the population and to
offer them a coherent combination of basic and continuing learning, then we need to seriously re
examine the way we structure and deliver education today. This re examination must include the
arrangement of the two- or three-term year and a four-year long undergraduate programme, for
only those who qualify, the nature of the curriculum subjecting content, process, duration,
assessment and outcome of courses to a serious review; we will need to redefine quality and
excellence in terms of value and fitness for purpose. Thoughts on these considerations bring me
to make another observation, which is:

New strategies must be discovered, including and especially combining learning and
work. This, as some of you know was very much the spirit behind the COLOGNE
CHARTER\(^4\) of 1999 which recognized that:

1. first, that everyone should have access to learning and training, not just those who are
   intellectually gifted or economically privileged, and basic education should be free of
   charge. Special attention should be given to the needs of the disadvantaged and the
   importance of combating illiteracy;
2. second, that everyone should be encouraged and enabled to continue learning
   throughout their lives, not just in the years of compulsory schooling;
3. third, that opportunities for lifelong learning must be extended so that all people can
   have access to education anywhere and anytime throughout their lives.

The interaction of people and ideas is at the heart of education. Distance education
especially with the support of information and communication technologies (ICT) hold out the
promise of enriching the contents and changing the mode of delivery of education, potentially
allowing societies to extend access to learning and deepen students' ability to understand and

Geneva, Switzerland
innovate. They are also, when properly constructed, tools that expand individuals’ capacities to solve problems and acquire information throughout their lives. Here in lies the challenge to distance educators generally. The question is not whether there is a role for distance education in knowledge based societies but whether those who promote and practice distance education have a capacity to:

1. **Change the prevailing instructional paradigm** which demands that learners subscribe to a regime that does not recognize individual circumstances of pacing, pausing and progressing at one’s own self-prescribed regime. Educators including distance educators hold learners’ prisoner to time constraints. In a system supportive of lifelong learning the desired (new) learning paradigm should be one where learning becomes the primary driving force and, since learning can occur at anytime and at anyplace 24 hours every day, the constraints of time are removed.

2. **Customize Content**: Sophisticated pedagogy can facilitate individuals to customize their learning needs. Learning can either become a multi-channel or a mono-channel experience. The final authority on customization will be the expected learning outcomes of the subject and the learning preference of the student.

3. **Develop and deliver just-in-time training**: The rapid changes that are taking place in the workplace will require training to be delivered quickly. Such training needs to be high speed, low cost and should reach small and large groups. Traditional ways of delivering training is time consuming, labour intensive, socially disruptive and costly.

4. **Manage the Information explosion**: Those who study these developments say that the total amount of information that becomes available doubles every four to five years. Stating it another way, the total of all human knowledge that was available to an undergraduate in 1997 will be less than 1% of what will be available to a student in the year 2050. Distance educators have to become experts in helping learners navigate through this sea of information rather than pretending to be effective transformers of that information into knowledge for their students. Students must be trained to bring about that transformation. Those who survive this information explosion will be able to deal with it effectively, and even more importantly, turn it into knowledge. In other words we need to be clever with our instructional strategies.

For a variety of reasons those providing distance learning in Asia have mostly found it difficult to address these challenges. Sometimes this is so because of the legislative environments and at other times institutions have imposed upon themselves traditions very similar to their peers in conventional systems. Knowledge based societies require a new kind of culture; we need to create new traditions and new practices. I will conclude this presentation by
listing a number of issues that requires our consideration if we are to truly serve self sustaining knowledge societies. These are:

1. **Access** to learning, where reaching the unreached was seen as an essential imperative to improve the availability of educational opportunities to all citizens of a nation.

2. **Equity**: Ensuring that the ODL, especially where it is dependent on ICTs, identified are accessible to learners regardless of their places of residence, socio-economic status or learning abilities

3. **Relevance and quality** of curriculum and teaching by which citizens were provided with education and training to improve their quality of life, economic production and citizenship.

4. **Pedagogy**: Where ODL utilizes ICTs as tools for instruction, pedagogical considerations must receive policy attention. It is necessary that the choice of technology be dictated by the pedagogical objective of a learning experience. New pedagogical methods must be elaborated to exploit the full potential of a new technology. Policies that recognize the scope for deployment of the technology in support of learning goals are necessary

5. **Affordability**, to make resources available to a nation’s education and training institutions in a manner that assists these systems to achieve the goals of access and accountability, relevance and quality at costs that were affordable to the public purse on the one hand and the private (learner) citizen on the other.

6. **Sustainability**: Ensuring adequate provisions are available for the continued support and maintenance of operational and programme resources.

7. **Appropriateness**: of the technology to improve and to enable learning by increasing access to education and educational supports and by enhancing the quality of learning.

8. **Partnerships**: Collaboration within a nation’s educational and training systems as well as private sector interests for purposes of efficiency, enrichment and learner benefit. Regional and international collaboration can also be mobilized for similar reasons.

9. **Intellectual Property Protection**: Educators have traditionally made “copyrightable” works a basic pillar of their profession. Books, scholarly papers, syllabi, course materials and lecture notes, among others, are all assigned ownership to the creators of the property. Under the intellectual property protection legislation of many countries, digitized versions of these, as well as hybrid creations such as multimedia and Web pages are also assigned similar rights to their creators. Course and instructional designers, editors, Web masters and the institutions have also made investments in these materials. Such well-prepared multimedia learning materials are extremely valuable as they are used beyond the environment for which they were originally created. Yet, because these materials are digitized, they may be easily acquired without authorization. From a policy perspective, two items need to be addressed. The first has to do with the allocation of ownership of these
materials and the second has to do with ensuring that the materials are properly copyrighted to prevent misappropriation.

10. **Online Privacy, Protection and Censorship**: An aspect of all modern civilizations is the respect expected and shown to the privacy of the individual. There is a reasonable and widespread concern that the application of ICTs can compromise this respect. ICTs have the power to capture the full details of a learner from the moment he or she signs on for a course. While the details of an individual registered on a course is for legitimate purposes such as tracking the students’ progress or providing assistance during learning activities, there is a danger, however, that users may not be aware of the automatic data recording nor aware that schools can monitor all electronic transactions which could also include reading private e-mail messages. It is therefore necessary that schools must be made aware of the rights of individuals including their right to privacy and assisted in developing policies to protect the students’ rights as well as inform them explicitly of such policies. Already emerging are privacy guidelines such as those developed by the TRUSTe, a not for profit consortium. ⁵

The message for us as a community is simple. If we wish to be taken seriously as ‘players’ in knowledge societies we need to change in significant ways. Change has never ever been achieved without discomfort. All those vested with the leadership of our academic community must attempt to re invent, re engineer and refresh our practices to make us and our trade relevant to a new and interesting world. As observed by Kenich Ohmae ⁶ on another occasion “It is hard to let old beliefs go. They are familiar. We are comfortable with them and have spent years building systems and developing habits that depend on them. Like a man who has worn eyeglasses so long that he forgets he has them on, we forget that the world looks to us the way it does because we have become used to seeing it that way through a particular set of lenses. Today, however we need new lenses. And we need to throw the old ones away.”

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⁵ [http://www.truste.org](http://www.truste.org)