Transcript

1. On September 25, 1997, all 1000 courses offered during this quarter by the University of California, Los Angeles (UCLA), will go on-line. By a simple decree, university administrators have made the web page mandatory for all the courses in their College of Letters and Science. The web page will be constructed using a programme called WebCT. Apart from basic information such as course description, syllabus, meeting time, it will also contain readings, slides, and audio and video links to other resources (The Chronicle, August 1997).

2. Colleagues, you invited me to speak on the convergence of distance and conventional education; some of you who belong to my generation of distance education practitioners will, of course, remember that a discussion of this kind is not new. This subject has been discussed in a number of forums before. Dual mode institutions, their role, the advantages they bring to the practise of distance education and the challenges they confront, in being both good and economical, were all matters of great interest to our community throughout the seventies. I remember the big debate in Australia, led by a former Vice Chancellor of Deakin University, who was making a case for dual mode institutions and receiving encouragement from colleagues in India, Malaysia, New Zealand and Canada. Even then, there was already talk that the single mode dedicated distance teaching institutions had reached their peak and the future direction of distance education may well rest with the conventional institutions. That future seems to be here and it is therefore interesting, at least for me, to look back, reflect on those pronouncements of the seventies and eighties and see if anything has changed at all.

3. UCLA is by no means the only North American University riding on the back of the digital revolution
to reconfigure the teaching and learning environments. John Hopkins, Cornell, Duke, Rice and Stanford Universities are experimenting with the digital way of delivering knowledge products. There is talk that even the more tradition-bound institutions like Yale and Chicago have begun talking about distance education. So, has the "new wave" of learner centred and technology mediated delivery of education finally caught up with the world of academe and, if yes, what is causing it? Is it competition, is it demand, is it glamour or is it simply recognition that the "sage on the stage" is not the only path to Nirvana (enlightenment)? While the sage is, and will continue to be a necessary part of the educational environment, the stage is, perhaps, ceasing to be important.

4. Some 30 years ago, when I was coerced into teaching in an off-campus programme at the Science University of Malaysia, the distinction between "distance" and "conventional" forms of education seemed clear cut. There was a difference between my on- and off-campus students. The difference was not only in the nature of the student population but also (very clearly) in the different ways that I could reach them. One had, but could not quite depend on the postal services reaching remote parts of my country, access to telephone lines was narrow and, where it was available, the service provided was costly and often not dependable. All of these circumstances ingrained in me with the belief that the self-learning materials I created, by themselves, should have the capacity to enable my students to learn from them effectively with an occasional meeting with me. It was, therefore, not difficult then to accept the distinction between "distance" and "convention".

5. Times have changed; Malaysia has embraced the new technologies and its telecommunication systems have been undergoing a revolution. Today, there is no reason for any student in Malaysia to feel isolated however remotely he or she may be located. Study centres, telephone systems, electronic libraries and databases, and Internet facilities are all within reach. Learners may be located off-campus but interacting with a professor, a fellow student or a tutor, in real or delayed time, is not impossible. This does not necessarily mean that good self-learning materials are no longer important, but simply that developments outside campus walls have made the learning environment which was once available only within campus, replicable (to a large extent) even away from those walls. It is not surprising, therefore, to hear that the Malaysian Minister of Education, some 13 months ago, decreed that ALL universities in that country should be prepared to take their courses to learners outside campus walls. In time to come, it should not be surprising also to see more Malaysians studying for knowledge, skills, credits and credentials outside, rather than inside, campus walls.

6. Some ten months ago, UNESCO published the report of its Commission on Education for the 21st century1. This report drew attention to the fact that world-wide, basic education should be extended to some 900 million adults who are illiterate, to 130 million children who are not enrolled in school and to more than 100 million who drop out from school annually. The Commissioners were also quick to point out that, by and large, in many countries of the world; large parts of the secondary school systems were becoming dysfunctional with inappropriate curriculum and inadequate choice. Lastly, they stated that access to post-secondary education was abysmal in almost all parts of the developing world, especially in the context of a "New World" where education throughout life was a necessity rather than an option.

7. Those of you who are observers of educational trends and demands will also be aware that there is
rarely a political leader in the world today who does not speak of a need to increase opportunities for post-secondary education in his/her country. Countries, where participation in this sector is below 2%, are aspiring to achieve participation in the double-digit level and those who are already at the low and middle double-digit levels are aspiring for almost universal access. Is this desire to aspire for mass basic education and post secondary-education and training just based on social equity or are there any other considerations? Reflect:

- In the world of work, "... the 1960's future has become the 1990's present ... people now are enveloped in the revolution that was forecast in the 1960's. It is all around us." (The Futurist, 1996). Advances in communications and information technologies are constantly increasing the extent to which industrial processes are based on and driven by knowledge. This has meant workplace obsolescence for millions of workers whose knowledge and skills become increasingly useless within a short period of time. When I was leaving college, my aspiration was to return to my little town and settle into a safe and salaried job for the rest of my life. I did not, because by then my hometown did not have a job for life for me. I have since changed jobs five times and relocated my place of residence five times as well. Today’s job entrant will be naive to believe that there is a job in his/her hometown and that his/her knowledge will be useful beyond the next three to five years. There are roughly two billion people in the workforce today who will wish to continue be in the workforce for at least the next 25 years. It is not too difficult to imagine what needs to be done to retrofit this generation of workers, constantly and periodically. Returning to school throughout life is not going to be a matter of choice.

- Some three years ago, a North American multi-national was scouting around Southeast Asia to locate a wafer fabricating plant. They finally zeroed in on two countries - Thailand and Malaysia. Malaysia won in the end - the factor that made the difference was the higher level of language (English) and numeracy skills of Malaysian labour. As globalisation progresses, economic competition becomes much more acute. If countries want to survive this competition, they have to provide the most competitive environment there is to attract investment - an educated labour force becomes a big asset. At the other end of the scale, among the older economies, it is not so much the qualification of the new entrants to the job market that determines competitiveness. Their numbers are shrinking and, therefore, cannot provide in large numbers, the new skills required. Those already employed need provisions for upgrading their skills. Economic liberalisation, competition for investment and political necessities, rather than the desire for pure commitment to greater social equity have all contributed (to the demand) for more education among our nations.

8. It is therefore not surprising to hear "provisions for more education" becoming part of the political noise. In an estimate done for one Australian development agency, it was said that, globally, we could expect to see about 150 million young people seeking access to tertiary education by the first quarter of the next century. They would come mainly from countries presently described as developing. Many times that number, who aspire to upgrade themselves, would also be knocking on the doors of post-secondary institutions in countries presently described as developed. This would, as your very distinguished Vice Chancellor pointed out not too long ago, require the construction of one new university every week for the next 20 years. For individuals and nations to be constantly competitive, preparing the workforce for new kinds of employment as well as re-skilling the workforce while it is still working becomes vital. If
we add to this, the aspirations of many societies to be provided with "equality of opportunities" which have been denied them in the past, then nations must transform themselves into learning societies. Post-secondary educational facilities must not only be widened, but must also reach those who were once considered unreachable. This would include cross generation clients, women, the physically challenged, under-privileged minorities and others. This inevitably must lead governments to desire systems that deliver mass post-secondary education and training, comprehensively and inexpensively.

9. Wanting more and different types of education and making adequate resources for it are two different things entirely. Providing education to the one billion children lucky enough to find a place in classrooms and the 60 million young adults on campuses, presently costs the world economy approximately five to seven thousand billion dollars. What then would be the cost for:

- providing literacy education to some 900 million adults worldwide?
- making basic education available to one billion children?
- re-skilling, retraining and keeping current, a world-wide workforce of over two billion people who will most likely
- be working till the end of the first quarter of the next century?
- enabling some 700 million youth to be economically productive? and
- making tertiary education available to no less than 150 million individuals aspiring for this experience?

To a species which has successfully defied gravity to explore new frontiers in space, possesses the intellect to conquer any disease, feed itself, clean up its environment and, more or less, has a unique capacity to self-destruct in a second, meeting the above educational challenges is not beyond (its) grasp. However, it will take a commitment to global social equality and considerable resources to achieve these goals.

10. Rightly or wrongly, many government policy-makers have used the scarcity of resources as a major reason to advocate the use of distance education to confront the educational and training challenges that have been emerging within their communities. Again, rightly or wrongly (at least in the past), academic debates did not recognise resources as central to the issue. The concern here has been on education, instruction, teaching, learning, knowledge and information. The conventional position has been (and, perhaps, continues to be in some quarters) that the norms of good teaching are to be found in face-to-face modes and the onus is on distance educators to demonstrate how far they are able to meet them. These norms have more or less focused on:

- the purpose of education (versus training);
- the central role of the teacher and the tutor in the learning process;
- individual and pastoral care;
• peer support in the learning process;
• social environment for debate and reflection; and
• the distinction between knowledge and information.

11. The implication here is that once out of campus, the above-stated norms seldom exist. Distance education, on the other hand, has always attempted to draw a distinction between teaching (what is to be taught) and learning (ways in which it can be learnt). Planning, designing, creating and delivering a course with the accompanying support systems to students, have effectively replaced the norms of conventional modes, at least in terms of values of education and instruction, roles of teaching and learning. In terms of the concerns relating to knowledge and information, should we not seriously reconsider the belief that the most important part of using or transforming information to knowledge is the presence of a warm bodied guru? Good instructional design, clever organisation of support systems and adequate provision for peer learning, can all facilitate the transformation processes that were once thought of as special to a classroom.

12. While the debate is by no means over, the environment in which the debate has been taking place is changing. The main agents of change in this case, apart from the political and a few academic forces, seem to be the new inventions in computing and the technologies surrounding information and communication. The communications and information technologies have become more versatile, less expensive, friendlier and supportive of learner needs. They have come to a point where they allow teachers to accomplish what they can imagine, be it instant access to an audio clip, a laboratory simulation, raw data or almost unlimited availability to literature. This, you all know well enough and I am sure you will hear more of it in the days to come. The foresight, courage and imagination of people such as yourselves and the arrival of these powerful technological tools, have forced and continue to force shifts in the way in which teachers see their roles in transactions involving learning. The position that the administration of UCLA is imposing upon its academic community is a reflection of the future.

13. Apart from the communications and information technologies, two other equally important developments also have a bearing on our discussions. The first relates to the market and the second to economic libertarianism. At no time in our recent history has the need to keep oneself current, in terms of knowledge and skills, been greater than today. Whether one is a financial advisor, a medical practitioner or an environmental engineer, the pace at which knowledge is growing requires all of us to be learners if we aspire to be professionally active and economically productive most of our lives. An entire industry, providing knowledge-related services, is being spawned and the users of these services expect knowledge products to come to them rather than they travel to the sources of the knowledge. The second and which is related to the previous point, is the expectation of most governments that their institutions of higher learning ought to generate a substantial portion of their revenue by being entrepreneurs in the knowledge market. From vending on-campus under-graduate education in the Far East markets to providing management training to busy executives, universities and colleges are fast moving from being just cost centres to 'for profit' organisations. In this context, strategic alliances with industry and commercial houses as well as using electronic networks to deliver education, are becoming common occurrences. Efficiency considerations, competitive edges and market innovations all require new ways of dealing with
educational delivery.

14. Not only in the developed world, but also on almost every continent, a resurgence of interest in taking education to the user is becoming increasingly noticeable. In the recently concluded conference of the Ministers of Education of the 53 Commonwealth countries, the most widely discussed item was the application of the newer technologies and experiences of distance education to many of the challenges confronting them in widening access to learning to the 1.8 billion people of the Commonwealth. It is important to note here that the impetus towards greater use of distance education has come from governments and their policy-makers. The larger academic community has mostly been reacting rather than leading. Very broadly, the policy directions seem to have manifested themselves in a number of ways across the nations of the world:

- Australia, New Zealand and the South Pacific have always used their conventional systems to deliver distance education. While in New Zealand, the Open Polytechnic is developing a strong presence as a dedicated distance teaching facility - other institutions in this sector are not excluded from offering similar services. Australia, on the other hand, has in the form of its Open Learning Agency, a facilitator of sorts to publicise and promote distance education, but the agency does not develop its own courses nor award credits.

- Asia's passion for dedicated distance teaching systems will continue at least for sometime to come. However, the need to broaden access to larger parts of its populations will require more than just an Open University. Already in India, there are more off-campus students studying externally with conventional universities than there are through distance teaching systems. Malaysia and, more recently, Indonesia are both encouraging their conventional universities to use the new technologies to deliver more; China's normal universities are being encouraged to consider off-campus programmes on a "user pay full cost basis". To expand participation from the current low levels of between 1 and 2% to 14 and 15% in the next 20 years in many parts of Asia, without massive increase in resources, will require an entirely different method of delivering education on the continent.

- With already 57% of the present tertiary education students studying through non-conventional channels in Europe - many institutions, apart from the open universities, are engaged in delivering their courses to off-campus students. There seems to be political encouragement for more of them to enter the non-formal market-place by making use of all the technologies that are currently available.

- In Anglophone Africa, the intention is to direct conventional systems to become dual mode at least at the tertiary level. The continent needs to use its limited availability of academic talent to maximum benefit. There is room on this continent for dedicated distance teaching institutions, especially to cater for specialised needs such as teacher and management training as well as to meet critical needs of basic education.

- In North America (especially the USA), there is a great resurgence of interest among conventional providers of education to become distance education facilities. As we all know, the
new technologies are being seen as the backbone of such systems and there is also a strong element of competition among providers.

15. It may be a little unfortunate that, in some instances, these policy directions somehow see distance and face-to-face modes of teaching and learning as separate although parallel educational enterprises. This has a tendency to reinforce and perpetuate the belief that somehow the demands of, or expectations from, one service are not relevant to the other. Those of us who have worked in both modes, know how far from reality this perception is. The perceived gap separating one from the other has even less of a justification with the emergence of the new communications and information technologies (as is seen in the case of UCLA). I am sure you will not dispute with me if I were to claim that the "distance" we confront in our profession has less to do with delivery and more to do with the way we have designed and developed learning materials and subsequently supported learning. If we accept this statement, then it would seem that policy considerations must focus on knowledge and expertise, organisational matters, infrastructure and financing to instil good pedagogical practises in post-secondary institutions; the mode of delivery then becomes secondary to these considerations.

16. Good practise in delivering education to clients outside of one's immediate environment requires serious consideration at many levels. These are issues most distance educators will take for granted, but it does not seem to be so in the case of many institutions or faculties which add remote delivery to their list of teaching activities. Research into the basic requirements for good distance education indicates that the following key areas require attention:

- curriculum design;
- curricula transformation;
- communication;
- phased learning; and
- user-friendly administration.

17. All of these good practises apply equally to both distance and conventional forms of education. During the last two decades, campuses in many parts of the world have been dedicating themselves to improving the quality of their teaching. The use of audio and visual aids, computer aided and assisted instruction, outcome-based curriculum, problem-based learning, etc., have all contributed, in one way or another, to shift the centre of the educational transaction away from the faculty to the learner. The arrival of the newer technologies such as multimedia seems to have accelerated the process even further. UCLA's decision to store and make the classroom lecture available is yet another institution transforming its tradition of educational delivery. Even more importantly, it is also recognition of the signs of our times. Like any other transformation, new opportunities as well as threats will emerge.

18. The opportunities will include:
• improving the learning environment beyond our present imagination; it allows teachers to bring the great minds of our times to their students at the touch of a button; it empowers learners and, in so doing, encourages inquisitiveness, research and creation of new knowledge;

• opening windows for partnerships of many kinds including with other institutions, businesses and individuals. Curriculum enhancement and sharing across the globe will become possible as will the mobility of learning products;

• playing a central role in the knowledge revolution by being engines which will enable individuals to participate in this revolution;

• renewing knowledge rapidly and less expensively;

• developing systems that allow transparency and thereby impose regimes of good practise; and

• achieving economies.

19. The threats on the other hand may include:

• alienation of a significant proportion of the academic community which may be uncomfortable with a new culture of teaching and learning; inducting such sceptics on the merits of this new culture is an important consideration for management;

• more intense competition among institutions for resources and business, which can be distracting; the main purpose of a university or college is to provide good quality education; and

• the fear of losing traditional values and the erosion of quality.

20. As an advocate for more distance education, I can only be optimistic about all that is happening in the world of tertiary education. Whether education is delivered by dedicated distance teaching or by conventional institutions, what matters most (at least to me) is that the teaching we do is excellent and it enables learning to be effective. Equally important also, is the concern that those of us who are engaged in this profession recognise the urgent need to derive maximum benefit from the enterprise. The new technologies are not meant to replace teachers, but to see that they contribute significantly to the enterprise and, in terms of both quality and accessibility, we must make these technologies a necessary part of our consideration. The challenge is for us to find the most judicious ways to match the versatility of the technologies to the educational goals.

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Footnote: