Introduction

There are many things about OUR century that we can be proud of. Colonialism is by and large gone and most countries are now independent; more and more people want to participate in making their communities work and the voice of and for human freedom is finding a hearing across the world; there are signs of perhaps global peace and security; human development generally seems to be on a fast course with the developing countries on a much faster pace than, say, that of industrialised countries in the last century, and the ingenuity of humans has led to many technological advancements in space, medicine, agriculture, information and communication. While we can and should commend ourselves on this progress, there is still a long list of deprivations, for example, the disparity between the rich and poor nations in terms of food, health care and social security is still large and increasing; there are now more conflicts within nations than between nations, and the social and political fabrics of many countries are beginning to disintegrate; the environment is largely endangered and our biodiversity at risk of massive erosion. It is still a world of great inequality.

*Professor Gajaraj Dhanarajan, President, The Commonwealth of Learning, Vancouver, Canada

Inequality In The World Of Learning

The progress of the first quarter of the next century in terms of human development may perhaps have only one yardstick of measurement and that is the level of equality of opportunity between people and nations. Nowhere is this disparity more glaring than in the
field of education. If we accept the premise that education, more than any other factor, can make the real difference between wealth and poverty, health and misery, conservation and destruction, national unity and division, then the levelling of educational opportunities must be a priority in the next decade. Just consider these:

1. Participation rate at pre-tertiary levels of schooling in the OECD
countries is between 88 and 93% and at tertiary levels it is between 30 and 50%.
2. In non-OECD countries, East Asia and the Pacific Islands,
participation rate at primary school level is close to 90%, though in East Asia some 100 million young boys and girls are still out of school. Participation in tertiary education is below 15%.
3. In South Asia, some 380 million people are still illiterate; while
participation rates in primary school education have increased dramatically to about 70%, at the tertiary level participation is around 5% and less for the whole region.
4. In Latin America and the Caribbean, about 31 million or roughly
86% of young children are able to go to primary schools, but less than half of grade 1 entrants reach grade 5; at the secondary level some 20 million boys and girls and at the tertiary level some 27 million men and women are out of school.
5. In the Arab States, some 46 million {from 80% (primary) to 55%
(secondary)} young people are in school, however, 80 million people are illiterate and a total of 23 million children are either out of primary or secondary schooling. In tertiary education, participation rate is very low.
6. In Sub-Saharan Africa, some 80 million young people are out of
primary and secondary schools which is about 45-55% of the age cohort. Participation in tertiary education is between 1,200 (South Africa) and
16 (Mozambique) per 100,000 of the population.

It is in this environment of tremendous disparities at all levels of the educational sector that we need to examine the role of the Universities in the 21st Century and how they relate to each other within and out of their countries. In as far as the higher education sector is concerned, two factors must receive serious attention.

. The first is the fact that despite high numbers of illiterate and out of
school children and youths, the number of individuals coming out of school and aspiring to undertake post-secondary education continues to grow - there are more than one billion youths attending school today (less than 300 million 50 years ago).
. Second, the place of work continues to change rapidly not only in terms
of the sectors but also in terms of the nature of work - agriculture and industrial work no longer constitute major sectors of employment instead more than one-fourth of the labour force in developing countries and more than two-thirds in the OECD countries now work in the service, communication, computing and information sectors. These sectors demand a constant renewal of knowledge and skills.

The Demand For Knowledge

All this means an unprecedented demand for and growth in the higher education sector not only to serve the needs of those coming out of school between the 18 and 24 years age groups, but also those who will continue to return to study to keep up with changes in the work place. The World Bank estimates a growth rate of 8% in the low income countries against a 4.5% rate for the higher income groups. Various other estimates seem to indicate that by the first quarter of the next century, there may be as many as 150 million individuals seeking post-secondary education in colleges, polytechnics and universities. In 1994, less than 50 million were served by between 16 and 20,000 post-secondary institutions at an annual cost of some US$1,200 billion. Most of the new demand will come from the present low income countries as well as from other non-traditional sources of supply (the chronically unemployed, people temporarily out of employment, women, girls, youths out of school, refugees and the disabled). The regions where the demand will be most dramatic will be the same ones where the fiscal, physical and human infrastructure needed to meet the demand will be least developed. Alternate ways of bringing education to these marginalised communities have to be found.

Distance And Open Learning

The clients of higher education, their numbers, the methods and cost of delivering it (education) to them will require a radical change if colleges and universities wish to respond in a meaningful way to the larger demand, sustain high quality and reduce the unit and total cost of the venture. Among the many options available to the sector is the use of a number of technological products that are and becoming available to educationalists and educational institutions. These technological innovations and the experience of delivering education to out of campus learners by distance and open learning institutions will form the basis of my panel's discussion at this symposium. While this shift in the paradigm of educational delivery opens up far greater opportunities for partnerships and collaborations than ever before, it will also be naive to believe that such partnerships will be fair, collegial and mutually rewarding between participants unless a conscious effort to be so is made by those participating in such arrangements.

The new technologies of today and those that will emerge as we progress towards the next century have brought and will bring humankind into an era of global communication; these
tools have made global interdependency even more profound than it has ever been. Marshall McLuhan said, some 25 years ago, that communication technologies bring to any society that adopts them, fundamental changes in patterns of personal and social interaction. In our life time, we have seen it happen from such diverse events as the increased condom sales in India (thereby helping to control population growth) by the simple intervention of a "sassy" television delivered commercial to, say, a greater use of the fax machine, not only to exchange business correspondence but also to circumvent official censorships to the flow of news. The converging technologies of communications, computing and information have gone far beyond enabling just the movement of goods and services - they have sensitised individuals to a world they were once unaware of and, more importantly, to a world in which they would wish to be full participants rather than remain passive bystanders.

Globalising Curriculum

Globalisation and universal interdependency will require people to also understand themselves and others through a better understanding of the world. I believe that these social changes must inevitably manifest themselves in changes of college and university curriculum. Such curriculum will have certain core universal objectives regardless of the location where the learning is taking place. In the recently published Delors Report, the UNESCO Commissioners called for four pillars of education to form the basic framework of education. These being:

. Learning to know, by having a broad overview of things and the skills to work in-depth on selected fields; learning to learn and thereby benefit from opportunities to learn throughout life;

. Learning to do, by acquiring vocational skills and the competencies to work in different situations and to work in teams;

. Learning to live together, and appreciating other cultures and people, respecting pluralism, peace and managing conflicts; and

. Learning to be, so as to better develop one's own personality, acting with autonomy, judgement and personal responsibility.

The call for curricula reform is not a new one. In early 1990, the Royal Society of the Arts, in arguing a case for wider participation in better higher education, made a similar plea for courses and programmes to be:

. Rigorous, attractive and enabling, so as to attract and retain student interest in learning, rigorous in its demands of intellectual and skills challenges and enabling learners to know and to do;
. Provide appropriate balance of subject skills and knowledge, general conceptual skills and personnel transferable skills, to work together, to lead and to respect others and their views, and

. Give added value and fitness for purpose to each student or learning to be;

and more recently, the OECD, through its reports on the educational challenges confronting its member states, seemed also to indicate the need for curricula reform which will result in learners acquiring the skills of:

. Communication, especially for working in a multicultural environment given the mobility of today's population for learners to appreciate the cultural differences of people outside their own communities and countries;

. Problem solving, which will require the ability to frame problems in the first place and then to apply information technologies to solve them;

. Working together in teams made up of people with different backgrounds, culture and skills; and

. Self learning, to be a lifelong learner, not only the skills of learning but also skills to assess what knowledge and skills one need to acquire to be competitive in and relevant to one's living environment.

It seems to me that forces outside of campus walls may eventually force the powers within to re-examine their core curriculum to meet users needs rather than perpetuate the traditional practice and belief that academic autonomy and freedom do not allow a say for the consumer to demand what is relevant, good and desirable for him or her. Globalisation will mean similar demands from diverse locations (a good example of what could happen is the MBA programme which, whether delivered in New Delhi, Beijing or Sydney, has features that are almost identical). In any meaningful and intense partnerships between institutions of higher learning, especially across national jurisdictions in as far as teaching and learning are concerned, the sharing of curriculum is perhaps the most sensitive and potentially difficult part of the arrangement, and resolving this impediment will require both patience and determination; partners unwilling to come together on matters of curriculum are not about globalising educational delivery, they are about self-serving interest, domination, superiority and control.
A Role For Technology

Fundamental shifts have to be made in the way we deliver education as we move away from elite to mass higher education for a largely mixed population in terms of its academic, cultural, gender and age traits. The assumptions of universities as to the where, when and how of teaching will have to undergo profound changes. One could expect a more assertive learner who, with the skills to use the technology, will demand a learning content and environment that meet with his or her needs rather than one where the institution or the academic determines the menu. Communication and information technologies, on which my panel speakers will have more to say, that are coming into use have yet an unrealised potential to apply to educational delivery.

But technology does not teach; it helps in the creation, production and delivery of teaching. It enables the transformation of the relationship between teachers and learners. We are entering an era where both multimedia and hypermedia are bringing together under one umbrella, the essence of print, audio and video signals, computer assisted instruction, computer conferencing and computer assisted group learning. At the heart of this teaching and learning transaction there will still be the teachers and their institutions; the challenge for them will be to create the pedagogies of learning that will set the educational parameters within which the technologies will contribute to effective learning.

Alliances

It is unlikely that in a learner centred, flexible, technology driven system of education where the student can be located anywhere in the globe, institutions can operate on their own and be immune to the pressures and influences upon them from their governments and, more importantly, clients. Partnerships, mergers, consortiums of one kind or another may have to be considered for many reasons but more notably for reasons of:

. Economy: the development of learning resources, establishment of support centres for learners; infrastructure for the delivery of courses are all up-front high capital costs which can be saved by shared use;

. Changing enrolment patterns is a common feature of flexible and modular learning; no institution committed to user centred curriculum can fulfil all learner demands; cross sharing of courses to meet programme aims and objectives better achieves student demands without causing enormous costs and presenting risks to individual institutions;

. Funding patterns which are uncertain and non-sustainable requires alliances and strategies that reduce risks; and

. Curricula demands that require a large variety of academic talent for short periods of time is better accomplished by sharing staff resources.
All of these actually provide a strong incentive to build partnerships in a number of areas - from the very mundane such as developing new learning materials to the very exciting of sharing students, courses and credits. Partnerships, especially with institutions located in those parts of the world where the demand for learning will far exceed the ability to supply, will be particularly helpful as nations begin to accelerate the agenda for greater equality of opportunities. Other than in areas of joint research and perhaps staff development, successful partnerships resulting in long-term mutual benefits for all parties especially in programmes and courses have been few. Some examples of existing arrangements which seem to be successful in the distance teaching and open learning sector that comes to mind include:

1. The National Technological University (NTU), USA: which acts as a bridge between remote learners and participating institutions (faculty) in post-graduate engineering studies arranging one way transmission of lecturers (in synchronous and more lately in asynchronous mode) with two or multiple ways of teacher - learner - learner computer-based communication. It enables the movement of credits and at the same time also grants its own awards.

2. The Open Learning Foundation Group (OLF), United Kingdom: a federation of mostly British Universities which design curriculum and develop self-learning materials for distribution to off-campus students. The Foundation does not support the learning environment nor does it assess or award credits; it facilitates staff development activities.

3. Open Learning Australia (OLA): an educational 'broker' with a multiplicity of functions to bring courses of Australian tertiary institutions to remote learners but does not itself have credit or credential granting authority.

These are all agencies which facilitate learning by managing a learning environment (as the NTU does), acting as broker of a kind with marginal support to learners (the OLA, Australia) or coordinating the process and development of materials (the OLF, United Kingdom). All three agencies, in their different ways, play extremely interesting roles and do, in fact, enable greater access to learning take place. Their relationship to the institutions which own the curriculum and credits, however, is non-interventionist in the curricula and assessment areas, mostly passive in academic decision making, actively business oriented and largely confined to national jurisdictions. Partnerships transcending national boundaries must be more than this, otherwise, as we have seen in recent years, they simply fall into a business arrangement where those who possess the knowledge products arrange to have distribution and service centres (for a fee) for the products with little or no transfer of the intellect, skills and technology (the twinning arrangements of many Australian and British Universities in Malaysia over the past decade are prime examples of these) which are needed to sustain the ventures.
In a report prepared for the Commonwealth Heads of Governments in 1987, a select group of eminent academics from the Commonwealth suggested that an opportunity to create a pan-Commonwealth family of distance teaching institutions was feasible (given the unique way in which these institutions designed their curriculum, developed their courses and learning materials, delivered teaching and supported learning and assessed and awarded credits). The components that could contribute to this network, were to include course production, delivery, student support and assessment and accreditation. The need for such a pan-Commonwealth partnership is a lot more urgent today than ever before if we wish to reduce the gap between those who have all the opportunity for higher learning and those who do not.

The 21st century will witness, I am certain, the emergence of a number of pan-global open learning systems not necessarily funded by the public purse but by entrepreneurs who will work in partnerships either with like-minded individuals or with public-funded institutions which will not place impediments against the movement of students, courses, learning materials, credits and staff. Like me, many of you in this audience may have knowledge of discussions that are already taking place among the international business community and perforce ask yourselves that if these discussions can happen in the private domain, why should they not take place among public institutions? Could it be that private enterprise is more sensitive to partnership arrangements, that profit motive enables it to make adjustments to parochial interests and management is much more focused on outcomes and less on peripherals?

Among a series of studies commissioned by the Commonwealth Secretariat prior to the establishment of the Commonwealth of Learning in 1986, one prepared by Daniel et al cited an analysis of a consortia that had failed. Lessons from these failures are worth noting as we enter into the next century:

. Complimentarity: Partnerships are based on mutual respect, trust and benefit. It is not exploitative of those within the partnership, though, clearly one purpose in any partnership is to strengthen one's competitive position. Partnerships are not about donors and recipients, they are about alliances supporting and building strengths. Dissonance among members about perceived status and resource capacities are not helpful.

. Mission clarity and articulation: There is a need to establish very clearly the purpose of the mission and to articulate it sensitively. A clear sense of direction rather than vaguely cobbled after thoughts for partnering welcomes disaster and frustration.

. Institutional commitment: Partnerships involving curriculum, materials, learning assessment and credentialling require unequivocal institutional commitment, support and approval. It is NOT an arrangement between two individuals - it involves entire communities and therefore requires an ownership of entire communities.
Government and community support: International partnerships must have government support both at a policy and practical level where it concerns the delivery of educational products.

Organisational structure to support partnership activity needs to be put in place. Education delivered across national jurisdictions relies on faith, trust and the belief that those who are delivering the education will also take the responsibility to support the learning environment just as they would when such transactions take place within campus walls in their own immediate environment.

Leadership: Like any such venture, the quality of the partnership is only as good as the time and interest that leaders of partnering institutions bring into the alliance. Venturing into international academic partnerships because it looks good to market presidentships locally do not make good collegiality. Leaders with a vision of global development and a desire to assist in reducing unhealthy disparities among people and nations and are willing to work towards these goals are what the international community needs.

In the concluding paragraph of their book on Collaboration In Distance Education, the editors, Moran and Mugridge, stated that the "distance education institution of the year 2000 is likely to be as much an educational broker as a credit granting institution. It may develop niche areas of academic expertise, which it will guard jealously in its immediate sphere of influence - but which may be amenable to partnerships with Institutions that offer no threat to its status or territory". Viewed from the perspective of the intensely competitive period of the mid-eighties and nineties, their view of a self-serving partnership wishing to fight off threats and preserve territories is understandable. Partnerships of the 21st century cannot be about territorial preservation (cyberspace does not recognise this), it will be about student volume and economics, learner choice and autonomies, mobility of jobs and people, explosion of knowledge and technology and about interdependency and universalisation. It will be a strategy for the survival of all.