

Academic Objectives, Occupational Preparation And The Learning Process: Strategies And Policies For The Future

Professor H. Ian Macdonald

York University Toronto, Canada

As I approach nearly fifty years of participation in the formal academic world and reflect on my recently concluded ten years as volunteer Chairman of the Commonwealth of Learning, I hope that I can tie together a number of threads which make up the complex fabric of education. As we raced to meet the global objectives for the year 2000 and now attempt to fulfil the Education for All mandate, two contending states of mind are all too apparent. On the one hand, we have become excessively preoccupied with the means of delivering educational services. At the same time, I would argue that we have failed to clarify, or even formulate, the broader purposes underlying our educational objectives. Such an enlarging dichotomy, if allowed to persist, could be a prescription for massive disappointment and extended divisions among people, races and nations.

In formulating public policy, we are too often swept along by a current of seductive terminology without examining the meaning of the words; equally, we fail to challenge the appropriateness of terms such as globalization, or the global village, as an accurate description of our situation. By the same token, we are tempted to conclude that only global solutions, macro-level policy, and institutional dominance will provide the key to progress, and we consider it axiomatic that education will be the panacea to cure the world's ills. Certainly, I include myself among the believers in that doctrine, or at least I did, until a very simple question threatened to shatter that illusion, and forced me to explore some basic issues about education. Since all of us have come to accept the doctrine of life-long learning, we are obliged to answer the question: "Learning for what?"

In July of 2001, I was privileged to deliver the G. Ram Reddy Memorial Lecture in New Delhi. There, at the conclusion of my presentation, one of the professors present challenged me on an issue that I have been pondering ever since. I have always believed that education is a prerequisite not only for personal fulfilment, but also for peace and harmony in the world. Education leads to wider compassion, greater equality, and an enhanced quality of life for mankind. Why, then, I was asked has this not happened? Indeed, science and technology have produced weapons of mass destruction as well as increases in agricultural productivity, modern medical research has brought threats of biological terror as well as improvements in public health, while the limited access to education has widened the gaps in the quality of life between individuals as well as

between nations. And now, the very activity in which we share a common interest - distance education - is employing modern technology and tools that could well result in a massive enlargement in the so-called digital divide.

So it is that we must ask: has education failed us? Have we nourished false hopes? Does the so-called knowledge society contain the seeds of its own destruction whereby it will ultimately crumble under its own weight? On the contrary, I would argue that it is we who have failed our educational system. We have fallen short in providing the leadership necessary to harness the benefits of education for the purpose of achieving a better world, and globalization - the companion of the knowledge economy - has, until very recently, had every appearance of widening the gaps and increasing tensions on a global scale. In a sense, then, we have not given education the opportunity to deliver its high promise, and to apply its capacity to provide for a better world.

Correction of that situation is one of the great moral imperatives of our time. Not only have we not beaten swords into ploughshares, we have given the bomb much higher priority than the book. Yes, as Professor Amartyn Sen asked in his brilliant keynote address to the 15th Conference of Commonwealth Education Ministers in Edinburgh recently: "Why is it so important to close the educational gap, and to remove the enormous disparities in educational access, inclusion and achievement? One reason, among others, is the importance of this for making the world more secure as well as more fair. H.G. Wells was not exaggerating when he said in his *Outline of History*: 'human history becomes more and more a race between education and catastrophe.' If we continue to leave vast sections of the people of the world outside the orbit of education, we make the world not only less just, but also less secure@.

However, the question then becomes: what kind of education? For many years and in most places, philosophers have argued about the purpose of education: is it for individual betterment as an end in itself, or should it be for occupational preparation? In his famous discourses in 1852, Cardinal John Henry Newman argued: "Knowledge is capable of being its own end. Such is the constitution of the human mind, that any kind of knowledge, if it be really such, is its own reward." And yet, at that very time, the great universities of Oxford and Cambridge were also designed for occupational preparation: to produce teachers, lawyers, ministers, doctors and public servants.

The answer, of course, is that education has always served both purposes. If the education is well conducted and if the learning process is reciprocal between student and teacher, then human development will occur both in the broad sense of the term as well as in the utilitarian sense. Certainly, over the past fifty years of my varied career, I have found that to be the case. How else to explain the enduring thirst for education? In that time I have

encountered a number of interesting students - mostly successful, but often unusual. I think here of two in particular. In the first class that I taught on the Principles of Economics, there was a young man in his early thirties who was already a multi-millionaire; he had benefited from the post-war boom in Canada to make a fortune in housing development. And I was to teach him the Principles of Economics? When I asked him why he had now come to university, he replied that he wanted to be a successful human being as well as a rich entrepreneur! And he was curious about the economic system that had made his success possible.

The second individual took his degree at age 87. He had left school when only 14 to help support his family, and had worked all his life at a variety of jobs. When I asked him the same question, he replied that he wanted to be better prepared for the after life than he had been for the first! Whatever the merits of the case, it could certainly be argued that both were enjoying a luxury in contrast to the millions of people in the world who are denied an education even of the most basic kind. However, both cases illustrate two points about education:

- (1) the primary importance of access;
- (2) the more enduring purposes of education.

Perhaps an even more pertinent example comes from Kenya. I read recently of an 84-year old Kenyan grandfather who has enrolled in primary school to learn to read, following his government's introduction of free primary education last year. His objective is to become a veterinarian. According to his Headmistress: "It was a total surprise when he turned up in school uniform!"

The lure of education has always been a powerful siren song, but education is also a term of vast depth and breadth. As with all such eclectic words, its meaning is too often ambiguous. Yet, today, the word is more pervasive than ever, even giving rise to the post-industrial noun - the knowledge society. If, indeed, we are or are to be a knowledge society, and if knowledge is to be the key to the promised land, then we must devote serious attention to three issues:

- (1) Who will have access to education to maximize the benefits from the knowledge society?
- (2) How can the knowledge society be shaped to ensure a less divided and more peaceful world?
- (3) Who should determine educational policies and how education is to be delivered?

I want to turn to the third item as a starting point on the question: education for whom and how? And why do we want and need education? Here, we must distinguish more than we have been inclined to do between education and training notwithstanding their symbiosis: education the process that enlarges horizons and leads to innovation, and training that enables people to perform tasks. I cannot agree with Alison Wolf in her book: **Does Education Matter? Myths About Education and Economic Growth**.⁶ As long as we accept the conventional content of the GNP, there is abundant evidence that education, insofar as it involves the storage and transmission of knowledge, plays a significant role. Of course, much more debate is required about what kind of economic growth is preferable in terms of the quality of life, and I have long argued that Western-style growth should be questioned as an ideal for economic development around the world. There are simply too many social costs and environmental consequences that go unanswered in our western definition of the GNP. However, even the desirable things by anyone's definition - pure water, clean air, preventative health measures, affordable and accessible housing, and public security - are grounded in education and knowledge.

Rather than debating whether education is a source of economic growth, I would argue that economic policy makers have too often simply ignored the importance of education for development. During my ten years as Chairman of the Commonwealth of Learning, I was privileged to attend the annual meetings of Commonwealth Finance Ministers and the triennial meetings of the Education Ministers. I often wondered if they ever spoke to one another. The finance ministers were very good at identifying the need for growth, the barriers to trade, the importance of capital flows, and the critical importance of various kinds of infrastructure. But the importance of investing in education was rarely expressed as a priority, even in the agenda of the Commonwealth Heads of Government Meetings. At the beginning of CHOGMS, our report on COL occupied no more than a few minutes of time, and generated little, if any, discussion. And yet, apart from the importance of the contribution to economic development, the absence of peace and security which so troubled leaders of government is too often the product of bombs rather than books.

When education is mentioned by leaders of government and senior policy-makers, it seems more as a motherhood slogan than a determination to provide adequate resources. Can we change this condition, and change it quickly enough to make the 2015 **Education for All** slogan a reality rather than a hollow promise? Can we agree to replace armaments with education and at a sufficiently significant rate to make a difference? Can we relax the traditional conservatism and truly recast old institutions

into new moldings, and acknowledge the distinctive roles of different institutions while accepting their strength and shortcomings? Distance learning and the application of new learning technologies has certainly found its way into the vocabulary of senior policy-makers. Unfortunately, too often this seems to be for feel-good reasons rather than for purposeful planning; rarely is there adequate follow-through from a statement of intention to a course of action. In November 2000, the Commonwealth Ministers of Education mandated the Commonwealth of Learning to prepare a feasibility plan for a Virtual University for small and island states. Three years later, COL has been commissioned to advance the planning for such an institution. However, I am not convinced that the Ministers have considered how difficult a task this will be, and the extent to which they must provide active and continuous leadership, not to mention resources.

In all regions of the world, there is an acknowledged need to sensitize stakeholders to the variety of new learning technologies applicable to the delivery of quality education. There is also increasing demand for the use of open and distance learning methodologies to address a number of capacity building issues. These include the extension of literacy and numeracy skills among millions of adults through the use of radio, television and telematics, helping rural women to develop entrepreneurial skills, assisting agricultural extension workers to improve their capacity to educate farm workers, the training of legislators in legislative drafting, increasing the speed of in-service training of un- or under-trained teachers, and delivering continuous professional development programmes for health workers, managers and administrators.

As you well know, the last ten years have been accompanied by a phenomenal increase in the application of new technologies to the learning environment. This development is removing the distinction between conventional and distance learning. It is also eroding political and geographical barriers to the movement of knowledge. While many view this as a good thing others fear the possibility of a new form of imperialism underlying these developments. This imperialism has all the potential to undermine a nation's intellectual and cultural assets in the longer term. Although we must always be mindful of those risks, a lot can be done to increase the national capability to exploit the new technologies, to increase local competitiveness, and to enhance local capacities to create and deliver learning and cultural products to the people.

To achieve this, skills must be developed to use the technologies in the learning environment, content has to be produced in sufficient quantity and quality, information technology connectivity has to be improved, appliances have to be made available at

affordable costs, appropriate uses for the technologies have to be identified and policy frameworks need to be established to support these ventures. The Commonwealth experience in all of these areas can be put to good use.

There can surely be no doubt that we will make substantial inroads on the issue of access over the next twenty-five years. And there is no doubt - both in developed and developing countries - that E-Learning will accelerate exponentially. But, the world of globalization has been one where the rich have become richer while the developing world struggles to gain a share of the world's wealth. Thus, will E-Learning widen the gap between individuals and nations more than access help to close it; that is to say, will the social divide become wider? There is a huge inherent danger that this will be so. Therefore, to minimize the impact toward social divide and maximize the prospect of social good, we must make a profound effort in certain directions. I cannot improve upon the words of the Commonwealth of Learning's President, Dr. Gajaraj Dhanarajan, who has cautioned us with the following admonition:

“One would be foolish to question the importance and relevance of the internet and the www for education in this new decade. At its worst, it has the ability to connect communities of learners and teachers as well as other knowledge seekers and providers and at its best it could very well be the tool that education has been waiting for these past thousand years. Its promise is only limited by the imagination and capacity of the people who can apply and benefit from it. However, access to that promise should not be limited to only a few who are wealthy, live in information rich societies, and have skills, knowledge and support to use the tools but also be provided to the many who lack all of these but who need education and training just as much as the ‘haves’ to escape from the traps of deprivation. To benefit the many, we must get some things right about on-line education.”

However, where higher education is concerned, I must add a special caveat about campus-based learning as opposed to virtual learning. In addition to the classroom, the library and the laboratory, the traditional university has also provided for the fostering of human relations needed both for work and general well-being. We must ensure that we do not end up with an elite group of those who have enjoyed that advantage over the distance-educated group. Indeed, with so many part-time students working long hours outside the university today, we notice that traditional “campus life” is difficult to sustain. Many years ago, I recall, asking a first-year student, who came from a small community in Northern Ontario, what was the most important thing he had learned in our highly diverse community. “Professor Macdonald”, he replied, “the university is just wonderful; I have

discovered that people are basically human.” We must ensure that it continues to be the case.

And so with constant scrutiny, we can shape our future to ensure that distance education and open learning, particularly E-Learning, promote social good rather than social divide. But this will not happen as the night follows the day. Educators throughout the world must first adhere to the following seven principles:

- (1) Educational technology is a significant supplement, but it does not replace the human element and the qualitative role of the teacher. In all of our programmes, there must be a human presence at the end of the line. Pedagogy must remain pre-eminent.
- (2) Education is not simply about the enlargement of the gross national product. Indeed, in these days of concern over sustainable development, we must continue our efforts to take some of the grossness out of the gross national product, and to produce a world of greater peace and compassion.
- (3) If the final result, both in terms of nations and individuals, should be that the rich get richer and the lot of the poorer is not enhanced, then we shall have failed utterly. Therefore, we must never turn our backs on those for whom technology will be slower to take root, in the interest of building monuments to ourselves as distance educators. Access must assume whatever form is most practical in any given situation.
- (4) Education must continue to widen horizons and be life-long; it must not be limited to short-term utilitarian purposes.
- (5) The twin goals of education for its own sake and occupational relevance must maintain a symbiotic relationship, as they always have done.
- (6) We must ensure that increasing use of education technology does not encourage paternal as opposed to a partnership approach between individuals, institutions and nations. Open learning and distance education as a means of ensuring greater opportunities and greater equality must operate from the principle that we will all learn from one another in the process. In that sense, we must continue to forge partnerships between nations and institutions.
- (7) Finally, we must renew our efforts to ensure that education sustains the local culture, values and objectives of all parts of the developing world rather than overwhelming it.

This is surely essential, not only for its own sake, but also to withstand some of the less desirable consequences of globalization which could so readily become homogenization.

Under these conditions, we can all take heart for the future of the knowledge society as a contributor not only to economic development but also to human advancement. In these times, the best means of achieving that objective will be found through individual and institutional collaboration. It is under these circumstances that the design and delivery of education is being reconsidered by nations both rich and poor. A consensus is beginning to emerge that opportunities for and provisions of life-long learning will require a reformation in the ways in which the educational environment is constructed, organized, structured, governed and financed. There is also an increasing acknowledgment of a shift in instructional philosophy where the instructor or teacher is no longer the sole source of knowledge but, instead, acts as a facilitator, supporting student learning.

In the process, we now see distance education being incorporated into mainstream education and training efforts; it is reshaping the new educational landscape, including to whom and how education is delivered. New educational designs are being developed as rapid increases in technology continue to collapse spatial boundaries, and Commonwealth countries continue to lead the world in the imaginative ways in which they have applied distance and open learning. However, that capability is neither distributed equally among all Commonwealth countries nor in all sectors of education in those countries where open and distance learning has found success in one form or another. To overcome that disparity is our immediate challenge, and a challenge that we must resolve to address.

You will not be surprised if, as Chairman for two thirds of its life, I suggest that The Commonwealth of Learning can take pride in the fact that it has not only brought attention to the opportunities presented by open and distance learning but also trained people, built partnerships, developed models and provided expanding capabilities among nations of the Commonwealth in the application of open and distance learning.

However, nations alone cannot accomplish all that is required, indeed, what is a nation in terms of the geo-political construct of the world today? That takes us again to the topic of globalization and its unquestioned value in the minds of its delivery agents, the multinational corporations of the world. However, as I have suggested, education is about human resource development, and the betterment of people as well as the

enhancement of economic opportunity; thus it must always be perceived and assessed in the context of human values. As the economist Kenneth Boulding has suggested: "Human values are the product of an evolutionary process; they have no more equilibrium than anything else...We are always moving into a changing future in which we hope that things will go from bad to better instead of from bad to worse. That is all the quality of life means, going from bad to better instead of bad to worse.@ Our task is not only to enlarge the gross national product, but also to ensure that relief of poverty, improved health services, and accessibility to basic education for those 150 million of the world=s children to whom it is currently denied become priorities for action.

I want you to know that I, for one, do not believe that Western economic values are necessarily the most appropriate for the rest of the world. Indeed, they are not necessarily always the best for the West. We must be cautious about whose interest globalization is designed to serve; certainly it is not always the interest of the people of the world. As Nelson Mandela remarked: "Is globalization only to benefit the powerful and the speculators? Does it offer nothing to men, women and children who are ravaged by poverty?" And well he might ask, for 51 of the largest economies in the world are corporations, while the 300 largest corporations account for 25 per cent of the world=s productive assets, and the combined revenue of General Motors and Ford, the two largest automobile corporations, exceed the combined gross domestic product for all of sub-Saharan Africa.

For the past 50 years, missionaries from the Western world have been suggesting to the developing world Ahow to do it@ and have been preoccupied with studying the conditions in those countries. During the next 50 years, might it not be beneficial - or at least fair - to reverse the trend and have the developing world examine the West more closely to see if that is what it really wants? In particular, I am mindful of the current attitudinal wave of reform sweeping the Western world, driven by what some call neo-liberals, and others neo-conservatives, but what I believe are really neo-mercantilists. It is best summed up by the proposition that governments can do no right! But good government is central to development, for who else does provide for the well-being of the people? That is a lesson that is now being driven home every day in a world of uncertainty and turbulence.

It is most likely that, in the next quarter of a century, a few key issues that will preoccupy the minds of educational planners and administrators will also determine the style and state of education in the world at large. These factors will include among other things, expansion, equity, access, costs, globalization, competition, quality, efficiencies, effectiveness and technology. While there may be debate about the relative importance of

these various factors depending on the particular sector of education, the location of where the education is delivered and the prejudices of those participating in the debate, there can no longer be a debate about the importance of learning technologies and their impact on the delivery of education and training. Among the many reasons for ascribing this importance to technology, the following are most prominent, and once again, I am indebted to Dr. Dhanarajan in formulating this catalogue.

- (1) **Death of Distance:** the belief that distance is a factor in human communication is dying. There is hope that the cost of communication will not be determined by distance even in the most regulated environment. Reaching out to students through the electronic highway will be determined more by willingness of the education providers to utilize the newer technologies than by fear of inaccessibility because of communication costs.
- (2) **Cost of appliances, which are so necessary for participation in educational transactions reliant on the ICTs,** will continue to drop even as the computing capacities of such appliances increase. The cost of the Networking computers of the future is expected to decrease to the level of present day televisions making it possible for many more householders to own appliances. Where households are too poor to have the appliance, the emergence of tele-learning centres can provide an intermediate solution.
- (3) **Location does not matter:** providers of educational services can be located anywhere on earth and can reach the user of the educational service wherever they may be as long as there is a basic communication infrastructure. Even today, Indian students already have access to, say, courses from North America without having to be in North America. Similarly, courses from India can and should travel across the globe.
- (4) **The size of the organization** providing the educational service is not relevant; what matters is the quality of the service. Small and specialized organizations can offer their products to large groups and be globally competitive.
- (5) **Content customization:** sophisticated pedagogy can facilitate individuals to customize their learning needs. Learning can become either a multi-channel or a mono-channel experience. The final authority on customization will be the expected learning outcome of the subject and the learning preference of the student.
- (6) **People as the ultimate scarce resource:** the really difficult challenge for institutions will

be to recruit people with the necessary skills to perform the tasks required, as well as to train and retrain those already in service to work in the new environment.

- (7) **Emergence of globally used language:** the emergence of English as a dominant second language of science, technology, business and international relations, as well as education and training, will mean the availability of globally useable knowledge products. In turn, there will be an increase in the choice of educational and training courses.
- (8) **Communities of culture can be developed.** The opportunity to make available content in other languages, apart from English, to a larger audience will become feasible. Declining cost and ease of use of communication tools will mean the availability of a vehicle to disseminate other cultures and traditions.

Finally, in preparing the abstract of what I planned to say this afternoon, I posed eight issues for consideration. Let me, therefore, summarize my response.

- (1) To what extent should basic education be strengthened? I trust that the **Education for All** mandate has demonstrated what an enormous task this will be, and how the nations of the world must use every means at their disposal: local, national and international.
- (2) How far must this proceed before occupational preparation can be effective? Although we can do much by way of occupational training while enlarging access to basic education, occupational training will be greatly strengthened for those possessed of a sound basic education.
- (3) Which institutions are best equipped to assume responsibility for occupational training? This must involve every means: traditional schools, online courses, training institutes, as well as employer and workforce organizations.
- (4) Which techniques and delivery systems are most suitable for basic education and occupational education respectively? Whereas I believe that distance education still has huge gains to make in providing for basic education, training will be much more effective in a hands-on situation, at a local level, particularly where the student has limited basic education.
- 5) How should this be financed and who should pay? I would like to see broad concurrence with a United Nations resolution that would pose a formula for the

systematic transference of resources from armaments to education.

- (6) How do we reconcile modes of education designed to strengthen indigenous societies with the demands of globalization? We must work hard to tailor the programmes designed in the developed world to the cultural characteristics of the user-world - a very high priority for educational policy in globalized societies.
- (7) What strategies and policies are most suitable for narrowing rather than widening economic and social gaps? This is the most difficult challenge of all, but the answer is to be found in a purposeful attack on narrowing the digital divide.
- (8) How can these issues be highlighted on the international agenda? We will need the leaders of the U.N., and G8, CHOGM, and all levels of government to agree that **Education for All** and other such universal propositions will no longer be a pious hope but a top priority in international, national and local decision-making.

I hold out these challenges to all who care about education. The influence that you can bring to bear can never be over-stated.