JAMAICAN ASSOCIATION
FOR DISTANCE AND OPEN LEARNING

Slide 1:
A Man's Reach Should Exceed his Grasp ….
Jamaica October 24, 2002

Slide 2:
Everything has been thought of before: the challenge is to think of it again.

Many of the things I will talk about today will have a familiar ring but I think as we proceed through the morning and the next day or so we will agree that although they are familiar concepts they remain current in the 21st century and the challenge to us as educators and distance educators is to find a 21st century solution to them – however modest that might be, and not become caught on our own orthodoxy.

I have divided my talk this morning into two sections. This first deals with major trends that affect us as well as the rest of society. I then proceed to issues that have more specific influence on open and distance learning.

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OVERARCHING DRIVERS
Knowledge Based Society of Economy
The information revolution, common and accepted as that concept now is, is just that, a revolution. It has, like other revolutions, whether social or industrial, affected many, if not all aspects of our society from financial to educational. This revolution as we know, is producing the knowledge base economies of the 21st century with all the implications that this has for nations, yours and mine, if they are to have healthy, wealthy and wise citizens in a stable and prosperous country.

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The dominant good or commodity of the 21st century will be new knowledge, which places educators in the centre of this fantastic change. In the previous industrial era, which required a few to think and many to "do the grunt work" it was the role of the education system to separate the two and produce only enough of each. (The diamonds and the stones we used to call them). In this era, we must nurture every bit of creativity, innovation and knowledge that our people possess, if we are to be a successful nation. Innovation need not be some great new scientific discovery, although that is always a nice part of the mix, but it does mean having new ideas about anything from how to get fish to market - tastier and fresher, to how to secure a better crop yield, to making traffic flow more efficiently, and putting those ideas quickly into practice.

For us it means creating learning environments that nurture innovative thinking not accumulation of static skills. The natural extension of preparing citizens to live in an innovative, knowledge-based society is that lifelong learning has become essential. Learning will have to go on in informal and formal environments. As educators, we know we must teach people how to continually learn, and as distance educators, we will be increasingly called upon to provide opportunities for people to refresh their skills to keep pace with their changing environment.

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<u>The fisherman and the steward</u>

The basis of value in the previous industrial era was scarcity. In that system, if you had a fish you could sell it, if the type of fish was rare, you could sell it for more up to a certain "price point". If you had more commonly available fish you could sell them too except the value of each fish would be less. In both instances, however the fish

(singular and plural) was (were) now gone. The new owner might add value-turn them into fish cakes and sell them, but value to you was finished. In the knowledge economy if you give, barter, or sell, an idea both you and the new owner have the idea. Both of you can now create a new concept based on the first idea. You have a two for one deal. Unlike in the earlier linear world where one created one, in the world of ideas knowledge multiplies and continues to have value and be the basis of growth for all, including the original owner. No longer is there a need to hoard.

Collaboration, not competition, has become the good thing. We must become knowledge stewards and nurture community owned learning that supports the public good – both social and economic. Just as the good steward of biblical days did, we must keep the knowledge, nurture it and pass it on to the community – not just let it lie hidden and safe.

In keeping with the new world of ideas, increasingly we notice that today's learning tools are not for individual use. Although the book that you go quietly away and read will continue to have its place, today's applications are chat groups, bulletin boards, interactive web sites and portals. Today's tools are collaborative to support the sharing and building of knowledge.

Generation X and Y

Another phrase that those of us who are somewhat "longer of tooth" are quite familiar with is "today's student is different". Well, I propose the student that is currently in, or just leaving, the post secondary system is "differenter". This is the generation that grew up with the tools of the 21st century. In a very few years the baby boomers will start to retire and thus likely leave the formal learning environment to the X and Y generations.

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(Cartier, 2001)

This slide is an effort to depict the large groups of learners that have passed through the post secondary and lifelong learning environment for a little over half a century.

After the Second World War, there was a considerable effort certainly in North America to complete the education of soldiers whose learning careers had been interrupted so they could be reintegrated into a peaceful society. During the 50's there was a little heralded group, sandwiched between the returning soldiers and the boomers, identified here as the silent generation. Then, as in all aspects of society during that period, they were overshadowed by the baby boomers, and their needs and orientation dominated the scene for 20-25 years. Now the boomers are moving on and their children, Gens- X & Y, are moving through. There has been of course intermingling of these generations as each group has passed through however they have each had their place in the sun!

In the generation prior to ours (or mine), print and radio were the dominant technologies, in mine it was TV, in our children's (and their children's) it is computers. Just like the generations the technologies and learners' comfort level with them co-exist. However, like it or lump it, today's learners belong to the networked and computerized world. They are the instant gratification generation the one's who move past an e-commerce site in eight seconds if they don't see something "grabby": they are the ones who don't type full words in their chat groups: they are the ones who work part-time throughout their whole university careers, this only in part because they need the funds for study, but equally because they have a lifestyle expectation that far exceeds anything we had as students. They, therefore, are part-time learners while they are still in university. They already see school and life as a "continuous presence", … and, if you think for one moment you will get them to have a philosophical reflection on a book then you might want to think again. I do not imply that either approach to learning is better or worse … it just is.

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Migration to the Home

The delivery of services to the home is also a trend becoming more apparent in the networked society. Perhaps not altogether … to the home, even in more developed countries but certainly "away from the institution". I am sure you notice these trends here as well.

More and more services and activities of life are moving away from central institutions. Perhaps the ones most people are cognisant of are the service offerings of the financial world. Once we all lined up at a teller in the bank to withdraw our money or pay our bills. Then a machine appeared in the porch of the bank, then you could access a machine in a mall or an airport, and now you can do your banking from your home. In the health system, there is a move away from providing all care in major hospitals, to provision at community-based clinics and there is a growing trend toward home-care. In my province you can pay $5.00, someone will come to your office and take a blood sample if you need blood test, and in Britain, you can get x-rays taken in some drug stores. Distance educators were the ones who started to move the walls of the institutions further out, into study centres, and homes, but today, as the world demands more personalized services we may find ourselves being pushed to find innovative means to address the new learners' expectations, learners who also have an expectation that some part of their learning be network supported. For most of us that means being creative about hybrid designs that use the Internet for research and interaction and other resources like books, CDROM, VT for other aspects of the course.

The points I have mentioned already, I think are among major trends that influence society and with that open and distance learning. During the remainder of my talk, I will highlight the influences that I think are more specific to ODL. Many of these as my first

slide implies will be things that have been factors in our lives for many years and they will continue to be with their evolving faces for many years to come.

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Globalization

Globalization doesn't sound much like an issue specific to ODL but it brings with it something relatively new to education …. Competition. Although we hear about globalization continually, it is not a new idea. Arguably, it has been with us from the days of the Phoenician traders – but certainly from the days of the development of great empires of the 15th and 16th centuries. More than traditional open and distance learning, however, globalization enabled by electronic networks has delivered competition to the very doors of higher education institutions, which traditionally enjoyed a quasi-monopoly provider position. Competition has brought with it the concomitant concepts markets and e-commerce.

Everywhere today we see reference of the size of the education and training market

- By 2002 and the total global expenditure on education is $IT pa (WTO 2000). In pure international trade terms this is $27B
- The internet education market estimated ($7B)
- The E- learning marked estimated to be $47B by 2003
- By 2003 80% of traditional universities and colleges in the U.S. will deliver 60% of their undergraduate teaching by e-learning (Gartner)
- By 2003 >50% of US colleges, universities will be offering courses to students globally anytime, anywhere (Gartner)

Figures like these are enough to wet the appetite of cash starved institutions and private sector firms alike.

In addition to the traditional higher education institutions, groups like SMARTFORCE and DigitalThink virtual institutions will provide learning opportunities to people who might traditionally come to a higher education institution for business programmes. These students are able to pay for courses, or have firms pay thus producing funds that could go to other course creation. Globalization enabled by networks gives new groups, without "bricks and mortar" to support, new and sometimes more cost effective ways to provide learning service to our traditional student.

Not surprisingly, given figures like those mentioned above and the dominant role of knowledge in this age, the WTO plans to put education on the table in its next round of negotiations. It will be impossible for us to resist this trend and we must be prepared to live with the outcomes.

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Despite these commercial and competitive influences, all is not lost to those of us who have practiced in this field for "lo these many years". It does, however, mean that we need to analyse what our strengths are, and how we do what we do; or to use the language of business we need to determine what our "value add" is for our students and we need to determine where we want to fit on the value chain if we are to continue to have them knock on our door.

One of the significant advantages of formal education institutions, and therefore the ODL units attached to them is the PRODUCT we sell, i.e., "credit" and credentials: a degree, a diploma, or a high school certification. Despite the need for JIT learning, which I will touch upon later, the workplace still depends on the formal education system both, to provide the initial (just in case) learning and to advise the world at what level the graduates can perform. Longevity also counts. Students know that traditional

institutions will still be there tomorrow to lend creditability to the credential they have secured. The established and well recognised processes that formal institutions have for assuring accountability and academic integrity also add value to the product. Local institutions have their own advantages in that they deliver much more culturally sensitive, relevant, and contextualized learning. These are all "value adds" for perspective students. However, we cannot rest upon these laurels, we must deliver a quality engaging product (read programme) in a timely fashion or value will be soon diminished and the Internet will carry them elsewhere.

In some instances, in these days of decreased funding and increased workload, we can help maintain quality by partnering or sharing aspects of design and delivery with other groups: again to use the words of e-commerce to define where we are on the value chain. We need to identify the "must do ourselves" portion and then determine how we can share or purchase the other aspects of learning provision so as to do more with less. Historically the formal and particularly the higher education system has been the sole provider of the entire education chain however, increasingly groups are breaking down the chain into components to determine if there may be aspects through which partnerships can help reduce costs and at the same time reinvent how we tackle learner needs.

The following slide gives a listing of the various components of what we do… there are undoubtedly others of defining ODL activities but these are illustrative

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Curriculum Development: Traditionally a faculty role and with some justification. This probably will remain so as this is the core of what we deliver to our learners. However, other groups are being invited to the table to plan the curriculum, like practicing scientists and business persons.

Content Development for ODL: Portions could be licensed for example video and CDROM demonstrations of skills or concepts like a acceleration. Multimedia development could be outsourced to a private firm with training experience and overseen by an instructional designer from an institution which would save the cost of building up a production facility. A content-creation centre to be established and shared among several institutions. Newer tools such as LMS like Web-CT make it easier for faculty members to create web courses using templates and design suggestions in the software. Many universities are finding real advantages with both "buy in" and cost savings here.

Student Support: Many aspects can be shared or bartered with and institutions with a complementary service (1) libraries, exam invigilation, registration, help desks. etc. 24/7 help desks are fast becoming the "killer" learner support challenge… partnering with a sister institution in a different time zone is one possibility for addressing this need.

Delivery: Again, usually the domain of faculty or tutors, however private firms can build and maintain websites and other infrastructure sometimes at less cost than institutions, or groups can share infrastructure… learners care not where the server is as long as it works.

Assessment and Advising: Some testing can be included using the computerized systems of LMS, which can both be administered and correct various forms of assessments. Tutoring software can play a role in some circumstances where specific skill are being taught

Articulation and Credentialing: Again the purview of the institutions although in some instances Accrediting Associations are beginning to take a role.

So there are opportunities through partnering to rethink our core activity, what we do well and efficiently, as well increasing capacity to do what we do better.

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A recently released Canadian policy document states that countries that succeed in the 21st century will be those whose citizens are creative, adaptable and skilled. Knowledge Matters

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This century and this need has also brought to our doors
The New Learner – new life long learners
Lifelong Learning

Life long learning is again, a familiar concept to those of us who helped coin and popularize the phrase – Do You, like we, have the saying – be careful what you pray for … the answer may be yes"? Well somebody said yes. Although the concept of lifelong learning has been around for many centuries, until quite recently it was for the most part a luxury of the rich. However, today, due to the rate at which knowledge requirements change it has become a "need to have" for everybody for their economic and social well-being. Open and Distance Learning , including online learning, is certainly expected to play a significant role in providing these opportunities … we have become the flavour of the month – and we have become so because of these learners who have entered our "realm".

Workplace Training

Although a portion of today's lifelong learners will seek additional accredited courses and programmes through formal institutions perhaps, the fastest growing demand is that of workplace learning. The learning opportunities required in many work settings are

generally referred to as “just in time” and “just enough”. Unlike the “just in case” variety of courses we are used to producing, on the job there is a need to know “now”. At the same time, however, an opportunity for knowledge sharing and knowledge building among workers in a company or sector is seen as desirable so that the whole company or sector can benefit. Distance and open learning, particularly e-learning and online learning, are fast becoming the delivery mode of choice in this setting. In many instances, universities, technical institutes and colleges find themselves addressing this set of learners. There are some interesting challenges of design for distance educators who are used to creating learning opportunities for a cohort of students who study and learn together over a period of weeks and months. At most, in this new environment people would be engaged in learning for a few hours on any given topic. Our group has designed programmes in this type of setting for owner operators of SME and while the actual development of the short “nested” modules had some challenges the creation of “communities of practice” to share and build knowledge in this environment is not one we have really mastered to date and would certainly like to share ideas with you on how to.

The Time Shifters

A second type of workplace oriented life long learner, I refer to as the time shifter. Those workers who are not involved in JIT training, but rather are continuing to take courses to enhance their careers, are requiring greater and greater flexibility in the time of their learning. After the workday, after the kids are in bed, is for better or for worse, when the course work is done. Online, asynchronous learning has been a godsend to these lifelong learners. Being able to take part in a collaborative conference at a time convenient to the student, being able to post a question and have it addressed before they return to study the next night, being able to exchange ideas with other students, as well as having access to the vast resources of the WWW when libraries are closed or distant, have significantly enhanced the learning experience significantly beyond what books and correspondence (this original asynchronous format) and even the

synchronous teleconference mode have been able to do. These learners too are with us to stay

The on-campus ODL'er

The other new learners in the ODL environment are those who are on the campuses themselves – a trend that many faculty find unsettling but who are none the less is a growing presence in institutions of higher education. The Education for All initiative and the general recognition of the need for higher education to secure reasonable employment are delivering more and more students to both the secondary and post-secondary/tertiary systems.

As I mentioned earlier, numerous students currently on campus have to work to support their studies and other aspects of life, so often they use ODL and online learning methods - as a mechanism to secure courses that cannot be accommodated in the regular university or college schedule so that they are not delayed in graduating. They may take these courses from their own universities or others and then transfer their credits in. These on-campus ODL'ers are certainly part of Gen X or more likely Y. These are the people who accept computers and their applications and who expect to be able to use them in their learning as a preparation for having to use them at work.

Some refer to this phenomena as distributed learning. These learners are driving both the on-campus and ODL providers to the use of more ICT's in learning environment. This has the positive effect of familiarizing on campus faculty with using web-based technologies in their regular teaching. Increasingly on-campus faculty keep in touch with students by e-mail; they post case discussions, lecture notes, and self-tests on course web pages. This paves the way for greater acceptance of distance and online learning and is moving it closer to the mainstream

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COST

Although always a factor in distance learning, cost is cited as an even more significant issue as groups move to online environments. The use of materials and resources for both on and off campus as mentioned above produce some economies of scale thus reducing per student cost which while not reducing the cost of production does help rationally the cost of our time.

The cost of producing media, particularly multimedia, is a challenge even in developed countries. AS a partial response to this there has been a significant movement evolving in the last few years to find ways to allow reuse of multimedia resources instead of re-creating them for each course. Groups across several continents are attempting to reach an agreement on a number of interoperable standards and protocols that will allow small “bits” or “granules” of digital material, whether that be text or multimedia, known as learning objects to be placed in databases known as learning object repositories. Each object will be identified with a set of universal codes called metatags that allow people to find these learning objects, in databases worldwide. This will allow bits of material to be used and reused in learning modules. Various ways of “paying” for these objects are also being discussed licensing for use in certain circumstances and periods of time, purchasing and bartering are among those under consideration. This last resonates with many educators as it allows for a type of credit banking: if you out in you can withdraw.

Collaborative tools such as web conferencing and bulletin boards; address the student’s need to be actively engaged in learning, allow students and faculty to share and grow new knowledge, as well as providing a forum to encourage development of critical thinking skills through dialogue and discussion. These aspects of learning are every bit

as if not more important than high-end multi-media in supporting and engaging the learner – and they are by and large less expensive.

Learning management systems for those not familiar with the concept are software products that consist of a bundle of applications related to distance and online learning. They frequently include registration, student tracking, testing, and communication tools such as e-mail, bulletin boards, chat group and conferencing features. While certainly having licensing costs they do provide templates that guide faculty, tutors and others in creating materials that are pedagogically sound. This can limit the cost of production. Many groups getting started in online learning find these systems quite useful as they are a one-stop shopping starter kit, so to speak. They also help keep indirect costs down – people only have to learn how to deal with one user interface.

The Universidad Estatal a Distance in Costa Rica as reported in Open Learning Vol 16, provides an excellent example of how, despite limited budgets and considerable limitations in available equipment, they were able to prepare and deliver multimedia courses on the Internet. They used cost containment techniques such as simultaneously preparing traditional materials (textbooks) and web pages. They used the automatic testing function in LMS software for evaluation. They used a hybrid print/online model. (This and other hybrid models such as “online and CD” help address limited bandwidth situations.) They used bulletin boards instead of e-mail for student/teacher interaction reduced the time teachers had to spend in tutoring. They used HTML coding to maximize the types of computers, and therefore students, that could access the programmes, and they identified and used freeware for many aspects of design and delivery.

WordWorth	Word processing
ImageWerks:	Image manipulation
XNView:	Image conversion and storage

AOL Press:	HTML editor
AOL Press:	Web browsing and accessing the course component
IrfanView:	Multimedia
LeechFTP:	Free page hosting
Skwyrul:	Agenda, student marks, databases

Therefore, there are ways to limit cost although we will not make them vanish. However, they can make them more manageable as groups with limited budgets.

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ACCESS

Yet another old friend – provision of access. After all, despite the time shifters on on-campus ODL'ers the reason why many distance educators entered this field was to support learning for those who were somehow disenfranised. Although it is important that we teach using current tools it is equally important that we make these available to these very learners. The worldwide system of telecentres, which provide citizens including learners access to ICT's , is one mechanism that countries are using to address this need. There are many successful applications of these centres in countries such as Ghana, Australia, South Africa, and Uganda to name but a few. They are one of the ways that services can be delivered closer to home even in developing countries. (COL Telecentres: Case Studies and key issues.)

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GOVERNMENT POLICY

For those of you in the room today who may be from government agencies – institutions cannot do this on their own. If they are to become a centrepiece of the knowledge

society, they are going to need help and governments are going to have to develop policies and programmes to support this change.

In Canada in recent years a number of targeted and related initiatives have supported this new direction in distance and online. The Council of Ministers of Education of Canada created a task force that reviewed the demands on the education system in Canada and the role learning technology can and is playing in addressing the issues. The recommendations of their report the E-learning E-volution in Canada are being acted on: e-learning funding programmes through agencies like CANARIE and the Office of Learning Technologies, and nation-wide programme to increase connectivity such as CAP, SchoolNet , and now the broadband initiative are all ways that government has been addressing some of the barriers that I have discussed today.

Similarly in Jamaica, in the green paper for the year 2000: Education: the Way Upward, the government also acknowledges the importance of education in this new age and the requirement to support life long learning to be provided anywhere, anytime. It seeks to develop partnerships to create a national information infrastructure to provide equitable access to communications facilities and set minimum targets for connectivity such as one Internet -connected computer in every school.

We can only encourage our governments to continue to develop and implement these policies to the best of their abilities given all the other demands on resources. Even to have these issues addressed in policy is a good first step and we must do our best as educators to support and facilitate these initiatives.

In closing let me leave you with two thoughts as we all return to our challenges again on Monday morning.

Slide 16 DRAGON…. I look at it every day ….. is everyday a step forward into the new world of the knowledge economy…..No! Most days are full of alligators and the occasional dragon but

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As US President, Calvin Coolidge during the early part of the last century said

“ Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan “press on” has solved and always will solve the problems of the human race”

So that is our lot, Although the challenges to ODL in this networked society are many there are an equal number of manageable solutions if we persevere, and take the time and energy to envision and implement them. We as the distance educators of 2002 must continue to reach beyond our grasp innovate as did those who began these networked applications some 25 years ago, to find new ways to address these perennial issues.

Thank you again for allowing me to join you in your deliberations over the next few days