

The Future Direction of Higher Education

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Introduction

As labor costs continue to rise in the future, both advanced as well as developing nations will be challenged to develop an even more productive workforce. As competition continues to escalate, it will force companies to adopt more advanced production techniques. One of the challenges that will increasingly plague companies everywhere will be to find an ever increasing number of employees with a more advanced level of knowledge and skills required to be productive especially in a more technologically advancing workplace.

Since the mid-eighties, developed nations have expected their departments of education to graduate more students with smaller educational budgets and be more accountable for results. Many advanced countries have forecasted increasing shortages of labor force participants in the future. This will challenge them to educate a much larger portion of adults previously under represented in higher education.

To respond to these demands, departments of higher education need to find more cost effective as well as more innovative ways to deliver education. Common international purposes, philosophies, principles, and pedagogy along with pooled resources, and the use of advanced technologies may lead them to much more cost effective solutions that could produce many additional benefits.

Traditional views and practices as well as resistance to change will slow innovation in advanced nations. However developing nations, with less tradition, will be able to adapt newer approaches and technologies more quickly.

This document presents a number of thoughts related to the future directions of higher education in a highly competitive global environment. It begins with statements relating the purpose of education when viewed from a global perspective. This is followed by a section which presents a less traditional and more learner centered view of education. The third section shares a number of thoughts about a more student centered delivery approach in higher education. The final section talks about the growing role of advanced technologies in higher education and how they can be harnessed to substantially reduce cost, while at the same time, increase educational quality.

The Purpose of Adult Education

To compete on the world stage, governments must educate a workforce in the future that is better able to compete in a global community. In this regard the following set of statements may be used to describe the purpose of higher education from a global perspective:

- To develop the knowledge, skills, attitudes, and behaviours of learners that will enable them to become productive and contributing members within their families, society, and industry, on a local as well as global basis.
- To help learners understand that much of the knowledge and skills that are needed today will not be as relevant tomorrow and therefore to help them adopt a life long

learning attitude. This means developing learning to learn skills that will enable the individual to continue to acquire new knowledge and skills throughout life.

- To develop the collaborative, cooperative, communicative, and language skills of learners that will serve them locally and internationally.
- To develop and understand the diversity of mankind and to better appreciate and respect each other at local, regional, and international levels.
- To develop a greater understanding of the needs of our environment, as well as the safety and security needs of individuals in our society, and similar needs of people around the world.
- To develop greater problem solving and decision making skills that will enable learners to develop more innovative and creative solutions to challenges facing them and mankind.
- To develop the ability to assess the social, emotional, spiritual, and physical needs oneself has.
- To develop the ability to see oneself in relation to others in various global societies in order to develop more meaningful, efficient and effective products, processes and services to satisfy those needs.
- To learn to become moral and ethical as well as fair and just individuals that contribute to the common good of mankind.

Understanding Individuals and Their Learning Needs

The following statements may assist one to better understand the learning needs of individuals. They begin with a broader interpretation of intelligence.

- Intelligence is what is acquired when we either formally (in school) or informally (out of school) acquire more knowledge and/or skills, or modifying our current attitudes or behaviors.
- Intelligence not only relates to acquiring mental knowledge, but also relates to acquiring physical as well as artistic skills, talents, gifts and abilities. For some people acquiring some forms of intelligence occurs more innately. However, for most people the ability to acquire and/or develop each of these could take a lifetime; nevertheless, they will occur best when the individual feels supported, more relaxed, comfortable, respected, valued, stimulated, and challenged to grow. Some mental knowledge may form as a result of pain, fear, anxiety, and failure. In this regard one's physical, psychological, and experiential surroundings may greatly influence their development. Their development will also be effected by access to quality support, guidance, coaching, expertise, counsel, and understanding from others.
- Each individual will develop and demonstrate different forms of intelligence in different ways. This will be determined or affected by the nature of the environment the individual is exposed to and the degree the environment recognizes, values, and respects the various forms of intelligence. Western society and especially the western education system tend to view intelligence as a mental ability. Children in western societies learn quickly that education is primarily focused on mental ability and those who perform well in this environment are highly valued. Children who do not do well in this environment tend to form a lower self esteem that can affect their development and performance throughout life. A greater number of individuals will grow up and develop a more

positive view of themselves when the society in which they live, values and respects the various forms of intelligence.

- Individuals are born with the innate desire to learn and therefore develop intelligences throughout life. However, it must be understood that humans learn and develop in different ways and at different rates.
- Although some individuals learn better by hearing sounds, others learn better by seeing the world around them. Most individuals learn and develop best when they are able to engage more of their senses, by doing or experiencing things for themselves.
- Individuals find some knowledge and/or skills harder to acquire and others easier, even if the new knowledge and/or skills seem very similar to that which was just acquired.
- Some individuals may blame themselves for not acquiring new knowledge and skills when this could have been caused by an environmental factor such as a teacher, parent, employer, or as a result of a particular situation. It is therefore important for those responsible for education and training to question themselves as well as their methods and approach to facilitating learning when one or more individuals are not successful.
- Individuals may further develop or enhance their knowledge and skills from interaction with others through cooperative and/or collaborative learning. This interaction may occur inside or outside a formal learning environment such as a classroom. Often this interaction allows individuals to experience, apply, adapt, modify, reinforce, strengthen, solidify, and retain specific concepts and/or critical thinking skills. These more in-depth experiences may increase the individuals' ability to move what they have learned from less valued short term memory to more valued long term memory.

These experiences often take the form of personal reflection, discussions, presentations, role playing, debates, simulations, group work, panels, and case studies. They may also be experienced in labs, computer simulations, field trips, practicums, service learning, community activities, tutoring, and student exchange programs.

- Essentially, knowledge and skills are more effectively understood, acquired and retained when the learner is more motivated to learn. This motivation tends to increase when the learner moves from a more passive learning environment to a more active learning environment which allows them to be in more control of what they are learning. This will allow them to gain more personal, and, therefore, more relevant experience. Still greater depth and appreciation of new knowledge and skills is realized when it is used to assess and analyze a situation (preferably a real problem) and an effective solution is identified.

The more personally authentic the situation or problem is to each learner, the more motivated they will be to learn and the more meaningful the experience will be. Educators/trainers are therefore encouraged to have learners draw on real life situations when trying to understand a concept or when learning to apply new knowledge and/or skills. It is through the process of problem based and experiential learning that learners are able to take theory and put it into practice that provides the most deep seated meaning to an individual, and may be retained by them the longest.

- Learning and growth are recognized as being achieved when the individual is able to demonstrate they are able to consistently apply new knowledge and/or skills in a meaningful manner to solve a variety of new and preferably real world problems or challenges. This is referred to, by some, as outcome-based or competency-based learning.
- Learning is often influenced by such matters as cultural or civil beliefs or practices. It may also be affected by familial, emotional, physical, psychological, social, financial, or

maturational matters. Some of these influences may affect learning for all or a considerable portion of ones' life.

- Learning can be inhibited or severely impaired when a learner is placed in an environment where they are not able to adequately function at the level expected of them by the authority. This inhibition or impairment may be further exacerbated by the negative reaction of their peers. Therefore, great care needs to be taken to assess a learner's readiness to be admitted to a new learning environment. It must be ascertained if they have the necessary entry level language, communication skills, knowledge, cultural skills, abilities, and motivation, at this time, to be successful in their new learning environment.
- A fundamental principle of any educational system (also meaning institutions, administrators, faculty) must be that when a student fails the system also fails, and when the student succeeds then so does the system. The purpose of every educational system should be to ensure that it is structured to respond to the different learning needs of each individual that will enable them to succeed.

In summary, the most preferred learning situation will occur when each learner is placed in a learning environment that is structured to accommodate his/her learning style, interests, abilities, and skills. It will be more effective when he/she is able to progress at a speed that is challenging, yet comfortable to them. Furthermore, it will be most successful when each learner receives continuous feedback, encouragement, and stimuli that allows them to successfully acquire learning outcomes.

The Learning Environment

In the future, college and university classrooms in most societies will transition from four walls, desks, black boards, and pencils to student-centered interactive learning environments that are highly technologically driven. What is currently referred to as non-traditional education and distance education will, in many ways, be integrated with today's traditional delivery system.

With the aid of extensive technology enhancement, education will move away from its mass production lines, with its lock step approach, and one size fits all approach, to a much more individual learner-centered approach. Future education systems will respond to individual learner needs rather than vice versa. The following statements present many of the elements that will be included in a future learning system.

- To move board governance from local and regional authority to national and international authority.
- To move from larger centralized institutions delivering many degrees to smaller decentralized locations serving greater numbers of learners both part time and full time with an even broader range of courses, specializations, and degree programs.
- To move educational standards from local and regional levels to national and more preferably international levels.
- To move from group based instruction in large classrooms to individualized and small groups of learners interacting face-to-face as well as over the Internet.
- To move from lecturing to a large group of students to facilitating individuals and small groups of learners.
- To move learners from being passive note takers to active participants.

- To move learning from a single source lecturer to learning from facilitators, peers, mentors, tutors, counselors, and advisors within the community and around the world.
- To expand learning from a mostly textbook environment, to learning from collaborative and experiential learning activities such as discussions, case studies, simulations, practicums, student exchange programs, and assisting with research.
- To move from a deficit-based model that penalizes students for taking too long to complete a course or program, to a strength-based model that rewards them for completing sooner and doing better.
- To move from more face-to-face interaction with faculty, advisors, counselors, and administrators to more internet contact.
- To move from courses requiring primarily short term memory to pass multiple choice final exams to courses requiring students to demonstrate they have acquired the necessary competencies and skills using long term memory.
- To move learning assessment from one or two methods determined by the instructor to multiple assessment methods where students may choose between several options such as: folio and portfolio assessment, observation, practicum, and work experience activities. It may also include the use of journals and practicum employer evaluation reports, simulation assessments, demonstrations, presentations, as well as collaborative learning activities. Learners may also be assessed as a result of assisting in research activities, completing literature reviews and papers, problem solving activities, or creating products, processes, and/or innovative solutions to preferably real life challenges.

The Future Role of Advanced Technologies in Adult Education

With the exception of distance education, the use of advanced technologies in higher education is still marginally used by most faculty members. This is largely due to limited skills of faculty members who have not, to any real extent, learned how to use advanced technologies such as black board, Wikis, blogs, social sites, moodles, and websites to deliver their course. In most institutions the student's knowledge and use of computers far exceeds that of their faculty member.

Today a number of forces are working together that will see far greater changes in the use of technology in adult education in the next twenty years than the past twenty years. These forces include: downward budget pressures, more extensive and powerful user friendly technology, the retirement of older faculty members, and the growth of a more diverse student population with much broader demands than the historical 18 to 22 year old student population of the past.

These changes will include:

- Moving from print and electronic means of recruiting students (eg. newspaper, television, and radio) to a predominantly computer and internet means.
- Moving from more face-to-face means of interacting, assessing, and selecting students to a more computerized method.
- Moving from more face-to-face methods of counseling, advising, administering, supporting, and orientating learners to the greater use of technology.

- Moving from classroom lectures to web-based lectures, presentations, demonstrations, simulations, case studies, discussions, and debates with other learners in many countries.
- Moving from a lecturer and course textbook as the primary sources of knowledge transfer to web-based learning groups, tutors, peer support, mentors, specialists, counselors, and advisors from around the world.
- Moving from classroom-based paper and pencil methods of assessment to more community-based and internet-based observations, simulations, demonstrations, presentations, and practicums.
- Moving from each institution creating the same administrative structure, student support structure, technology structure, program development structure, course delivery structure, and physical building structure to more national and even more global structures where massive duplication of effort are not repeated again and again at the global cost of hundreds of billions of dollars annually.

In closing, the potential now exists to substantially reduce the annual costs of higher education locally while at the same time establishing national and international standards, becoming more accountable, increasing quality, and focusing more on individual learner's needs.