# **Technology and Online Learning Options in the Future of Education**

**Principles of Learning** 

EDUC5001G - Professor W. Hunter

Assignment 1 – Vision Statement

February 20, 2013

**Theresa Shin** 

**University of Ontario Institute of Technology** 

#### Abstract

With the constant changes and advancement in technology, education sector will need to continue to adapt and to change in order to be relevant with the knowledge economy and the society. This paper provides a general review of the current trends in the use of technology in the online learning environment and the possible future trends in teaching and learning using technology in our education system. The three areas reviewed include online learning, lifelong learning and blended learning in the context of individual or learner-centered approach. Online learning provides opportunities for many individuals to engage in learning because of its flexible learning environment and the current trends indicate that it will continue to grow as part of lifelong learning for the adult learners, and it would most likely be integrated as part of a blended learning strategy in all courses in the school system in the near future.

Key Words: online learning, lifelong learning, blended learning, learner-centered

#### Introduction

The change in all aspects of our society seems constant, and the speed of change seems to increase rapidly as we progress through the second decade of the twenty-first century. One of the main drivers of this change seems to be technology. The speed of change in technology seems to affect every facet of our society including education. As Toffler (1970) had foreseen, we live in a knowledge-based economy, where we would need to develop appropriate "time-bias" and a "suitable degree of futureness" in order to survive and thrive (p. 214). My vision for education in this era of rapid change includes increased use of technology in teaching and learning in every course offered in our school system at all levels, and a student or individual centered approach to teaching and learning. A shift in teaching practices has already begun in order to better engage the learners who use a variety of social media and other internet connected software on a daily basis. The teaching and learning areas affected by technology to be

discussed in this paper include online learning, lifelong learning and blended learning in the context of individual or learner-centered approach.

## **Online Learning**

### **Online Learning in Ontario**

Online learning has experienced exponential growth during the last 15 years particularly in the post-secondary education, and it will continue to grow into the foreseeable future (Colleges Ontario, 2012). For many people, online learning offers an opportunity to take a course from anywhere and at any time that they are able. It offers flexibility, and it's not tied to a place or location for them to commute. Although a variety of synchronous and asynchronous, or combination of online courses are offered for secondary and post-secondary programs, the flexibility and convenience of taking an online course provide a significant advantage for many learners. For the institutions offering these courses, the cost in savings from not having to provide the physical space and the associated savings in not having to maintain the infrastructure would be significant. Also, for those who live in geographically remote regions, online learning may be the only option for an educational opportunity if they do not wish to leave their homes.

Ontario colleges' collaborative online education portal, Ontario Learn, seems to be the route that Ontario's colleges would take to develop online programs further. The course registration in 2011-12 was 66,000, which seems to be an enormous growth when compared to 500 course registrations in 1995-96 (Colleges Ontario, 2012, p. 17). The Ontario Learn consortium is a collaborative effort of the colleges in Ontario and is sustained without the additional funding from the government (Colleges Ontario, 2012). The demand for online courses would most likely continue to grow as more people upgrade their skills in a flexible positive online learning environment. This growth seems to reflect the urgent call for investment in adult education and lifelong learning that's adaptable to a "flexible environment" as discussed

in a workshop sponsored by the European Commission (Punie, Cabrera, Bogdanowicz, Zinnbauer, & Navajas, 2006, p. 27). The on-going research to improve and enhance teaching and learning online would also add to this momentum in growth, possibly advancing further explosion of growth in the near future.

## Online Learning in a Global Context

A systematic approach to online or e-learning seems to be in a development stage in the medical education sector on a global scale and would affect many aspects of medical profession in practice and in learning at a local level in the near future (Harden, 2005). The CRISIS model (Convenience, Relevance, Individualization, Self-assessment, Independent learning and Systematic approach) as illustrated by Harden (2005) seems to provide an effective guideline for continuing education development using online resources in technology. The emphasis is placed on individualized learning and "just-in-time" learning for each individual as the need arises on a continuous basis (p. 44). This type of individualized learner-centered approach engages individuals to continue learning from where they are in terms of knowledge base to where they need to be, when considering solutions to specific issues on an ad hoc basis. The advantages and benefits of this type of access to information on individuals who have varied degrees of knowledge on a specific issue would encourage not only speedy adaptation of such products in the medical profession when it becomes available, but would also open up possible proliferation in other professions.

Technology is also enabling the reusability of information by providing a "bank of reusable learning objects (RLOs)" in many different formats, which can be accessed as needed (Harden, 2005, p. 46). This model of continuing medical education can be used as a part of blended learning teaching strategy for undergraduate and postgraduate education, and also as part of a lifelong learning strategy in continuing education. Although Harden's (2005) CRISIS

model was intended for the medical profession, this model can be adapted to other professions, or subject matter. The consequences of such ease of access and availability of specialized information would radically change many professions. It would also eliminate much of the inperson requirements and enable more opportunities for online resolutions.

#### **Lifelong Learning**

Technology would be an essential part of lifelong learning process through online learning options as identified in the previous section, and other networked information and communication technology options. Lifelong learning seems to be tied to the needs of globalisation and the volatility of our economy (as cited in Lee, 2011). Lifelong learning focuses on the individual's motivation to learn by enabling an individual to strategically determine his/her own "adaptation to the changing world" (Lee, 2011, p. 59). Lee (2011) further clarifies that lifelong learning enhances "humanitarian values on an individual level, active citizenship on a societal level, and democracy on a political level" (p. 60). It seems that lifelong learning is not only beneficial to our changing global knowledge economy, but also to the global knowledge society. The personal benefit to an individual in terms of overall health and wellness would also be priceless. Consequently, meeting the rapidly changing demands of the knowledge economy and the society by "developing the skills to learn continuously" will continue to be a high priority globally (Punie, Cabrera, Bogdanowicz, Zinnbauer, & Navajas, 2006, p. 27).

## **Learning Space for Lifelong Learning**

The future "learning space", as discussed in a workshop sponsored by the European Commission, can be an extension and modification of the current online learning system, but with an individualized learner-centered flexible learning approach (Punie, Cabrera, Bogdanowicz, Zinnbauer, & Navajas, 2006, p. 35). The "learning space" has a potential to move forward rapidly if introduced to an existing online learning system with an addition of personalized social

learning network possibilities, and also available to the learners on a permanent basis as a free learning space for the lifelong learners. As Punie (2007) mentioned, learning is a "social process" and as a result, "guidance and interaction" is an important aspect of any learning medium (p. 196). Adding or combining such strategies with existing infrastructure requires cooperation from many parties in the current education system, and may take some time to implement; however, it may still be more effective than starting as a grass roots strategy. Also, leveraging on an existing population of online learners who are motivated to learn, and who already have access to technology may provide an effective means of engaging learners to the new concept.

## **Blended Learning**

Blended learning encompasses a combination of instructional environment ranging from face-to-face interaction to any amount of technology infusion in a teaching and learning environment (E-Learning Ontario, 2011). This model of teaching and learning seems to be an ideal solution for transitioning the school system to make use of technology in and out of classrooms in a gradually progressive and adaptable way. Blended learning strategy would provide opportunities for training, adapting or retraining required by teachers/faculty. It would also provide the necessary time required for the institutions to equip the educational facilities with adequate technology.

In addition, one of the many benefits of blended learning is that it provides a variety of options to be combined with other instructional strategies such as problem based learning and experiential learning (Delialioğlu, 2012). On an instructional level, keeping options open, being flexible and creative in teaching is essential to meeting the needs of the learners by being relevant and responsive. Blended learning opens opportunities for the instructors to be able to try a variety of teaching strategies. This would help learners to be better engaged and to be able to learn independently and as part of a team. Providing more opportunities to engage learners

constructively using a variety of instructional methods would generate more interest for the learners to learn, making learning relevant, inclusive and enjoyable. As Parsons (2010) indicated, "learning has always succeeded when students actively engage in projects they care about" (p. 35). In summary, there's flexibility and variety in blended learning to be able to position itself as an instructional strategy of the near future.

As Toffler (1970) had envisioned, the schools today are experimenting with many varied methods to "facilitate adaptation" (p. 208). Hargreaves and Shirley (2008) examined the transformation of Finland's education system, and its effects toward a creative and flexible knowledge economy. The changes made to Finland's education system to decentralize along with a selection of highly qualified teachers and with cooperative resource sharing attitude have transformed their education system to the highest performing school system in the world in a very short period of time (Hargreaves & Shirley, p. 60). The words of Toffler (2007) seem to resonate with Finland's transformation, "dispersal, decentralization, interpenetration with the community, ad-hocratic administration, a break-up of the rigid system of scheduling and grouping" (p. 208). It seems that as a nation, Finland has achieved "commitment to group goals" and effectively worked towards it to reach their goal (Hallinger & Heck, 2002, p. 13). As we continue to examine success models of education in the global economy, and experimenting and tweaking the system to suit the unique needs of our diverse population, our education system will continue to adapt and change alongside our knowledge economy.

#### Conclusion

Consequently, online learning, lifelong learning and blended learning in the context of individual or learner-centered approach would provide an opportunity for all learners to be involved in a technology enriched learning environment of the future. In the knowledge society, technology is used as a tool to enable individuals to explore learning in a creative environment. Currently,

many courses in all levels of our school system engage in the use of technology to facilitate teaching and learning. My vision for education of the future includes all courses offered at all levels of our educational system to be actively engaged in the use of the available technology to better utilize available resources and to be relevant to the changing needs of the knowledge economy and the society.

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