A Report to the Minister on the Role of Government in the Establishment of

E-Learning Policies and Regulations

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ETEC 520 - Dr. Tatiana Bourlova, Professor

April 1st, 2012

Introduction

This report serves to provide recommendations to government regarding their role in establishing policy and regulations for e-learning that would assist in bettering the future of both the citizens and the province through the establishment of quality e-learning programs that could lead to the generation of revenue provincially, nationally and/or internationally.

There are several key priorities on which government must focus in order to participate in the planning and management of e-learning in the province of British Columbia. The following eight items have been identified as key priorities for government:

- The establishment of an accreditation process for local and foreign content;
- The development of standards;
- Flexibility in delivery;
- Governance;
- Faculty training in e-learning and teaching online;
- Resources and funding;
- The development of a consortium; and
- Clear understanding of intellectual property rights as applicable to e-learning.

The British Columbia Context

The BC Ministry of Education has recently released the BC Education Plan (2012) for public input. This new plan places a focus on encouraging the use of technology in K-12 schools and better preparing students to thrive in today's digital world by developing their skills to use current and emerging technologies effectively. The plan also addresses the need for educators to use technology to empower the learning process, connect with other teachers in a community of learning, and also to connect with parents and the community (BC Education Plan, 2012). The BC Ministry of Advanced Education (MOAE) has the mandate to ensure that British Columbians have the skills and knowledge required to be successful and contributing members of society so that BC can reach its economic and social goals (MOAE Service Plan, 2012). The Ministry of Advanced Education shares with the Ministry of Education the responsibility for making British Columbia the best-educated and most literate jurisdiction on the continent. Therefore, the Ministry of Advanced Education must provide higher education and training opportunities that enhance the capacity and efficiency of BC's labour market and attract people with the necessary knowledge and skills to BC workplaces and communities (MOAE Service Plan, 2012). The Ministry of Advanced Education also partners with the Ministry of Small Business, Technology and Economic Development to accomplish another government goal of creating more jobs per capita than anywhere else in Canada (MOAE Service Plan, 2012, p. 7).

In August 2001, Premier Gordon Campbell announced the formation of the Premier's Technology Council. The Premier's Technology Council has since identified e-learning as one of the five technologies with the potential to transform the economy of the province (e-learning BC, n.d.). BC has the capacity and the opportunity to be both the recipient of a provincial e-learning strategy, as well as one of the top global providers of commercialized e-learning. (e-learning BC, n.d.).

The current dynamics and increasing costs of delivering higher education and concerns regarding quality and risk-taking that are inherent in any e-learning initiative suggest important possibilities for government's involvement in e-learning in the province. Bates (2001) suggested roles that government can play in managing technological change in higher education including the role of deregulator of planning and process, stimulator of best practice and choice, enabler and broker of partnerships, creator of technology networks, guide to consumers, and investor on behalf of the province and underrepresented populations and regions. These are the key items that need to be addressed through government policies and regulations governing e-learning.

The Canadian Context

Anderson (2006) and Carpenter (2010) both argue that Canada is falling significantly behind comparative countries in the size and quality of investment in e-learning policy making, implementation and systematic research. In fact, there is little research available on the state of elearning in Canada with the exception of a report published by the Canadian Council on Learning (2009) which has been criticized by leaders in the field such as Tony Bates for containing both redundant and missing information (Carpenter, 2010).

However, various Canadian provinces have recently noticed how the technology sector in BC is organizing itself and for-profit industry associations are ready to join forces as strategic partners with each other and with the BC government to achieve a strong reputation for the development of tools, services, approaches, and business models for e-learning (e-learning BC, n.d.).

Accreditation and Foreign Content

A quick Google search will clearly indicate the vast number of higher educational opportunities readily available world-wide. Many countries are taking action to develop elearning both for the productivity benefit of their citizens as well as for a commercial global advantage (e-learning BC, n.d.). Therefore, due to sheer volume, it is clear that controlling access to foreign programs is not possible and speaks to the necessity for government to initiate an accreditation process through which to assist British Columbians in making sound educational program decisions (Bates, 2001). BC is in a good position to benefit from investments in the e-learning market because of BC's proximity to the United States and being part of a group of well-known technology firms (e-learning BC, n.d.). BC also has a large number of immigrants and foreign students who could also benefit from e-learning courses and programs prior to their arrival in Canada thereby increasing revenue for the province.

Bates (2001) reports that it may be worthwhile to require foreign institutions to be accredited by the appropriate national body and advise students to ensure that the courses they propose to take from a foreign organization will be recognized by such an accreditation body. Elearning BC (n.d.) tells us that the Advisory Committee of Deputy Ministers of Education researched applicable accreditation models and working frameworks for accreditation that would prepare the way for this type of accreditation in BC, Canada and nationally.

The transformation of learning through e-learning will continue, with or without the active participation or engagement of BC or Canadian organizations and institutions (State of E-learning in Canada, 2009). More and more foreign institutions will provide Canada with e-learning tools and services, responding to Canadian market demands rather than a vested interest in fostering Canadian content or culture unless BC and Canada develop policy and regulations through which to monitor this encroachment.

Recommendation: That government develop an accreditation procedure for both importing and exporting e-learning programs and services between provinces and internationally.

Recommendation: That government provide guidance to British Columbians regarding properly accredited e-learning programs.

Recommendation: That government grow the market for foreign students coming to British Columbia by supporting the efforts of BC institutions by marketing various programs available to learners abroad before they arrive as immigrants in Canada.

Standards for E-learning Content in BC

Quality assurance in education evaluates the quality of a course, program, or institution. The document, *The State of E-Learning in Canada* (2009) reports that there are numerous approaches to quality assurance, but the process has two key elements: clearly delineated standards and criteria of quality; and established procedures through which an institution or program would be evaluated against these standards.

An example of this can be found in the focused initiatives of Prince Edward Island and Nova Scotia on supporting technology in education, and on funding for infrastructure within the provinces. Prince Edward Island's strategy specified technical standards and outlined key performance measures (The State of E-Learning in Canada, 2009).

Recommendation: That government develop BC standards and perhaps use the International Society for Technology in Education (ISTE) standards and performance indicators as a starting point for determining desired outcomes for British Columbians.

Recommendation: That government assist higher education in the development of common standards supporting the sharing of learning resources in the form of learning objects.

Recommendation: That government assist higher education with the implementation of technical standards and the sharing of tools for instructional design and activities.

Flexibility

E-learning enables greater flexibility in terms of where and when students can participate in learning activities thereby reducing barriers to accessing educational programs (Bates, 2001). However, from a pedagogical point of view, the focus of e-learning should not be on access, but on learning. E-learning provides learners with the opportunity to be more active and to take greater responsibility for their learning while providing faculty a wider variety of tools for facilitating participation and collaboration (The e-learning Report, 2005).

In his "*Final Report, Engagement Process for an Ontario Online Institute*" Jean-Louis (2011) found that the increasing cost of higher education was driving students to take on parttime employment to help reduce debt which often resulted in course timetabling conflicts. Online learning, especially when combined with hybrid or blended learning provides increased flexibility for students (Jean-Louis, 2011).

In addition, Jean-Louis (2011) explains that by reducing time away from employment, elearning allows employees to acquire training while still working, and enables employers to maintain productivity without having to replace workers while they are being trained. A BC example takes place in a trades training program for apprentice car body maintenance workers where face-to-face time was reduced from thirteen weeks to three weeks through the use of elearning (Jean-Louis, 2011).

Recommendation: That government provide avenues for higher learning institutions to offer greater flexibility to learners through alternative modes of delivery, including a blending of online and in-the-classroom delivery.

Recommendation: That government leverage existing investments in the system and bring further economies of scale to e-learning in BC.

Governance

Hénard and Mitterl (2006) reported that because government is the major financial source in most of the higher education systems reviewed in their study, that government still decides who which gets funding and on which basis. Regulations are embedded in virtually every tool available to government to influence the behaviour of institutions, students and other actors within higher education systems. "In devising mechanisms to enable institutions to operate effectively, governments face the challenge of introducing a new relationship between themselves and institutions so that the latter are accountable for their performance, but are given sufficient autonomy in the direction of their own affairs to be dynamic and creative" (Hénard & Mitterl, 2006, p. 22).

Contact North (2010) reported that one of the major barriers that Canada faces in the area of e-learning governance is that there is no educational governance body at the national level. *Recommendation:* That government implement an independent continuous quality improvement process that utilizes feedback mechanisms with opportunities for engagement of all stakeholders (U of A, 2011).

Recommendation: That government implement a governance model that is well-structured, inclusive and transparent to all stakeholders, incorporating principles of vision and accountability (U of A, 2011).

Recommendation: That government engage external stakeholders (ie: Alberta Health Services, rural medical facilities) in the eLearning implementation strategy to ensure the e-Learning technologies address the needs of faculty and learners working in these settings (U of A, 2011). *Recommendation:* That government facilitate the development of a national education policy and a national e-learning governance body in Canada (Contact North, 2010).

Training for Faculty in Teaching

The current professional development model for online teaching in higher education is broken (Contact North, 2010). More and more institutions of higher learning are offering an instructional diploma program for new faculty, but often these programs do not adequately cover online teaching. In other words, there is no systematic pre-service training in teaching in higher education (Contact North, 2010).

An example of this can be found at Virginia Tech and the University of Central Florida where they try to ensure that all faculty who teach online have received at least minimal training. *Recommendation:* That government initiate a process by which all faculty in higher education receive a mandatory program of studies in effective practices of e-learning and teaching online.

Resources and Funding

As stated earlier, e-learning holds great promise and potential but remains a largely unresearched field. Rossiter (2006) reported a lack of Canadian empirical and longitudinal research on e-learning and therefore the current effectiveness of Canadian e-learning initiatives cannot be measured at this time. However, it must be noted that research and development are needed to discover the best approaches for developing this new medium's potential.

In addition, as the 2001 report of the Advisory Committee for Online Learning noted, the promise of e-learning will not be realized without initiatives to remove significant obstacles (State of E-Learning in Canada, 2009). Development and delivery of online courses and programs will require institutions to make significant structural adjustments and to commit resources, often beyond their capacity.

Research by Rossiter (2006) confirms that professional development for e-learning is costly, which often hinders the quality and quantity of such opportunities. Provinces, territories and institutions that share professional development resources tend to have the highest success in implementation and transference (Advisory Council for On-line Learning, 2001).

Bates (2001) suggests that government can play a direct role in providing funding for equipment, Internet connectivity and operation of local community e-learning centers or it may play an indirect role by providing free or reduced Internet costs or tax breaks to commercial organizations. Bates (2001) also suggests that taxation and student grant-policies could be used to encourage increased use and access to the Internet.

The BC government presently contributes to funding the Online Program Development Fund (OPDF) through BCcampus which was designed to develop and promote innovation in elearning projects.

However, the reallocation of existing funding may be the most realistic option for supporting e-learning but it means that something will have to be given up or replaced by elearning (Bates, 2001). Therefore, policy decisions regarding the importance of e-learning relative to other educational, social or economic issues and about methods of teaching and learning must be made.

Recommendation: That government focus funding linked to an agreed mandate and role of elearning in higher learning. This funding will be in addition to the existing funding for postsecondary education.

Recommendation: That government increase financial support to BCcampus to assist with the facilitation of cross-sector collaborations using e-learning through funding programs, online communities and shared resource libraries (BCcampus Strategic Plan, 2012).

Recommendation: That government assist with copyright management negotiations thereby facilitating the development of e-learning courses. Government could require publishers to develop public-domain materials to supplement textbooks and e-learning delivery.

Creation of a Consortium

It is estimated that tens of thousands of course websites and other educational materials are freely available online, originating from hundreds of institutions, organizations, and educators around the world (Canadian Council on Learning, 2009). This unprecedented access to educational resources is combined with the collaboration of a growing body of educational institutions. The Canadian Council on Learning (2009) further states that through the creation of consortia and agreements, these institutions can share and create resources and repositories, and develop new models for the collaborative production and distribution of educational resources.

Despite Canada's rich array of e-learning resources and expertise, lack of co-ordination and communication limit further progress (The Canadian Council on Learning, 2009). Therefore, stakeholders need to work together through discussion forums, sustainable funding, by linking learning object repositories, training for policy and research, and collaborating internationally.

However, on a local level in BC, minimal collaboration across and among jurisdictions is evident and is resulting in the duplication of efforts and unnecessary costs (The Canadian Council on Learning, 2009). Simply stated, the costs and risks are too high according to Bates (2001) who suggests that such collaborative approaches often go against traditional competitive relationships between regionally-based institutions.

An example of this type of collaboration can be found with BCNET when it officially opened as Canada's first regional network in 1988 providing the first Internet connection in BC with founding members UBC, SFU, UVic and TRIUMF (BCNET Website, 2012). BCNET's mandate continues to include shared technology services to help its research and higher education members decrease costs, reduce technology duplication, improve efficiencies and provide a platform for common services like cloud computing and shared data centre services (BCNET Website, 2012). In summary, BC and Canada would benefit from bringing sectors together including educational institutions, federal and provincial governments, business and community-based organizations and associations to discuss mutually beneficial ways of working together. *Recommendation:* That government promote the formation of a large consortium through which to create purchasing power for members that would be maximized and managed by the consortium.

Recommendation: That government establish guidelines for project partnerships that promote collaboration of both public and private provincial, national and international institutions.

Recommendation: That government will help create a learning object and materials repository which can be freely accessed by all publicly-assisted education and training providers in BC to speed course development and enable the rapid conversion of courses for online delivery. This curriculum sharing and learning resource library will reduce duplication, speed development, lower costs and enable those developing courses to work in a community of practice second to none. Expand opportunities to market BC-based learning materials to other markets worldwide (Jean-Louis, 2011).

Recommendation: That government will encourage and enable collaboration between colleges, universities and other education and training providers on the design, development, deployment and delivery of e-learning courses.

Intellectual Property Rights

Issues of intellectual property and copyright significantly impact e-learning. The State of E-Learning in Canada (2009, p 79) suggests that this challenge must be resolved if the benefits of online content are to be achieved at the least cost.

The issue of intellectual property rights in Canada's higher learning institutions is diverse and complex because some faculties are reluctant to create electronic content because it is at risk of being copyrighted, owned and expanded by a program, and taught by a different instructor while in other cases, faculty/instructor contracts place 100% ownership with the post-secondary institution which means that the content expert is not free to reuse their instructional materials in other settings. Also, at other Canadian higher learning institutions, intellectual property belongs to the author, which adds complexity to the sharing, reuse and repurposing of such content (State of E-Learning in Canada, 2009).

Geist (2007) as reported in the State of E-Learning in Canada suggests that governments can play a key role in issues related to copyright, by improving access to content they control or help fund. This could be accomplished without legislation and at minimal cost. Specifically, he proposes the following measures:

Recommendation: That government eliminate Crown-copyright legislation that grants government control over taxpayer-funded work (The State of E-Learning in Canada, 2009). *Recommendation:* That government introduce open-access requirements for federally-funded research (The State of E-Learning in Canada, 2009).

Conclusion

In order to ensure a healthy and prosperous province, BC government must promote the development and distribution of knowledge through the establishment of provincial and federal policies for e-learning. This document contains several recommendations for government to consider to promote the exchange of knowledge and maintain healthy interactions in the local, national and international e-learning communities.

It is believed that government can assist greatly in creating the right environment for elearning by promoting partnerships between government and institutions, collaboration between provinces and countries and the sharing of resources. Failure to promote and develop e-learning in BC has the potential to lead to losses in terms of revenue but also in terms of BC's competitiveness in the global market.

Therefore, British Columbia will not be able to move forward with e-learning without policy and regulations to govern an accreditation process, well developed standards, flexibility in delivery, governance, teaching skills, resources and funding, a well-developed consortium and intellectual property rights. With all these aforementioned items in place together with the development of for-profit e-learning programs BC could easily become a world leader in elearning innovation.

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