

**E-learning at the University of Prince Edward Island:
A Planning Document**

**Submitted by the E-learning Committee
To the University of Prince Edward Island
Vice President Academic Development**

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Table of Contents

Context of the Planning Document	p. 3
A. Introduction	p. 4
B. Establishment of the UPEI E-learning Committee	p. 5
Activities of the E-learning Committee	p. 5
C. State of E-learning at UPEI	p. 6
C.1 Cameos	p. 6
How Nurses Use Their Moodle	p.6
Information Technology: Walking the Walk	p. 6
School of Business	p. 7
Physics Department	p. 7
Atlantic Veterinary College	p. 8
Faculty of Education	p. 8
Robertson Library	p. 8
C.2 Faculty Comments About E-learning	p. 9
C.3 Student E-learning Survey	p. 10
D. State of E-learning in Institutions across Canada and Globally	p. 12
E. Vision for UPEI	p. 14
F. Recommendations	p. 15
F.1 Create an E-learning Culture at UPEI	p. 15
F.2 Advance Online Learning at UPEI	p. 16
F.3 Build Capacity for E-learning at UPEI	p. 17
F.4 Support and Promote the Use of New Media Technology at UPEI	p. 18
G. References	p. 19

Context of the Planning Document for E-learning at the University of Prince Edward Island

This planning document for e-learning at the University of Prince Edward Island has been prepared for the consideration of the Vice President Academic Development as Chair of the Academic Planning Facilitation Committee. The E-learning Committee was asked to develop a planning document in the spring, 2009 by the Vice President Academic.

The document was prepared internally by the members of the E-learning Committee; consultants were not hired to assist in the preparation of the document. Data which informed the process was collected in a number of ways, including an electronic survey sent to UPEI students enrolled in the summer session 2009, a focus group consisting of those who responded to an invitation to participate sent to the UPEI community, and a survey sent to educational technologists and educators across North America and globally.

A number of recommendations have been generated through the process of developing this document. The E-learning Committee, in a spirit of collaboration, has recommended that various units on the UPEI campus be tasked with certain responsibilities. It should be noted that members of the E-learning Committee have also accepted ongoing responsibilities for carrying out particular tasks. The final responsibility for the adoption of these recommendations rests with the Vice President Academic Development, Chair of the Academic Planning Facilitation Committee.

Respectfully submitted,

Members of the E-learning Committee

A. Introduction

At the University of Prince Edward Island, a number of studies and initiatives have explored how information and communication technologies could support the basic mission of the university— teaching, research, and service. These include the *Information Technology Integration Report* (2000), the Webster Foundation Infrastructure and the Webster Foundation Instructional and Curriculum Innovation Fund grant opportunities, and *Extended Learning @ UPEI: A Strategy for Online Teaching and Learning* (2005). (Please note: This introduction does not include a discussion of initiatives coordinated by Computer Services or by Robertson Library in the fulfillment of their own mandates).

The *Final Report on Information Technology Integration: Curriculum, Teaching and Learning and Research* (2000, January) responded to the mandate to develop a strategy and an action plan on the integration of information technology at UPEI.

Recommendations called for university administration to explore and support the development of technology assisted education; to establish a committee given a strong mandate; to create an ongoing forum and system of round tables to foster continuing dialogue and ownership; and to establish a clear system of incentives and rewards to encourage activity, recognize achievement and foster continuing accomplishment in technology assisted education.

The Webster Foundation Infrastructure and the Instructional and Curriculum Innovation Fund dispersed funds on an annual basis for a number of years to UPEI faculty and staff who developed proposals to integrate technology into teaching, research and service work. The types of projects funded included the development of a set of five online Master's courses in a particular program, developing digital video opportunities for students, implementing web-based components in undergraduate courses, and numerous others.

Extended Learning @ UPEI: A Strategy for Online Teaching and Learning (2005) was a position paper written by two faculty members reviewing the state of online learning at UPEI. The focus of the paper was to identify current online learning programs, review the possibilities for a focused, strategic, and integrated approach for extended learning opportunities, and present the argument for an Office of Extended Learning at UPEI. Recommendations included: aligning an online learning strategy with curriculum renewal and development; addressing issues of teaching, costs, resources, and funding new initiatives; coordinating the responsibilities and leadership for online teaching/learning to provide pedagogical leadership for Faculty needs; ensuring adequate technology support to coordinate grants and funding supports for Faculty development of online and blended courses.

Over the past decade, the University of Prince Edward Island has supported these and other initiatives to explore information and communication technologies within the teaching, research and service mandate of the university. What has gone before has laid the groundwork for new initiatives, as the university faces the challenges of the twenty-first century. As Garrison and Vaughn (2008) suggest, “There must be a shift in how we

approach teaching and learning. We need an approach that recognizes the technological advances facing graduates, an approach that uses those same technologies to prepare graduates to be the critical and creative thinkers that are essential in the knowledge era” (p. 158).

B. Establishment of the UPEI E-learning Committee

The E-learning Committee at the University of Prince Edward Island was formed in January of 2007 at the request of the Vice President Academic Development. The mission of this committee was twofold:

- 1) To investigate the state of teaching with information and communication technologies at the University of Prince Edward Island. (This was mandated under Theme Eight: Employment of Learning Technologies in the Academic Facilitation and Planning Committee’s document)
- 2) To make recommendations for action regarding e-learning at the University of Prince Edward Island to the Academic Facilitation and Planning Committee.

Membership on the committee has included wide representation from the university community. Members represent the Faculties of Arts, Science, and Education, the Schools of Nursing and Business and the Webster Centre, the Atlantic Veterinary College, Robertson Library, Computer Services, and Integrated Communications.

Activities of the E-learning Committee:

Since its inception, the E-learning Committee has undertaken a number of initiatives to carry out its mission including:

- Recommending that UPEI move to Moodle as the online learning environment of choice;
- Surveying faculty regarding their use of information and communication technologies in accomplishing their work;
- Reviewing “clicker” systems (system for immediate student feedback during lectures);
- Offering a series of workshops on integrating the online learning environment Moodle into teaching, 2007-2009.
- Developing *Let’s Talk Teaching Day*, September 2007, focused on integration of e-learning in teaching;
- Delivering *Summer Institute on Teaching with Technology*, June 2008;
- Conducting focus group with UPEI faculty on e-learning at UPEI, April, 2009;
- Surveying UPEI students on their use of information and communication technologies, August, 2009;
- Developing an e-learning planning document for UPEI.

The E-learning Committee at UPEI has written this document to describe e-learning at UPEI, and to articulate where UPEI should move to address the potential of e-learning at this institution. Sections of the document include: state of e-learning at UPEI, state of the field across Canada and globally, a vision for the field of e-learning, objectives and actions. Also included is an appendix with information about a range of e-learning tools.

C. State of E-learning at UPEI

E-learning initiatives have been developed throughout the UPEI community. Exemplars of the current state of e-learning at UPEI are shared in this section, including (C.1) e-learning examples from different academic units, (C.2) what a group of faculty members suggest about the strengths, weaknesses, threats and opportunities of e-learning, and (C.3) what our students say about e-learning at UPEI.

C.1 Cameos

How Nurses Use Their Moodle

The University of Prince Edward Island School of Nursing was one of the first departments to incorporate Moodle, a learning management system, into their curriculum. In the fall semester of 2007, a few faculty began by using Moodle as a depository for class notes which then evolved into uploading entire course outlines (sometimes 45 pages long). Eventually, nursing faculty integrated clinical conferencing discussion groups in the more advanced courses. Currently 34 faculty and instructors use multiple aspects of Moodle throughout the 23 courses they offer to their 254 students from first to fourth year of study. Using multiple components of Moodle meets the diverse learning needs of these student nurses. This approach helps students become more receptive to the varied learning needs of their clients when doing health education in the home, hospital, or community. They are more aware of the alternate teaching and learning strategies for health information within a diverse health care context.

From Barb Campbell, Nursing

Information Technology – Walking the Walk

As a first-time sessional instructor in IT, I found Moodle to be an effective and convenient way to communicate with my students. Moodle made it easy for them to access course resources, submit assignments, receive grades and feedback, and ask questions. Since that first experience, I've made a point of asking students about their experiences with Moodle in my classes, and the overwhelming response was that they found it easy-to-use and very valuable. I've heard similar feedback from the instructors teaching other sections of the same course. Having a supported, ready-made solution with as many features as Moodle has given us one central location for interacting with our students on-line, making it easier for all involved. It even helped us make our classes "greener" -- no paper being used to distribute information or to submit assignments! Thanks to integration by Computer Services between Moodle and our University Information System, students can now login to Moodle using the same identifying information they use to access other campus resources, and will find all of their courses listed for them automatically. The same goes for faculty – all courses are now

automatically created making it even easier to take advantage of this flexible campus resource.

From Blair Vessey, Computer Services and Faculty of Science

Cameo from the School of Business

My use of e-learning is really just the use of a web-site that provides class notes, a clear schedule of what needs to be done for each class, and information on assignments and tests. Information on assignments includes guides on how to do those assignments, and information on tests includes copies of old tests. I don't use Moodle, because I am comfortable making my own webpages and I have greater control than I would with Moodle. My BUS 101 course webpage from last fall, for example, can be viewed at <http://people.upei.ca/dwagner/bus101/>.

I am about to begin a 6-week MBA course, and I plan to start using an on-line scheduling system allowing students to pick when they present (on a 1st come 1st serve basis) and to claim a topic.

Someday, I would like to introduce some on-line lectures to enable me to use class-time to interact with smaller groups of students. For example, in BUS 101 the class size is 60. With some on-line lectures (using the technology that Joe Velaidum uses), I could then divide the class into 4 groups of 15 students each. The first group would come for the first half of the Tuesday class, the 2nd group would come for the 2nd half of that class, the 3rd group would come for the first half of the Thursday class, and the last group would come for the 2nd half of the Thursday class. That would enable a very interactive class with a small number of students. But I haven't done it yet.

That summarizes what I do now and what I hope to do soon.

From Don Wagner, School of Business

Cameo from the Physics Department

I am using digital technology in my 1st year physics (111 and 122) classes.

My notes are all prepared using Power Point and I give my lectures from these notes. I use Moodle for my course as well. On Moodle, my students will find the course syllabus, a stripped down version of my lecture notes (solutions to examples worked on in class are removed), all problem assignments, answers to problem assignments, eventually solutions to these assignments, quiz solutions, useful links, etc. I also use Moodle to record course grades and expect students to monitor their grades on Moodle for omissions and errors. There are many course elements that are graded on a weekly basis so it is essential that the students help keep track of their grades. I send out occasional messages through Moodle knowing that the student will receive the message at his/her preferred address. I also use Moodle to schedule make-up labs and quizzes for students who miss their regular sessions.

Other elements to my course include some on-line physics simulation packages that allow me to show "physics in action". The students have access to these same packages through links on Moodle. Finally, a major part of my course is something called Mastering

Physics. It is an on-line physics tutor and assignment system available through Pearson Editors, the publisher of the textbook. The students do problems that I choose. These are marked automatically. I download their grades at the end of term. The package also includes an on-line electronic version of the textbook!

From Reina Lamothe, Department of Physics

Cameo from the Atlantic Veterinary College

Veterinary and graduate students have enormously benefited from e-learning. Just a few years ago our students were only able to access kodachromes slide and VHS tapes in few rooms at AVC. In this day and age our students can access on-line materials 24/7 anywhere where there is Internet. An added benefit of E-learning is the fact that students from other parts of Canada and all around the globe learn from educational modules produced at AVC-UPEI. Electronic quizzes are another success story in knowledge acquisition via Internet. Students get immediate feedback by electronic quizzes made available in the Internet. Course evaluations unmistakably show that quizzes along with Internet instructional modules are effective and well-valued by AVC students. Also, these quizzes also help to prepare our students for the types of questions to be encountered in the North American Licensing Examination.

From Alfonso Lopez, Professor Pathology and Microbiology, Atlantic Veterinary College.

Cameo from the Faculty of Education

Digital technologies have become integral to teaching and learning in my classes. I use presentation software to structure class time, stimulate class discussion, and orchestrate multimedia. Often the multimedia has been created or remixed using audio, video, or image editing software. The Internet serves as an inexhaustible source of material ranging from YouTube videos to NFB shorts, from online versions of print newspapers to audio and video clips of radio and TV news, to full-text digital versions of peer-reviewed research. Perhaps the most challenging, most ambitious, and most promising uses, however, are those which encourage students to draw on the connective and creative possibilities of digital technologies to individually and jointly construct their own knowledge, as did students in my Culture and Society class last year when they used Knowledge Forum to connect with student teachers in Barcelona to compare cultural interpretations of Pedro Almodovar's film, *Women on the Verge of a Nervous Breakdown*.

From Sandy McAuley, Faculty of Education

Cameo from Robertson Library

The Robertson Library continues to make use of technology to enhance teaching and learning.

One example is integrating a library presence into Moodle. Students often find it difficult to select the most relevant research materials for their courses from the many resources offered through the Library website. Recognizing this, the Library initiated a pilot project for the 2007 Fall Term using Moodle to provide students with one-click access to the library resources relevant for that specific course. Based on positive feedback from

participating faculty and students, the service has expanded in subsequent terms. A standard block of library resources appears by default in a highly visible location within each Moodle course, with course-specific resources added as appropriate. These course-specific resources can include databases, research guides, tutorials, and electronic reference tools, and are integrated into the courses and dynamically updated using an in-library developed "database of databases". One faculty member commented: "I think you are making it very easy for the students as compared to the old days!!"

One of the resources which appears in the standard block is the Library ASK US chat reference service. This use of technology provides students with ready access to 'human' help whenever, and wherever, they need it.

The tutorials which are added to specific Moodle course communities are produced using Camtasia Studio. These tutorials and the Virtual Library Tour are also made available as MP3 downloads, and are also loaded on iPods available to be signed out through the Circulation Desk. Also available for loan are laptops.

All of the Library's licensed resources (e-journals, e-books, and databases) are available off-campus to UPEI students, faculty, and staff. Technology has been used, as well, to ensure that users who identify citations through a database search can quickly determine whether the Library has that article in print or electronic format. If the article is available in a licensed product to which the Library subscribes, a direct link is provided to the full-text of the article.

From Betty Jeffery, Robertson Library

C.2 Faculty Comments about E-learning: Focus Group May 6, 2009

Six faculty members and staff came together in a focus group to discuss e-learning at UPEI. Faculty members at UPEI have diverse responses to the emergence of digital technologies as essential tools in their classrooms. They are not unique; the debate over the benefits and costs of adding digital technologies to classrooms and campus centres has entered its third decade (Kanuka & Kelland, 2008). UPEI faculty members suggest that the addition of digital technologies to course preparation and delivery is being done on an ad hoc basis on campus, purely through the interest of individual instructors. Instructors suggested that they would be interested in more structured/formalized ICT additions to courses. However, there is a major cost in terms of time to learn new skills. In some cases, that time cost may be too high.

Strengths of the e-learning landscape at UPEI include Moodle, the willingness of academic staff to embrace new technologies for the benefit of students, the opportunities for e-learning in First World classrooms, and the opportunities for international work and collaborations that e-learning brings to campus.

Among the weaknesses in the e-learning landscape are the pressures of time to develop new skill sets, different learning styles and individual responses to things technological, the need to depend on another person for technological skill development and for

technical help when required, physical classroom set-up which is often not conducive to use of e-learning, non-dedicated computer labs for particular programs, the lack of computer help and support for students. At present, there are some resources allocated to e-learning at UPEI. However, the resourcing must be enhanced as more faculty integrate e-learning into their courses.

Threats that instructors connected to e-learning at UPEI were varied. The faculty discussed students' use of laptops in class (both a threat and an opportunity), limited use of interactive potential online learning environments, and the "diminishing luster" of technology. Faculty also raised concerns about the constant learning required for faculty to attempt to keep current with e-learning and new technologies, the challenge to keep students focused on the curriculum rather than on the technology, and different learning patterns/ styles/ experiences of students in different faculties. There were also threats raised about other institutions "outpacing" us, and what cachet our distance education offerings might have to students who could choose to take online courses from institutions such as Harvard or McGill.

Opportunities were also articulated. The potential of Web 2.0 to enhance student learning is a real possibility. Blended courses (a combination of face-to-face work with work via distance) have great potential to meet the needs of both on-campus and distance learners. UPEI courses offered by distance may meet the needs of lifelong learners on PEI very well. The needs of learners in the Island community provide UPEI with opportunities for outreach and potential new markets.

C.3 UPEI Student E-learning Survey Results

This survey was developed by the E-learning Committee and sent electronically to students who were registered in the second summer session, 2009. Students were invited to provide feedback to the Committee regarding their experiences with technology, and in particular, their experiences with technology at the University of Prince Edward Island. 112 students responded to the invitation to participate. The Committee would be happy to provide the full survey report upon request.

Respondents and Accessibility to Technology

Fifty per cent of the respondents were in their fourth year or "Other" category at the time of the survey completion. The majority of these respondents (58%) were satisfied or very satisfied with the support they received from Computer Services. 75% of the respondents stated that having a wireless network available on campus was extremely important, and 62% of the students made use of the network. Many of those students who did not use the wireless network reported that their laptops did not have wireless capability.

Accessing Online Course Materials

Most students reported accessing online course materials a number of times per week. 70% were accessing course materials online from once a day to 2-3 times per week. However, 12% reported almost never accessing course materials online.

Instructors' decisions to make class lectures available online did not/would not result in a decision to miss class for a majority of students. Over 60% of the respondents stated that having access to online lectures would *not* result in their missing class.

The availability of completely online courses appealed to many of the respondents; 63% stated that this was important to them. 55% of the respondents agreed that using information and communication technology (ICT) in classrooms was convenient in terms of completing class activities.

Respondents did not agree about whether the ICTs currently used in classwork would prepare them adequately for the workplace; 21% thought that the ICTs being used would prepare them, 28% were neutral, and 13% disagreed.

Use of ICTs and Internet for Learning

A majority of respondents indicated that they wanted assistance in developing greater proficiency in using a wide range of ICTs, for example, 51% would like help in creating and publishing web pages.

Students believed that they were quite accomplished at searching for information on the Internet (87%). As well, 57% of the respondents stated that they felt confident in evaluating the credibility of web sites.

25% of these respondents contributed to blogs, 36% posted content to photo and video sites such as Flickr and YouTube, and 64% of respondents used social networking sites such as Facebook at least once daily. However, the use of other Web 2.0 tools was quite low among this group of respondents: almost 62% had never used podcasts, 75% had never used social bookmarking, and 76% had not contributed to a wiki.

46% of the respondents used a spreadsheet daily or weekly basis; 35% of these students used Powerpoint daily or weekly; and 28% used graphics software on a daily or weekly basis.

In summary, we would suggest that the majority of those students who responded to the survey appreciated the availability of online course resources (Moodle), were comfortable searching for online information and evaluating resources, used some Web 2.0 tools while not using others, and used a variety of ICTs such as spreadsheets, graphics, and presentation software.

D. State of E-learning in Institutions Across Canada and Globally

In the late spring of 2009 D. Cormier (UPEI) sent a survey to his twitter followers (educational technology professionals and educators), to initiate a discussion about where universities were situated with technological adoption, particularly where ICTs supported learning. The following sections share information on the findings of this survey with regard to D.1) respondents, D.2) eportfolios, D.3) mobile education, D.4) lecture capture, D.5) learning object repositories, D.6) e-learning support structure, D.7) learning or content management systems, D.8) e-learning strategies, and D.9) Web 2.0 tools. A more detailed survey report is available upon request.

D.1 The Respondents.

Those who responded to this survey included their names on the understanding that their names and institutions would not be published as part of the results. This survey was based on a purposive sample, and the majority of the respondents were either educational technology or educational professionals at Universities in North/South America and Europe. The responses reflected the usage of educational technologies at 25 institutions of higher education in different parts of the world in the spring of 2009.

D.2 EPortfolios

The respondents indicated that they understood e-portfolios to be a good idea, but that there was some confusion or resistance about how this was actually going to be done. Over half of the respondents stated that their institutions were not using eportfolios. Of those that suggested that some use was being made, PebblePAD and D2I were most often cited as the eportfolios of choice. There was some consistent commentary about lone individuals or faculties (usually Education) who were moving in this direction, but no mandatory eportfolios were mentioned.

D.3 Mobile Education

Most respondents replied that their institutions either had no mobile education initiatives, or there had been 'discussions' but no real movement. A smaller group suggested that they had done podcasts, one had developed an iphone application and several others had explored ways to format existing work so that material was easily readable by mobile devices.

D.4 Lecture Capture

A very broad spectrum of different tools appears to be in use with respondents from most universities stating that they are using something for capturing lectures. There are only 2 occasions where broad spectrum adoption is present, but most respondents indicate they believe that this is a necessary part of the 21st century university. There was also a broad interpretation of this question, some respondents interpreted it to mean capturing powerpoints, some video and some the production of audio.

Comment: There are a huge number of options and they all fit for different purposes, and most require significant support. Tools like Ustream, Adobe Connect and Elluminate

benefit from being supported off site and being easy to record but suffer in the accessibility and portability department.

D.5 LOR (Learning Object Repository)/ OER (Open Educational Resources)

Over half of the respondents here said they did not have an identifiable LOR. Many respondents suggested that bands of educators work together to share materials. Of those who responded that their university did have a LOR, the majority suggested that the Learning Objects Repositories that were in use were actually getting little use. A handful of respondents suggested that the use of the LOR was mandatory and that it was being used for sharing.

D.6 E-learning Support Structure

The vast majority of the respondents indicated that their universities had a centralized support system. These support structures are usually found in the 'educational support' division or the e-learning support group or another group dedicated to computer assisted learning. In each of the 5 cases where the support was provided by a computer services department, a strong concern about the focus on technical systems rather than the learning was voiced.

D.7 Learning or Content Management Systems

100% of respondents indicated that their institutions utilized learning or content management systems. Many suggested that use of the learning management system was mandatory, and that there was a universal presence for every course. There was a mixture of Moodle, D2L, Blackboard/WebCT in use.

D.8 E-learning Strategy

Many universities seem to have an e-learning strategy, for some it is included in the overall strategic plan, for others, it is a discrete document. With the exception of the respondent that suggested that it was more important that they have someone in charge of thinking about this rather than the document itself, all respondents agreed that it was necessary. About half of the elearning strategic plans were publicly available.

D.9 Web 2.0 Tools

100% of the respondents see a variety of Web 2.0 tools in use. These include tools such as: Twitter, Delicious, WPMU (WordPress Multi-User), Plurk, Facebook, LinkedIn, YouTube, Vimeo, Ning, Chatzy, and Diigo . The two themes that emerged are the purposeful viral spreading of these tools and the institutional support of blogging.

Summary

The educational professionals who responded to this survey indicated that the majority of their institutions had an e-learning strategy in place. All universities used a learning management system. As well, the majority of the respondents indicated the importance of a centralized structure for e-learning support. The work being conducted at UPEI in mobile computing seems more advanced than what is happening at many other universities. A wide variety of Web 2.0 tools are in use at the respondents' universities, with blogging in particular increasing in importance in educational contexts.

E. Vision for UPEI

Members of the E-learning Committee at UPEI agree with Bates (2000) that “Technologies now play a central role in everyone’s life, and universities and colleges need to find new ways to respond to the growing demand for lifelong learning” (p.34). Bullen and Janes (2005) point out that “To meet the increasing demand for education and training, higher education institutions are increasingly turning to e-learning, which is seen as a way of providing convenient and flexible access... while avoiding the cost of building larger physical campus facilities and infrastructure” (p. vii). Yet, there is evidence that institutions are only slowly adopting e-learning solutions regardless of the potential benefits.

The OECD states that “information and communication technology has become a ubiquitous part of our lives in OECD countries. As it is about information and communication, it is of central relevance for education” (OECD *Trends shaping education*). Statistics Canada reports that in 2007, one-half of those who used the Internet at home chose to do so for the purposes of education, training, or school work.

Courses and/or programs offered through the use of information and communication technologies extend the possibility of pursuing post-secondary education to people already in the work force who wish to take courses on their own schedule, to people with disabilities, and to people in remote areas who are unable to attend face-to-face classes. In addition, many on-campus students choose to enroll in online courses because of the convenience, and the ability to complete course work on their own schedule.

However, there continue to be challenges to fully adopting e-learning possibilities within institutional contexts. These challenges include technical requirements such as bandwidth, human resource requirements such as faculty, student and technical support and financial requirements such as appropriate funding. And perhaps this should not be seen as “a failure of e-learning, but rather viewed as a failure of institutions to respond appropriately” (Bullen & Janes, 2005, p. vii).

The vision of the UPEI E-learning Committee is that the University of Prince Edward Island is a learning institution which is learner-centred, and which strives to meet the needs of traditional as well as non-traditional students. Teaching, learning and research at UPEI will be facilitated through the use of appropriate and effective information and communication technologies. The University will continually work to address the challenges and barriers to the effective implementation of e-learning.

An E-learning Strategy for UPEI needs to be built around the following essential elements: 1) Quality teaching; 2) Cost effectiveness; 3) An increased and targeted allocation of resources (human and technical); 4) Expertise in instructional design; 5) Prioritizing of e-learning initiatives; 6) A focus on learner support and learner needs; 7) An integration of academic and technological priorities; and 8) Effective professional development for faculty (adapted from *Extended Learning @ UPEI: A Strategy for Online Teaching/Learning*, 2005)

E-learning has a great deal of potential as a vehicle for advancing many of the University's institutional goals as it can:

- **Contribute** to recruitment and retention efforts by providing students with learning environments that build on their predilection for using technology.
- **Extend outreach** to adult learners by removing barriers to participation in post-secondary education.
- **Enrich** the student experience by enhancing communication with faculty and fellow classmates.
- **Advance** the environmental sustainability goals of the University by reducing the need for travel and printed materials.
- **Enhance** the University's reputation by using technology to positively impact on our students' experiences.
- **Provide platforms** for professional development in the Schools of Nursing and Veterinary Medicine.
- **Allow for flexibility** in examination venues and methods.
- **Allow automated and immediate feedback** on student progress.
- **Facilitate** focused technology purchasing at UPEI.
- **Support and promote** the growth of new media literacy among our students.

F. Recommendations

F.1 Create an E-learning Culture at UPEI

Rationale: As successive cohorts of students enter UPEI, we can observe the emergence of these groups' increasing reliance on Web 2.0 tools. These learners and their expanding literacy needs have major implications for our current models of post-secondary programs. It is becoming urgent to extend our post-secondary teaching to meet the literacy and learning needs of the "net generation" (Tapscott, 2009). Garrison and Vaughn (2008) propose that "It is becoming very clear that for higher education to meet these challenges, it must develop a 'capacity to adapt and change as new modes of knowledge formation emerge'" (p.157).

Given the importance of adapting and changing, the E-learning Committee makes these specific recommendations regarding the creation of an e-learning culture at UPEI:

- Research both pedagogical and technical best practices developed on-campus and at other institutions. This is a continual activity as the field of teaching and learning supported by digital technologies continues to evolve. (Responsibility: E-learning Committee, interested faculty members).
 - Biannual Report provided to the Vice-President, Academic.
- Provide input into the direction that e-learning is taking on our campus. (Responsibility: E-learning Committee).
 - Annual Report provided to the Vice-President, Academic.
- The E-learning Committee becomes a Standing Committee of Senate. (Responsibility: Vice-President Academic, E-learning Committee).
- When new faculty are hired, their willingness to adopt e-learning technologies in their teaching/learning will be considered as part of the hiring process. (Responsibility: Senior Management Group, The Faculty Association).
 - Lobby for the acceptance of a "portfolio" of e-learning materials as part of the formal application and interview process
- Provide a wiki-based version of this document to report on progress and also facilitate a broader discussion of the recommendations and actions." (E-learning Committee)

F.2 Advance Online Learning at UPEI

Rationale: As the generation of students who have always learned with technology are now entering university, various forms of online learning are proving to be as successful with these students than more traditional learning methods (if not more successful in certain cases, see for example, U.S. Department of Education, 2009). Not only are online learning tools effective in engaging today's students, they may also help to alleviate our ongoing classroom space issues, reduce paper consumption, and provide for a more flexible curriculum to meet the needs of adult learners. Online learning tools may also help students who find it difficult to choose electives because of the demands of their degree requirements (e.g. some nursing and science students). Additionally, as a university with a mandate to serve the entire province, online learning will enable a wider participation in UPEI programs.

Therefore, these specific recommendations regarding the advancement of online learning at UPEI are offered:

- All courses offered at UPEI currently have an online presence. Faculty will decide for themselves how much the online presence will be realized in their specific classes. (Responsibility: Vice President Academic Development)
- There will be sufficient online courses made available at UPEI that members of the community will be able to complete degrees through study online. In that regard:

- The Centre for Lifelong Learning will facilitate the development of number of courses for blended delivery. Ten courses should be completed and ready for blended delivery in the 2010-2011 academic year. (Responsibility: Centre for Life-Long Learning)
- 20 courses should be completed and delivered in 2011-2012. (Responsibility: Centre for Life-Long Learning)
- A further 40 courses should be developed after 2012, ensuring that students in the BIS program can take an entire program online by 2015. (Responsibility: Centre for Life-Long Learning)
- Faculty should be supported in the creation and use of rich online learning content. (Responsibility: E-learning Unit, E-Learning Committee)
- A method of measuring the success of e-learning initiatives will be devised and carried out. (Responsibility: Vice-President, Academic).

F.3 Build Capacity for E-learning at UPEI

Rationale: According to research recently conducted by the Organization for Economic Co-operation and Development, "Building a framework that would help shift e-learning to the mainstream and maximize its impact in the classroom is the current priority [for institutions of higher learning]"(2005, p. 19). This is a consistent theme of research conducted in this field.

Therefore, in order for faculty and students to participate fully in e-learning the Committee recommends that:

- A series of workshops be developed and offered throughout the academic term to support faculty who wish to integrate e-learning tools into their teaching. (Responsibility: E-learning Committee, Webster Centre for Teaching and Learning).
- Effective support (both online and in-person) will be offered to faculty who choose to utilize e-learning options in their courses. This pedagogical support and technical support will be available on a consistent basis.(Responsibility: Coordinator for E-Learning and the E-Learning Unit).
- Administrative support will be offered to teachers who wish to use e-learning resources in their teaching. This will include support for the development of online courses. (Responsibility: Vice-President, Academic).
- E-learning components of courses (or entire courses) are accepted as indicators of innovation in tenure and promotion files by 2012. (Responsibility: The University Review Committee, The Faculty Association)
 - There is currently little recognition for faculty who develop e-learning initiatives.
- Effective support for students engaged in e-learning is made available. (Responsibility: Coordinator of E-Learning, E-Learning Unit, Computer Services, Webster Centre for Teaching and Learning, Robertson Library).

F.4 Support and Promote the Use of New Media Technology at UPEI

Rationale: To accelerate the participation of faculty and students in e-learning activities, the University should raise the profile of new learning modes and technologies. To accomplish this, the E-learning Committee recommends that:

- A Summer Institute on Teaching with Technology be hosted biannually, with preference given to faculty members from UPEI. (Responsibility: E-learning Committee, Centre for Life-long Learning).
 - The Institute will give UPEI faculty an opportunity to share their experiences, both good and bad, in using technology to teach.
- Faculty members who utilize e-learning strategies in their teaching, learning and research activities will be encouraged and formally recognized by the University. (Responsibility: Vice-President Academic, E-learning Committee).
 - Identify funds for two annual \$500 awards for faculty engaged in e-learning to assist them to continue with their success.
- Continue to invite faculty to share their e-learning successes with their peers through semi-annual brown bag lunches dedicated to this topic. (Responsibility: Webster Centre for Teaching and Learning).
- Produce twice yearly faculty profiles for the web site demonstrating the effectiveness of e-learning as engaged in by faculty members. (Responsibility: Integrated Communications).

G. References

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