Assignment 3:

E-Learning Readiness Audit - Analysis

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E-Learning Readiness Audit - Analysis

This paper is a continuation of our preliminary audit of The University of Ottawa's (uOttawa's) current state of e-learning readiness for which we developed an audit tool to assess various key factors that, in our view, are crucial to institutional e-learning readiness. Although we looked at a number of documents for our assessment, the primary source was the *Report of the E-Learning Working Group,* which we shall refer to throughout the remainder of this paper as The Report. Our overview concluded that the university's E-learning Working Group had shown considerable forethought in considering both the strengths and challenges that pertain to the university's current and future state of e-learning readiness (Bartanus & Kim Moore, 2015). Before examining each of the factors that led to this conclusion and discussing their implications, it is essential to provide context with some relevant facts that relate to uOttawa's recent history.

Since 2005, uOttawa has undergone significant growth. Student enrollment has increased to over 40,000, the number of graduate students has jumped by 40%, and 50 new programs (mostly graduate level) have been launched. Furthermore, "the faculty has been transformed through both generational change and the creation of over 250 new positions, with the result that newcomers now account for over 40% of all regular professors" (Rock, 2013, p. 1). In the context of e-learning readiness, the implications of this growth and transformation are substantial. Research has clearly shown that faculties (especially tenured professors) are often resistant to the notion of expending precious time on pedagogical and/or technological retraining (Bates & Sangrà, 2011). With a higher percentage of faculty newcomers, there is a possibility that many of them will be more comfortable and aware of educational technologies; therefore, the implication is that there may be much less resistance than would otherwise occur with an established group of seasoned faculty. With this positive contextual prognosis in mind, we will begin our detailed analysis with an examination of the

readiness audit tool factors that pertain to Administrative Support.

Assessment of Administrative Support

Commitment - Items 1 to 4 (as delineated in the audit tool)

In the Administrative Support section of the audit tool, there were fifteen items to assess. With all but one item, we were able to find ample evidence that uOttawa has a viable e-learning strategic plan in place and appears to be well on the road to fulfilling its vision of becoming "one of the great universities of our time, with a reputation to match its achievements" (Rock, 2013, p. 1).

For this to be possible, the first requirement for any institution is commitment. As described in our overview (Bartanus & Kim Moore, 2015, p. 4) , the first 4 items of our audit tool (2015, p. 6) all relate to *administrative commitment* and the fact that uOttawa's Working Group team includes such influential leaders as Christian Detellier, Vice-President Academic and Provost, Richard Pinet, Director of the Centre for e-Learning, Teaching and Learning Support Service, and a number of other high-profile administrators, strongly indicates there is every reason to expect that the "championing program" that The Report discusses (2013, pp. 6, 43, 44, and 47) will be promoted and sustained for at least a few years. Furthermore, the Working Group was given its mandate directly by the University's Administration Committee, which comes under the direction of the University President and consists of the Vice-President, Academic and Provost; the Vice-President, Research; the Vice-President, External Relations; the Vice-President, Resources; and the Vice-President, Governance (“About uOttawa,” n.d.).

One key foundational pillar of that commitment is evident in the Working Group's emphasis on the fact that successful deployment of their blended learning plan will require considerable effort. On both pages 3 and 40 of The Report, it states there will be a need for "inter-departmental and inter-functional area cooperation," along with acceptance of

technology and "appreciation of new pedagogical approaches." On page 35, as part of its recommendation for professional development programs and web-based resources, the Working Group also points out that both technical skills and "awareness of the pedagogy of online learning and new teaching techniques" are vital to the success of the e-learning initiative.

To support these needs, the Working Group recommends the creation of the "Blended Learning Support & Training Program" (2013, p. 36) that would be developed by the Teaching and Learning Support Service (TLSS) and receive input from a newly created E-Learning Advisory Committee. Because the new committee would be comprised of a broad membership, (including members from Central Administration, Faculties, Computing and Communications Services, professors, student representatives, and such campus service organizations as the library), several new channels of communication could open across the entire university. This, in our view, shows ample commitment to fostering some attainable organizational culture changes that should result in strong collaboration among faculty, IT personnel, and administrators, as called for in audit tool Item 2 (Bartanus & Kim Moore, 2015, p. 6).

Policy - Items 5, 8, 10, 11, 15

The new committee also speaks to Item 8 (2015, p. 7), which pertains to policy and the establishment of an e-learning committee. Other evidence of concrete administrative policy support is indicated in The Report's implementation plan, which delegates full responsibility for all logistical aspects of online and distance education to the TLSS, as advocated in Item 5 (2015, pp. 6–7). Although this is clearly a move towards centralization, the Working Group is careful to specify that these logistics are in the areas of "implementation of the policies, operational activities and daily tasks" (2004, p. 34). This, in effect, sidesteps curriculum and pedagogy and allows the University's two main

organizational cultures--collegial and managerial--to peacefully co-exist: the collegial culture maintains a high degree of autonomy by continuing to look after curriculum and pedagogy while the managerial culture facilitates a more efficient e-learning management operation.

However, the Working Group has also considered the reality that some instructors will need some pedagogical re-training for the blended learning (BL) initiative and have already provided professional development opportunities (Item 10) as shown at the TLSS's Integrated Training web page. As suggested in the introduction to this assessment, the newly reconstituted (and probably rejuvenated) uOttawa faculty is more likely take full advantage of this excellent resource than an established faculty of "veterans" and the likelihood of a successful transition to the BL program is strong.

Item 15 deals with the full integration of computing into the institution's culture and, although uOttawa recognizes that they do not offer as many online programs or courses as some other Canadian universities (2013, p. 18), The Report indicates that it has a healthy complement of existing resources (see “Assessment of Resource Support” below) and that over the past 12 years, the University's infrastructure has become very well equipped with specialized "learning spaces," training rooms, Virtual Campus, and other facilities that are ready for immediate use in the implementation of the BL strategy (The Report, 2013, p. 37). Given the context of the Working Group's entire report and other related documents, there is no reason to doubt that computing is fully integrated into uOttawa's culture.

Under "policy support," the only audit factor that we ranked at less than "ample evidence" was Item 11, which deals with support for instructors access to networks of other online practitioners. We said there was "some evidence" because of the University's documented interest in various consortia. However, upon further analysis of The Report, we have located some specific recommendations that include providing professors with access to communities of practice for exchanging ideas, concepts, etc. related to e-learning (2013, p. 36)

and have since upgraded this specific factor to "ample evidence." The implications of this are significant: by freely participating in such communities and tapping into the distributed knowledge base provided, instructional staff will be able to more quickly advance their own knowledge and practice in the BL course environments they will be using.

Instruction - Items 7, 14; 6, 9, 10, 12

Perhaps the best way to analytically approach the instructional aspect of administrative support at uOttawa is holistically. Items 7 and 14 (focused on e-learning and learner-centered instruction) are very general in nature and, as reported throughout numerous sections of all of the analyzed documents, will have ample administrative support.

Regarding the other items (6, 9, 10, and 12), they are primarily concerned with training and support for both students and staff and they are given due deference in three of The Report's nine Guiding Principles:

> 3. Appropriate support, tools and resources will be provided to professors to help them develop effective and meaningful skills and develop competencies in using blended and online learning.
>
> 4. Although the degree to which e-learning is used by instructors will vary due to a number of factors including their personal teaching preferences, the nature of the subject matter, the students involved as well as the availability of technical and instructional design support, minimum standards need to be defined and implemented.
>
> ...9. It is recognized that although it is desirable to reduce costs, learning outcomes must be maintained or improved. During this process, it will be recognized that instructors who explore new instructional methods require time and appropriate support to develop, pilot, and revise their practice. (2013, p. 22)

The fact that training and support for faculty and students are written into the guiding

principles is most encouraging and the implications are likewise very positive. Bates and Sangrà's case studies (2011) provide ample evidence that failure to provide such support is often a key factor in failed e-learning initiatives. By ensuring and reassuring all concerned parties that their support and training have already been "built in" as guiding principles, it is much more likely that they will "buy in" to the e-learning initiative that they are being asked to undertake.

Assessment of Resource Support

Finances - Items 16, 17

Though encompassing only two audit items, the readiness indicators related to finances are significant due to the fact that all other items in a primary or secondary way relate to financial resources and sustainability. uOttawa is coming from a *relatively* strong position of a stronger balance sheet, lighter debt load and lower administrative expenses compared to other comparable institutions in Canada; Nonetheless, they have experienced deficit positions in their operating budgets since at least the 2012-13 academic year ("Roadmap@Destination 2020 (highlights)," 2014). Facing pressures and challenges of reduced provincial revenues, uOttawa shows evidence of carefully positioning itself for long-term sustainability, including financial considerations relevant to e-learning. Their acknowledgement of their current position, scale of anticipated deficits, and looking forward with goals in line with strategic objectives show institutional readiness. Specifically, uOttawa has acknowledged that e-learning is a "key factor in enhancing competitive advantage in an increasingly active marketplace" (2013, p. 7), and by acknowledging this, they have prioritized resources and finances in order to be a strong and growing presence in e-learning. One of the main objectives of the working group is in relation to cost: "What impact would implementation of an online strategy have on the budget of the University?"

Regarding reference to budgeting (Item 17), The Report recommends an investment of $315 000 per year for the TLSS and lays out resources and costs implications required in eight areas including consultations, workshops, multimedia tools, etc… (2013, p. 55). This is just over 6% of the 5 million in strategic investments to the year 2020. This is in addition to existing operating costs of the TLSS. If fully implemented, this investment in a time of financial challenges implies a full commitment on the part of uOttawa to e-learning. The awareness of e-learning as a strategic opportunity for financial sustainability and competitiveness in attracting and retaining students may also benefit from the re-evaluation of uOttawa's internal funding formula ("Roadmap@Destination 2020 (highlights)," 2014, p. 12). The implication of a shift from funding based on student population growth to strategic goals would be advantageous to the TLSS.

Cooperation - Item 18

This item was added based on our preliminary audit. Upon further review of uOttawa's position, we would further revise the wording from "participating in a broader consortium" to "participating in cooperative agreements and exercises with other institutions" in order to broaden the item's scope.

The Report states that The Council of Ontario Universities started developing a consortium called Ontario Universities Online (OUO) that would enable universities "to support technology-enabled learning through collaboration" (2013, p. 9). uOttawa pledged that it would be an active member of this consortium that would enable universities to improve access and quality of online courses, improve credit transfers, support professional development, and maximize the use of resources to enable technology-enabled learning. Upon further online investigation, though the announcement of the OUO occurred in 2012 (October), we could not locate any evidence of uOttawa's membership in this particular consortium. It is unclear whether the initiative has been stalled or cut. This is

unfortunate, as such a cooperative could potentially benefit many Ontario Universities including uOttawa. OntarioLearn (ontariolearn.com) is a parallel consortium of 24 colleges that currently offers online courses. Alberta and British Columbia also have established cooperatives that benefit their Post-Secondary Education (PSE) institutions.

Though uOttawa's membership in the OUO has apparently not materialized, the Ministry of Training, Colleges and Universities (MTCU) has shown leadership by requiring institutions at the PSE level submit a Strategic Mandate Agreement (SMA). uOttawa's submission was filed in October 2012, and it makes significant note of the E-learning Working Group's mandate and role (2013, p. 12). The SMA is significant because of the accountability it automatically brings to both the MTCU as well as to the PSE community in Ontario, as the SMA's are publicly available and reviewed by peers. It is also worth noting, that uOttawa is active in aiming to learn from other institutions, including those that are leaders in the distance and online learning space. The implication of this involvement in a high level community of learners and leaders is the acceleration and execution of e-learning initiatives.

Human Resources - Items 19 to 22

The allocation of human resources to support e-learning throughout the university is directly tied to financial allocation. The TLSS whose mandate is specializing in "university teaching and techno-pedagogy to support faculty members, and enhance the student learning experience" has a team of 60 experts including Multimedia Technicians, Network Coordinators, Educational Developers and Graphic and Instructional Designers (2013, p. 37). Within the TLSS, these staff are deployed in various sectors, including The Centre for E-learning (designing, developing, and implementing interactive multimedia resources), Centre for Mediated Teaching and Learning (distance education), and Multimedia Distribution Service (technical support of multimedia technologies).

It's worth emphasizing that these services represent a significant financial commitment and in and of themselves serve as ample evidence to support the financial audit tool items. The implication of this extensive support system for faculty is the ability of the university to effectively train and support faculty in order to provide enhanced e-learning.

Technical Infrastructure - Items 23 to 31

The Working Group acknowledges the critical importance of deploying scalable and sustainable infrastructure that is "rock solid", as well as easy-to-use and well-supported for both faculty and staff. It describes a few challenges that relate to the Student Information System and and Rabaska, their registration process; however, Blackboard is the online platform used by uOttawa, and it has both the necessary system capacity and appropriate tools for communication and collaboration. The implication of a solid and reliable base is the capability of uOttawa to increase the load on their infrastructure of more interactivity-heavy learning activity as well increased enrollment on the system. Accessibility to reliable and appropriate hardware and software for e-learning activities are accomplished through the Multimedia Distribution Service. Due to the sophisticated and significant technical support in place through the TLSS, and lack of mention of challenges in reviewed documents, Items 30 through 31 relating to bandwidth and connectivity speeds are assumed to be in place.

There are 8 items in the audit tool that relate to infrastructure. This seems a relatively large number, however, this is the case only because uOttawa has all of the readiness indicators in place. Were it not the case, infrastructure issues would need to be isolated, analyzed, and addressed in priority sequence before having the capability to take further steps in the development of e-learning. In the case of uOttawa, the solid infrastructure allows for e-learning activities to proceed without frustrating and limiting hurdles.

Physical Infrastructure - Item 32

Finally, in continuation of the backwards design process, The Working Group's

extensive consideration of setting aside and designing spaces designated for BL compelled us to add an audit item relating to physical infrastructure. The Report dedicates more than 10 pages in the Appendix to studying various possibilities including numerical forecasts of seating capacity required based on projected enrollment (2013, pp. 65–75). uOttawa has considered the need to collaborate face-to-face as well as teach and learn online in existing building space, as well as planning a dedicated technology-assisted learning facility expected to open by 2016 (2013, p. 3). Recognizing that ultimately, their students desire some face-to-face time associated with traditional university lectures, labs and seminars, coupled with the flexibility of online learning, The Working Group has prepared the numbers in order to prepare for future needs. This puts uOttawa in a position of readiness for a potentially slower aspect of development - the physical modification and construction of spaces.

Summary

With very few exceptions, the University of Ottawa shows ample evidence on most items in our modified audit tool regarding e-learning readiness; It is by all accounts an organization with significant and established strategic goals and resources. The strength of the university's leadership, its strategy, established base of resources, and the TLSS attest that uOttawa beyond e-readiness, perhaps it would be interesting to establish and apply a checklist for "e-maturity"?

To summarize as succinctly as possible, we would assess uOttawa's e-learning readiness as well-established and suggest that their strategic plan is well under way, probably somewhere between Stages 4 (Planning) and Stage 5 (Sustainability) on Table 1, as depicted by the red double arrowed line. (next page)

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Lone Rangers	Encouragement	Chaos	Planning	Sustainability
• Early adopters • Individual initiative • No direct institutional support	• Early adopters supported with small grants or reductions in teaching load.	• Increase in use of eLearning • Growing administration concerned about lack of coordination or standards, duplication and costs	• Senior administration begins to address the "chaos" by setting standards, addressing need for faculty support and controlling costs and workload	• Stable eLearning system established that is cost-effective and scalable.

Table 1: The Five Stages of eLearning Integration in Higher Education (as cited in Bullen, 2013)

Next Steps

uOttawa's most significant challenge to the rate of progress with regards to e-learning may be funding. The Roadmap@Destination2020 document outlines details about the financial challenges the university faces. Of particular interest is the financial implications due to uOttawa's Francophonie and bilingual mandate; though the university receives provincial and federal subsidies that help defray the costs of providing programs and services in both official languages, the funding covers less than half of the costs ("Roadmap@Destination 2020 (highlights)," 2014, p. 13).

With continued careful strategy and prudent implementation, it is an institution well-poised to accomplish its e-learning strategic goals.

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Appendix A

Institutional Assessment (Revised)

The following items deal with administrative support in terms of commitment, policies, and instruction (Mercado, 2008, pp. 18.8–18.9).				
		No Evidence	Some Evidence	Ample Evidence
1	An e-learning initiative is an important aspect of the institution's mission			**X**
2	The institution recognizes that large-scale course redesign for the e-learning initiative involves a strong collaboration among the teachers, IT personnel, and administrators in the planning as well as the implementation.			**X**
3	There is commitment on the part of institutional leaders to use technology to achieve strategic academic goals.			**X**
4	There is commitment on the part of "champions" with power and influence (Bates & Sangrà, 2011, pp. 71–72) to use technology to achieve strategic academic goals and that such commitment extends beyond just using technology.			**X**
5	The institution is willing to employ or to assign an academically capable and/ or experienced faculty to oversee the implementation of the e-learning environment.			**X**
6	The institution supports and provides training for employees who seek out non-traditional development programs or experiences.			**X**
7	The institution is committed to implementing e-learning as a mode for teaching and learning.			**X**
8	The institution has a committee or is willing to put up a committee that will work directly with the development of online courses and programs.			**X**
9	The institution ensures / or is willing to put in place provisions that would ensure adequate and timely support to the teacher and students when technical issues arise			**X**
10	The institution provides or is willing to provide teachers with professional development opportunities to assist them in			**X**

	improving their online teaching.			
11	The institution support teachers to have access to a network of other online practitioners to discuss pedagogical and curricular issues.			**X**
12	The institution is willing to ensure that a professional support system is in place to ensure teacher success in delivering the online course.			**X**
13	The institution is willing to make provisions for collaborative learning and social constructivist pedagogy by integrating Web 2.0 technologies wherever possible.			**X**
14	The institution is committed to learner-centered instruction			**X**
15	Computing is firmly integrated into the institution's culture.			**X**
The following items deal with resource support, including financial, human, and technical resources (2008, pp. 18.8–18.9).				
16	The institution is financially ready to venture into e-learning		**X**	
17	The institution is willing to create a budget for implementing e-learning.			**X**
18	The institution participates in cooperative agreements and exercises with other institutions in order to share resources, expertise and costs in improving technology-enabled learning.		**X**	
19	The institution has experienced human resources, or a department that organizes trainings related to online learning.			**X**
20	The institution have adequate human resources to support an e-learning initiative.			**X**
21	Adequate and timely support is available to the ***teacher*** when technical issues arise.			**X**
22	Adequate and timely support is available to the ***students*** when technical issues arise.			**X**
23	The institution has a courseware delivery system (LMS) through which courses and programs are delivered.			**X**
24	The current technological infrastructure is adequate to sustain an online learning environment.			**X**

25	The current technological infrastructure is well-developed to support growth of the online learning environment.			**X**
26	The online platform used for course delivery has the necessary system capacity to support the learning activities of the course.			**X**
27	The online platform provides appropriate tools for communication and collaboration.			**X**
28	The institution is willing to provide students and faculty access to appropriate hardware and software needed in the e-learning implementation.			**X**
29	The institution ensures that instructional resources and equipment are readily available, accessible and reliable.			**X**
30	The institution has extensive bandwidth capability			**X**
31	Connection speeds are sufficient for communication and accessing all course materials.			**X**
32	The institution has considered and provided classroom spaces for teaching, learning, and collaborating for blended learning.			**X**