

Assignment 2:

An E-Learning Readiness Audit: NorQuest College

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Introduction

Leaping into full-scale e-learning implementation without being thoroughly informed, is analogous to diving into a pool without knowing how deep it is. It is crucial to the success and sustainability of technology integration to begin by assessing an institution's readiness as a first step, remedy any areas of weakness as a second step, and then to deploy e-learning strategies in a systematic, purposeful, and measurable way.

In order to begin, an e-learning readiness audit tool will be necessary. A tool of this nature serves multiple purposes. First, it helps those applying the tool to consider the perspectives of various stakeholders. Providing question prompts and checklists provides a starting point for dialogue across users from any department. Second, it helps the user understand the organization of the institution and to navigate the multiple organizational cultures, such as collegial and managerial, which reside in various areas (Bergquist & Pawlak, 2008). Third, it offers a snapshot of strengths and weaknesses; providing direction for the future.

Bates & Sangrà (2011) developed a list of Criteria for Assessing the Success or Otherwise of Technology Integration (p.71-74). This list of nine questions probes many areas of an institution; including, executive, E&IT, faculty, staff, administration, finance, students, innovation, and support. In using these questions as a framework for an e-learning readiness auditing tool, the user can see areas in which the institution is ready to proceed successfully, and others that will need attention before proceeding successfully with implementation.

The tool I have created (See Appendix 1) is based on Bates & Sangrà's (2011) aforementioned list. For each overarching question, a selection of sub-questions has been developed to guide the user towards appropriate sources and areas. Questions are scored on a scale of 0-3, and most can be answered subjectively, or with minimal digging. Overall scores attained through the use of this tool are also subjective. Institutions will need to decide on areas of priorities and what acceptable levels of readiness mean for them.

Below, you will find the rationale, an overview of analysis and discussion, for each criteria. Full analysis and recommendations for NorQuest College can be seen in Appendix 1.

An E-Learning Readiness Audit Tool; Rationale, Analysis and Discussion

The first question Bates & Sangrà (2011) ask is:

“Are there ‘champions’ with power and influence in the institution who recognize the importance of technology for conducting the business of the institution?”

Rationale

It is crucial to the success of a technology integration plan that leadership, especially the executive level, promotes and engages faculty and staff in appropriate activities to this end. Executive need not personally advance the agenda, but have a broader role to support transformation overall (Bates & Sangrà, 2011, p. 80). Executive also has a role in e-learning support units (Bullen, 2006); mediating across departments to support multiple, possibly conflicting, cultures (Bergquist & Pawlak, 2008) and ensuring senior-level decisions can be made. Having at least one senior administrator on the educational side highly involved indicates how much of a priority e-learning is (Bullen, n.d.). If decisions are left to non-academic areas, or there are no decision-makers involved, the plan will struggle to take hold from the beginning.

Analysis and Discussion

NorQuest College has recently undergone shifts in the structure and roles of the E&IT department, including moving a Technology Steering Committee into the college’s overall reporting structure. However, this committee, and its subcommittees, report to the Operations Committee, which then reports to the Executive Committee. This structure means that a) there are no decision makers directly involved, and b) the decision makers eventually involved are not on the academic side of the college c) the value of e-learning is minimally promoted. Because of these factors, systemic training for educators is not a priority beyond college-wide rollouts such as basic Moodle training. In order for e-learning to take hold, a couple of changes can be made here. First, the Technology Committee should report directly to executive, preferably VP Teaching and Learning. Second, the value of e-learning must be disseminated to faculty and staff and supported through a variety of professional development opportunities at various levels.

The second and third questions asked are:

Does the institution have an advanced, comprehensive technology infrastructure that enables all staff, students, and faculty to access computers, networks, software and services as required?

Has the institution digitalized its administrative systems, and can staff, students, and faculty access administrative information and services easily over the Web?

Rationale

The technological infrastructure and human support capital of an institution needs to be congruent with implementation goals. This includes both on-site capabilities, but also the ability to support learners at a distance (Bullen, n.d.). In order to bring infrastructure to an effective point, and to ensure capacities grow sustainably, an organization might need to invest in this area at the outset (Bates & Sangrà, 2011, p.105). This takes two forms; first, infrastructure access and support, and second, digitized processes. In digitizing administrative processes, the principle of distributed cognition (Jenkins, 2009) is recognized and low-level tasks are handled by technology, increasing efficiency and freeing up human resources for higher-level initiatives and tasks.

Analysis and Discussion

NorQuest is currently a part of Alberta's fiber optics SuperNet, with plans to move to its own fiber optic network with the construction of a new building (in progress) and the retrofit of the existing main campus. This demonstrates capacity to grow. Wifi access is mostly reliable, with slower running times when the network is highly used. This too is supposed to improve with the construction and retrofit. Accessing the college's network (faculty and staff), externally, is cumbersome and slow. Cloud-based systems are not used due to privacy and security concerns.

Many processes for faculty and staff are digitized, though not necessarily efficiently. Student attendance, assignment creation and tracking, and student contact information are all available through PeopleSoft, but the process to access each is not intuitive or efficient. Simple changes, such as attaching attendance rosters to gradebooks, importing student email addresses to Outlook, and allowing a "tab" function while entering grades will improve the experience for faculty as well as increasing their efficiency. Employee access to personal information, vacation and attendance tracking, and compensation information is easy and accessible.

The majority of student services, registration, financial assistance, course and program changes, are not digitized and require human resources personnel to complete. In addition, the software used for these functions is not live; it updates only once per day. There is also duplication of services (students must see a navigator, then an advisor, before being able to change courses and then the desired class may actually be full, as the registration system may not be up to date). Services are also duplicated in communicating access information to students, for email, student portals, Moodle, and the network (all of which are different). Students receive this information three-fold; in person, by mail, and by email.

Streamlining efficiencies in these areas will not only improve the student experience, but also reduce costs through eliminating duplicated services.

For all aforementioned services and functions, increased, multimodal, outside-of-office-hours support needs to be enhanced. This might include in-person, phone, live chat, or efficient email responses.

Fourth:

Has the institution identified a clear, strategic rationale for the use of technology within the institution?

Rationale

A well- prepared and thought out strategic e-learning plan is a necessity for rolling out any large-scale initiative. In this dynamic landscape, there are no set standards as to what this plan should look like. This lack of guidelines and standards mean that these plans might look drastically different from one institution to another. Bullen (2015) and Strong (2007) each address this issue by providing direction and guidance as per the development of a strategic technology plan. While each takes a different approach, they share many core elements; such as the needs for a determined vision and mission, to know what is already being done, for measurable priority or goal setting, to address funding sources, and to ensure faculty is involved and supported. The presence and use of a strong e-learning strategy, with clear direction, achievable goals, and accountability is necessary to help move an institution from early stages of technology adoption, where individuals and smaller groups are utilizing and innovating with technology, towards more advanced stages, where the institution as a whole begins integrating technology, setting expectations, and addressing sustainability issues (Bullen, 2015).

Analysis and Discussion

NorQuest has a Technology Strategy (2016), though it is not easily accessible nor widely proliferated. It includes elements such as an environmental scan, analysis of academic, business, and institutional capabilities, projections for future spending and role shifts, timelines, as well as a plethora of background and supporting research. What it does lack, however, are actionable goals, strategies, and measures of success. As this document is primarily positioned from a business/ project management perspective, much is missing from a teaching and learning viewpoint. This document needs to be appended with a vision and mission, supported by actionable strategies targeted for diverse areas across the college, including teaching and learning; from the executive to individual employee levels. It needs to be championed far and wide, both inside and outside the institution!

Fifth:

Has the institution identified additional financial resources or reallocated resources to support the integration of technology within the institution?

Rationale

The misconception that e-learning is a cheap and easy option that will bring revenue to an institution, with little investment, is a detriment to its successful implementation. Costs need to be realistically examined; including, start-up and infrastructure costs, development, training, maintenance, and sustainability (Bates, 2001). In order to demonstrate these costs are accounted for, choices will have to be made in the allocation of funds and in the funding model that will be used to support and sustain e-learning; such as base, revenue-generating, grant, or combined funding models (Bullen, n.d.). Taking a realistic view of the costs and benefits of e-learning, and taking steps to fund from core budgets, shows support for e-learning. Having sustainable funding helps to ensure class sizes, learning experiences, training opportunities and workloads remain stable, or improve (Bates & Sangrà, 2011)

Analysis and Discussion

E-learning projects and initiatives, aside from large scale rollouts of PeopleSoft and Moodle, are primarily funded by “pockets” of money or grants. These initiatives tend to dissolve following the lapse of funding; taking with them the expertise and effort invested in them. E&IT currently operates as a cost centre, meaning their role is simple to stay within an allotted budget, leaving no room for innovation. According to the Technology Strategy (2016), over the next three years, E&IT is to shift towards becoming an innovation centre. It includes projections of shifting expenditures, as well as targets for the future, but does not explicitly state how these changes will be achieved. NorQuest will benefit from a) creating incentives for innovators from the core budget, and b) explicitly outlining actionable steps to move E&IT from cost to innovation centre.

Sixth and seventh:

What proportion of staff, students, and faculty are using technology and for which activities?

How innovative is the use of technology, particularly for teaching?

Rationale

Identifying who is using which technologies and for which purposes will help an institution to determine the stage of implementation they are at before beginning with a strategy. This will help the institution

to see what is already being done, what is being duplicated, and what is unnecessary. This information can help guide the e-learning strategy in supporting technologies that are already strong, pruning away those that are not utilized, and identifying areas for growth. This scan can also identify human assets; the lone rangers can lead innovation and help to move the implementation curve along (Zemsky & Massy, 2004). Utilizing the SAMR model (Puentedura, 2013) as part of this analysis can also provide insight into the innovation levels of current activity. The SAMR model can also help faculty reflect on their own technology uses. Quality and purposeful use of technology will transform the teaching and learning experience for learners and teachers.

This question has been included as an additional checklist as the information is difficult to attain and will likely require a research initiative. That is not to say this information is not critical, it is, but one will not likely be able to ascertain this information simply through an environmental scan.

Analysis and Discussion

This is an area where NorQuest has very little data available. In my preliminary probing, looking to explore what technology is being used and how, I was told “Unfortunately, in order to use any existing College data of this sort for research, you would require a research ethics board approval. It would be considered a secondary use of personal data and you would need to apply for access as an external (graduate) researcher (by making arrangements through Research, as well as Data, Reporting, and Analytics once ethics is approved).” (Boucher, 2017). However, E&IT has compiled a list of all technology currently being used. Here, a large-scale study needs to be initiated, building off existing data, to explore what is being used, where (by who), and how. Levels of innovation can be evaluated through the “how” aspect; further quantifying and qualifying usage through a framework such as Puentedura’s SAMR Model (2013).

Eighth:

What level of support and training is given to instructors to ensure good-quality teaching when using technology?

Rationale

Educators are expected to be “in the know” regarding technology use and the pedagogy behind it. However, the reality is that many educators are ill equipped to shift from teaching for a factory economy to a knowledge based one, to handle larger and more diverse cohorts, or to deal with varied delivery formats (Bates, 2015). Training and professional development in educational technology and

pedagogy need to be offered in a number of ways; a combination of systemic training, ad-hoc offerings, and individual-sought opportunities will best support all faculty and staff in the transition to an e-learning environment (Bates & Sangrà, 2011; Hartman, Dziuban, & Brophy-Ellison, 2007). Support also needs to be available for those implementing in terms of technology issues, instructional design, and pedagogy; and in formats which can deal with immediate concerns, but also to support innovation and risk-taking for those working at advanced levels; including access to experts in media development, instructional design, programing (Hartman, Dziuban, & Brophy-Ellison, 2007). As more technology is adopted in the post-secondary sector, more cross-disciplinary experts will be needed. In order to have a pool to draw from, we need the educational opportunities to begin transitioning “innovators” into “experts” (Bates & Sangrà, 2011). Approaching training, development and innovation in tiers will also serve to advance the curve of technology integration more quickly by supporting educators where they are at (Hartman, Dziuban, & Brophy-Ellison, 2007).

Analysis and Discussion

NorQuest offers systemic training for college-wide technology initiatives such as PeopleSoft, Halogen, and Moodle. The requirements for attending such training is mandated by individual departments and areas. These trainings are on basic functionality and features of the systems. This training tends to support more the administrative side than the academic side. Technology and e-learning professional development needs to be expanded especially to address pedagogy, instructional design, and encourage collaboration and colleague-to-colleague support. Currently, training initiatives are offered through the College Teaching and Learning Development (CTLD) department. On-demand support is available, though this is mostly immediate support needed for Moodle. In order to increase efficiencies, Moodle support should be shifted to E&IT (service desk), allowing CTLD to offer more valuable training opportunities. It is also of utmost importance that faculty and staff in CLTD are well-versed and educated in educational technologies and champion their use.

Ninth:

Are students learning better and getting better services as a result of technology integration?

Rationale

Students need to develop a host of 21st century skills that are new to a knowledge-based economy. According to Jenkins (2009), these skills include high-level cognitive abilities such as synthesizing information, thinking critically, working collaboratively, taking perspectives, considering context, and seeing connection. Unfortunately, when it comes to technology and students, there is often an

erroneous assumption that a) they will automatically see the benefit of e-learning, and b) that they are digital natives and, thus, already using technology proficiently (Zemsky & Massy, 2004). In fact, learners need instruction and time to learn the technology, and to understand its benefits; to know what, why, and how they are learning.

Analysis and Discussion

Each year, students complete a satisfaction survey comprised of Likert and Likert-type questions. These questions are broad and primarily focus on student satisfaction and experience in various areas. For example, “Instructors helped me to learn in ways that fit my learning style”, “The wireless internet access on campus”, and “I get the service I need quickly” (Norquest College, 2017). While this is a start, more specific and pointed information needs to be gleaned. Supplementary questions on the survey would be the most effective way to gauge whether technology is enhancing student learning and services.

Conclusion

Overall, NorQuest shows that it is taking steps towards e-learning readiness, but still has room to grow before it will be able to successfully go this route. Assuming each of Bates & Sangrà’s (2011) criteria should be equally weighted, numbers six and seven excluded, here is the breakdown:

Criteria	Score	Percentage
1 (Champions for technology)	2/9	22%
2 (Infrastructure)	10/15	67%
3 (Digitized processes)	28/45	62%
4 (Strategic rationale)	4/9	44%
5 (Funding)	5/12	42%
8 (Faculty support)	6/12	50%
9 (Improved learner experience)	0/3	0%
Overall	55/105	52%

To best move towards e-learning readiness, a three-pronged strategy can be employed.

Prong one; leverage areas of strength, infrastructure and digitizing processes. As infrastructure improvements and expansions are already underway, a focus on digitizing processes to improve user experiences and eliminate duplicated services is the next step. This process will not only increase efficiency, but also allow for the reallocation of funds for sustainable investment in educational technology, thus connecting to prong three.

Prong two; take steps to determine current learner experiences and faculty technology use and innovation. Each of these areas will require full-scale research projects to collect and analyze the requisite data. This should begin quickly, as this will be a time consuming process and results garnered here will be informative to future direction of technology/ e-learning integration.

Prong three; modify the technology strategy and determine a funding model. Having the above information will provide direction for the technology strategy and the best-fit funding model. The addition of concrete and achievable outcomes is also necessary in both areas.

Prong four; establish an organizational structure which allows champions for technology to also be high-level decision makers. Add educational technology, technology integration, or e-learning to the portfolio of the VP Teaching and Learning. Converting the Educational Technology Subcommittee to a committee, which reports directly to executive, or at least having the Technology Steering Committee reporting directly to executive will ensure timely and impactful decisions can be made and followed through on.

NorQuest College intends to position itself as an innovator in educational technology. It has begun its journey in this direction. With these recommendations, continued planning and execution of those plans, it very well could achieve that status.

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Appendix 1:

Post-Secondary E-Learning Readiness Audit Tool: NorQuest College

Category/ Criteria	Scoring Information (choose one)	Comments (What do you see, or not see, currently?)	What (if anything) needs to be done to meet the criteria?
<p>1. Are there “champions” with power and influence in the institution who recognize the importance of technology for conducting the business of the institution? (particularly senior administration) (Bates & Sangrà, 2011)</p>			
<p>Who is responsible for e-learning initiatives?</p> <p>What is the role and responsibility level of this person?</p> <p>Does this person/ people have decision-making authority?</p>	<p>0- No person/ people has e-learning as a stated responsibility</p> <p>1- One person has e-learning as a small portion of responsibilities. This person is at the middle management level and does not have decision-making authority OR Multiple people share responsibilities, but no direct decision makers are involved</p> <p>2- 2+ people share the responsibility for e-learning initiatives. At least one person reports to executive directly, or no</p>	<p>The E&IT department at NorQuest College has undergone significant changes in the past year and a half; namely, the “E” for education was added into the title.</p> <p>Reporting structure has shifted so that an educational technology subcommittee is now included in the reporting structure, which is an improvement, but it is still 3 steps removed from executive.</p> <p>Ultimately, this area of the college falls under Operations.</p>	<p>Responsibility at the executive level needs to shift to the academic side.</p> <p>Reporting needs to be directly to executive.</p>

	<p>more than one step removed</p> <p>3- One or more people at the executive level hold responsibility for e-learning initiatives. This person has decision making authority</p>		
How are these initiatives proliferated and supported?	<p>0- Initiatives are not proliferated/ supported</p> <p>1- Individual faculty and staff attempt to proliferate and support within their own departments OR Initiatives are pushed by E&IT</p> <p>2- Department heads proliferate and support within their own areas</p> <p>3- Executive proliferates and supports.</p>	<p>Initiatives mostly undertaken by individual faculty or larger-scale implementation mandated by departments or college wide. For example, the Faculty of Foundational and Intercultural Studies boasts a high level of Moodle use, but this may end at the existence of a Moodle course page.</p>	<p>Systemic, as well as chosen, training for faculty and staff on educational technology. Consider incentives program for innovative use of technology.</p>
Does the entire executive team support these initiatives?	<p>0- No, none do</p> <p>1- Yes, few do</p> <p>2- Yes, most do</p> <p>3- Yes, all do</p>	<p>No executive members clearly promote the value and importance of educational technology.</p>	<p>Responsibility should lie with the VP Teaching and Learning. An incentive structure could be developed.</p> <p>All members of executive need to champion to each other first, and then spread from there to present a cohesive front.</p>
Totals:	2/9		
2. Does the institution have an advanced,			

<p>comprehensive technology infrastructure that enables all staff, students, and faculty to access computers, networks, software and services as required?</p>			
<p>What type of internet infrastructure is present?</p>	<p>0- No internet infrastructure. 1- Basic internet infrastructure (not broadband) 2- Intermediate internet infrastructure (broadband + Wi-Fi) 3- Advanced internet infrastructure (Fiber optics)</p>	<p>The college is currently part of Alberta SuperNet with plans to move towards its own fiber optics network. A new building is in progress and the current one will be retrofit with higher-capacity and performance infrastructure.</p>	
<p>Is internet access and speed reliable?</p>	<p>0- Not at all 1- Some of the time 2- Most of the time 3- All the time</p>	<p>Wired computers are always reliable. Wifi connections can be unreliable depending on the time of day and the number of people attempting to access.</p>	<p>Wifi access capacity needs to be increased to meet future demand.</p>
<p>Can faculty, staff, and students access necessary institutional servers remotely?</p>	<p>0- Not at all 1- Some of the time 2- Most of the time 3- All the time</p>	<p>Services such as student and faculty portals and email are always accessible.</p> <p>Access to internal networks/ drives, from outside the college, are slow and buggy at best.</p>	<p>A more direct system is needed for accessing shared drives externally.</p>
<p>Does the institution utilize cloud-based services?</p>	<p>0- Not at all 1- Some of the time 2- Most of the time 3- All the time</p>	<p>Individual staff and faculty may do so.</p> <p>Privacy and security services are not adequate to support the use of web-based storage (of any sort of</p>	<p>Increased privacy and security to support cloud-based services.</p> <p>Options for appropriate services need to be explored.</p>

		“sensitive” information) at this time.	
How are faculty, staff, and students supported in the use and access of institutional servers and services?	<p>0- Not at all</p> <p>1- Basic in-person or over the phone support during typical office hours. Slow response times.</p> <p>2- Moderate in-person and online support during typical office hours. Acceptable response times</p> <p>3- Advanced in-person, and online support available during hours in and out of 9am-5pm. Excellent response times</p>	<p>During daytime-hours, support is available in person or via email for general concerns (password resets, in-classroom technology concerns, etc.).</p> <p>Students may also access in-person, over-the-phone, or by-email assistance through Computer Commons (Mostly for access issues).</p> <p>The library website offers a live chat option during office hours.</p> <p>Response times are generally good.</p>	<p>Support hours need to be extended beyond typical office hours.</p> <p>A live-chat option needs to be added to student and faculty portals.</p>
Totals:	10/15		
3. Has the institution digitalized its administrative systems, and can staff, students, and faculty access administrative information and services easily over the Web?			
<i>For Students:</i>			
Can registration be completed digitally?	<p>0- Not at all</p> <p>1- Some elements</p> <p>2- Most elements</p> <p>3- All elements</p>	<p>Student registration processes are completed in-person. Information can be attained over the phone and email, but</p>	<p>Registration processes need to be digitized.</p> <p>Allow supporting documents to be</p>

		<p>processes are still completed manually.</p> <p>Students entering in foundational programs are also required to meet a navigator to chart an educational plan and assess student-readiness in person.</p> <p>The exception being students registering for e-campus courses. Here, any person may register for any course.</p>	<p>uploaded by students.</p> <p>Online student-readiness tools need to be deployed for all learners.</p>
Can financial assistance, awards, and bursaries be applied for digitally?	<p>0- Not at all</p> <p>1- Some elements</p> <p>2- Most elements</p> <p>3- All elements</p>	Forms can be printed attained online, but still has a large in-person or manual role. For example, a general form must be printed and signed, supporting documents attached, and the entire application returned in-person, by mail, or scanned and returned via email.	<p>Applications need to be digitized and consolidated.</p> <p>The option to upload supporting documents needs to be available.</p>
How is information, such as email, student portal, LMS, and network access, delivered to students?	<p>0- In person</p> <p>1- Via mail</p> <p>2- Via email</p> <p>3- A combination of the above</p>	Students receive pertinent information in-person, via email, and via mail. Confusingly, the access point and user ID/ password combinations for the student portal, LMS, network, and email systems are all different.	A single access-point service centre for students should be implemented. At the time of registration, students create an account which is then the access point for all services. This will decrease the duplication of services, and free up support services from spending much time navigating login issues for multiple points of access.

<p>Can students access student portals easily and intuitively?</p>	<p>0- Not at all 1- Some elements 2- Most elements 3- All elements</p>	<p>Assuming students have a handle on all required access-points and user name/ password combinations, access is easy.</p> <p>Navigation of the student portal is quite complex. Students often need support in navigating the system.</p>	<p>The student portal interface needs to be improved for easy navigation.</p> <p>Students need training in navigating the portal.</p>
<p>Can schedule, course, and program changes be completed digitally? Is support available for these processes?</p>	<p>0- Not at all 1- Some elements 2- Most elements 3- All elements</p>	<p>Students must see an advisor, and/ or a navigator for schedule or registration changes. This process involves a substantial amount of back-and-forth, as navigators and advisors fulfill different, though overlapping, roles.</p> <p>The registration system currently in use does not live-update. Rather, it updates only once a day. This makes it nearly impossible to know what the enrollment of a course is at any given point.</p>	<p>Students need to be able to handle basic course and program changes through a student portal.</p> <p>Enrollment tracking needs to live-update.</p> <p>Advisor and navigator roles need to be clearly delineated to avoid duplications in services.</p>
<i>For Faculty and Staff</i>			
<p>Is student information (emails, phone numbers) easily accessible?</p>	<p>0- Not at all 1- Some information is available 2- Most information is available 3- All information is available</p>	<p>Faculty and Staff can access student information through PeopleSoft. However, the ability to notify students directly through the system (tied to organizational emails) works sporadically.</p>	<p>Direct importing of class emails into the email system would improve the process.</p> <p>Improve the reliability of messaging through PeopleSoft directly.</p>

		Student emails must be copied and pasted into an email account for reliable messaging.	
Are digital class rosters consistently accurate?	<ul style="list-style-type: none"> 0- Not at all 1- Some of the time 2- Most of the time 3- All the time 	At the beginning of a term, it can take up to four weeks for class rosters to be fully accurate. This comes from the fact that administration must manually handle changes to enrollment; the process is time consuming and complex.	Allowing students to manage their own enrollment, on a live system, will remove this duty from administration, increasing efficiency and student autonomy.
Are attendance recording procedures transparent and intuitive?	<ul style="list-style-type: none"> 0- Not at all 1- Some elements 2- Most elements 3- All elements 	To set up an attendance roster, faculty must manually search, save, and name each course they are teaching. Each day presents as its own roster. Different sections of the same course (I.E. online, face-to-face, and distance in one class) present as separate rosters— one might have to navigate 2+ rosters for one class.	<p>Rosters need to be attached to the gradebook, generated and connected automatically.</p> <p>One course needs to have one roster, despite course composition.</p> <p>Display options for attendance rosters should allow for preferential options.</p>
Is assignment creation, entry, and tracking transparent and intuitive?	<ul style="list-style-type: none"> 0- Not at all 1- Some elements 2- Most elements 3- All elements 	Assignment creation is straight forward. Weighting is completed by administration.	
Is grade calculation, including weighting and categories, easily done?	<ul style="list-style-type: none"> 0- Not at all 1- Some elements 2- Most elements 3- All elements 	Yes, except for weighting being set by administration.	Improve system for weighting.
Is the employee's own personal information available and modifiable digitally?	<ul style="list-style-type: none"> 0- No, not at all 1- Some information is available 2- Most information is available 		

	3- All information is available		
Is employee absence reporting and tracking done digitally?	0- Not at all 1- Reporting is manual, tracking is digital 2- Yes, but process is duplicated (done manually and electronically) 3- Yes, completely		
Can personal employee compensation information be accessed digitally?	0- Not at all 1- Some elements 2- Most elements 3- All elements		
Are vacation calculations/ requests/ tracking done digitally?	0- Not at all 1- Some elements 2- Most elements 3- All elements		
Can employee benefits be viewed digitally?	0- Not at all 1- Some elements 2- Most elements 3- All elements		
Totals:	28/45		
4. Has the institution identified a clear, strategic rationale for the use of technology within the institution?			
Does the institution's overall strategic plan speak to e-learning?	0- Not at all 1- Yes, e-learning and/ or technology are mentioned minimally or in passing 2- Yes, e-learning and/ or technology are integrated into one strategic priority 3- Yes, e-learning and/ or technology are central to at least one strategic priority, or integrated into	Technology is mentioned as something that faculty do or offer to students.	A commitment to technology needs to be made.

	more than one strategic priority		
Does the institution have a dedicated e-learning strategic plan?	<ul style="list-style-type: none"> 0- Not at all 1- Yes, under development 2- Yes, it exists, but is not widely shared or acted upon 3- Yes, it is an active and referred-to document 	NorQuest has a technology strategy. It is not widely shared or easily accessible.	<p>Communicate the strategy from executive level.</p> <p>Make it easily accessible.</p>
Are e-learning goals and strategies SMART (specific, measurable, attainable, relevant, and time bound)?	<ul style="list-style-type: none"> 0- Not at all 1- Some goals and strategies are SMART 2- Most goals and strategies are SMART 3- All goals and strategies are SMART 	<p>The technology plan is mostly from a project-management, managerial perspective. Goals and timelines are presented as “projects” and related mostly to shifting the role of E&IT, infrastructure, safety and security, funding, and analytics.</p> <p>No direct objectives, goals, or strategies are presented.</p>	<p>Create a supplementary document or separate strategy specifically for the roll out of e-learning.</p> <p>Create a vision and mission unique to e-learning, supportive of, but distinct from, institutional goals.</p> <p>Include SMART goals for the levels of executive, departments, and faculty.</p>
Totals:	4/9		
5. Has the institution identified additional financial resources or reallocated resources to support the integration of technology within the institution?			
How are e-learning initiatives currently funded?	<ul style="list-style-type: none"> 0- Not at all 1- Based on one-time, project-based, or grant-like funding 2- Pulled from operations or 	E&IT is currently a cost centre, meaning there is no funding for innovation. However, the technology plan addresses this and	Create measureable, actionable steps to accomplish the move from cost centre to innovator.

	<p>department budgets (shifting funds)</p> <p>3- Funded from institution's core budget</p>	<p>intends to shift from cost centre to innovation centre over the next three years. But how?</p>	
<p>How have e-learning initiatives been funded in the past?</p>	<p>0- Not at all or unknown</p> <p>1- Based on one-time, project-based, or grant-like funding</p> <p>2- Pulled from operations or department budgets (shifting funds)</p> <p>3- Funded from institution's core budget</p>	<p>Except for college-wide rollouts of technology like SmartBoards and Moodle, pockets of funding tend to support projects, which then dissolve with the funding.</p>	<p>Improve efficiencies through reducing duplicated services and utilizing digitized systems to shift funds to e-learning innovations.</p> <p>Include e-learning and technology initiatives in the college's core budget.</p>
<p>How are costs, including overheads, tracked?</p>	<p>0- They are not tracked</p> <p>1- No formal tracking, only assumptions</p> <p>2- Rolled into the existing costing structure</p> <p>3- Separate, activity-based tracking</p>	<p>As far as I can tell, e-learning and technology costs are tracked in the same ways as any other teaching/ learning activity.</p>	<p>Move to activity-based tracking model.</p> <p>Examine actual overhead costs.</p>
<p>Is funding sustainable over time?</p>	<p>0- Not at all</p> <p>1- Some elements</p> <p>2- Most elements</p> <p>3- All elements</p>	<p>With E&IT as a cost centre, and initiatives mostly funded by pockets of money, no. However, the shift in function and responsibilities as proposed by the technology strategy move in the right direction.</p>	<p>See above three comments.</p>
<p>Totals:</p>	<p>5/12</p>		
<p>8. What level of support and training is given to instructors to ensure good-quality teaching when using technology?</p>			

Are instructors systemically trained in technology implementation?	<ul style="list-style-type: none"> 0- Not at all 1- Only those who actively seek the training 2- Yes, in some departments 3- Yes, across the institution 	Some departments require systemic training in Moodle use and functionality.	<p>Add additional technology/ e-learning topics.</p> <p>Expand Moodle training to include pedagogy and educational design principles.</p>
Are optional technology-based professional development opportunities available to those interested?	<ul style="list-style-type: none"> 0- Not at all 1- Few opportunities 2- Some opportunities 3- Many opportunities 	Moodle, Halogen, PeopleSoft, and SmartBoard training is offered in-house.	Expand offerings to include educational technologies other than the large institution-wide initiatives of the college.
Is personal support available to support technical implementation in the classroom?	<ul style="list-style-type: none"> 0- Not at all 1- Basic in-person or over the phone support. Slow response times. 2- Moderate in-person and online support. Acceptable response times 3- Advanced in-person, and online support available. Excellent response times 	<p>At the main campus, classroom support for technological issues is good; in person and via email.</p> <p>Distance campuses are not as good, especially if a visit from E&IT is necessary.</p>	E&IT personnel at regional campuses.
<p>Is support available to support pedagogical implantation of technology in the classroom?</p> <p>Is support available in a timely fashion?</p>	<ul style="list-style-type: none"> 0- Not at all 1- Basic support available. Slow response times 2- Moderate support available. Acceptable response times 3- Advanced support available. Excellent response times 	College Teaching and Learning Development supports this area. Mostly, they “put out Moodle fires”, leaving little time to support innovators.	<p>Shift Moodle support to E&IT.</p> <p>Use faculty development for higher-level, innovative implementation support.</p>
Totals:	6/12		
9. Are students learning better and getting better services as a result of			

technology integration?			
Is there information available on this?	<p>0- None</p> <p>1- Incomplete data on administrative services on the number of students served. Basic data regarding student retention, success, etc.</p> <p>No qualitative or qualifying student data</p> <p>2- Complete data on administrative services comparing pre-digitization to post-digitization of services on the number of students served.</p> <p>Student experience data available for administrative services OR learning quality.</p> <p>3- Complete data on administrative services comparing pre-digitization to post-digitization of services on the number of students served.</p> <p>Student experience data available for administrative services AND learning quality.</p>	<p>Students complete a Student Satisfaction survey each spring, but it mostly probes general awareness of areas of the college and services offered, satisfaction with service times of different areas and usability of platforms such as Moodle and MyQuest (student portal).</p> <p>Retention and progression data should be available via PeopleSoft.</p>	<p>Conduct study directly on administrative processes and services.</p> <p>Conduct study on how technology is used in the classroom, and experiences with it.</p> <p>Pull, aggregate, and analyze student retention and success data.</p>

Totals:	0/3		
Grand Totals:	55/105		

Current technology use and level of innovation:

NorQuest currently has a compiled list of all technologies being used, as garnered via survey. This information, however, lacks quantifiable data regarding rates of usage, nor does it offer how or why each technology is used.

Technology <i>(This information should be available prior to launching large-scale or transformative e-learning implementation.)</i>	Proportion of Use (%) 0- <25% 1- <50% 2- <75% 3- <100%	Level of Integration (SAMR) <i>Substitution (1)</i> <i>Augmentation (2)</i> <i>Modification (3)</i> <i>Redefinition (4)</i> (Puentedura, 2013)	Comments	What needs to be done to meet the criteria?
6. What proportion of staff, students, and faculty are using technology and for which activities?		7. How innovative is the use of technology, particularly for teaching?		
Desktop computers (i.e. computer labs)				
Classroom computers (i.e. laptops)				
Classroom iPads/ tablets (i.e. class sets)				
Bring your own device (i.e. students supply own computers, tablets, etc., what are used in class time)				
Email (see below)				
<ul style="list-style-type: none"> Teacher-student 				
<ul style="list-style-type: none"> Student-student 				
<ul style="list-style-type: none"> Teacher-teacher 				
Learning Management Systems (i.e. Moodle, Blackboard, etc.) (see below)				
<ul style="list-style-type: none"> For content storage (i.e. class notes, assignments, etc. available on LMS) 				

<ul style="list-style-type: none"> • For synchronous delivery (i.e. live online courses) 				
<ul style="list-style-type: none"> • For asynchronous delivery of previously live content (i.e. class recording links, etc.) 				
<ul style="list-style-type: none"> • For blended/ hybrid delivery (i.e. some components completed online, others in face-to-face class) 				
<ul style="list-style-type: none"> • For true asynchronous delivery (i.e. all content, delivery, and course work completed asynchronously online) 				
<ul style="list-style-type: none"> • For student-student interaction (i.e. discussions, group work, etc.) 				
<ul style="list-style-type: none"> • For teacher-student interaction (i.e. discussions, q&a forums, feedback, etc.) 				
<ul style="list-style-type: none"> • For computer- assessed work (i.e. multiple choice quizzes, etc.) 				
<ul style="list-style-type: none"> • For manually- assessed work (i.e. assignment submission, etc.) 				
Presentation tools (i.e. PowerPoint, Prezi, etc.) (see below)				
<ul style="list-style-type: none"> • For content presentation (i.e. theory and notes) 				
<ul style="list-style-type: none"> • For student use (i.e. student presentations) 				
Blogs				
Wikis				
Online discussion forums				
Video				
Audio				
Social Networks (i.e. Facebook, Pinterest, Twitter, Google+, etc.)				
Microsoft Office (i.e. Word, Excel, etc.)				
Search engines (i.e. Google, Bing, etc.)				
Simulation software/ apps (i.e. chemistry labs online, etc.)				
“Educational” apps (i.e. Kahoot, Quizlet, etc.)				

Open source texts (i.e. https://open.umn.edu/opentextbooks/ , etc.)				
Gaming/ gamification (i.e. Civic Mirror, badges for progress)				
Communication software/ apps (Skype, Google Hangouts, etc)				
Collaborative group work (i.e. Google Docs, OneDrive, etc.)				
Media production (i.e. multimedia assignments, possibly published online—websites or Youtube)				
Other (please specify)				