The message is in the choice of medium: Building OER strategy that reflects institutional values.

Introduction

Despite growing public enthusiasm supporting open initiatives, post-secondary institutions have been slow to actualize open education approaches in policy and practice (D’Antoni, Hylen & van Damme, 2012; Dhanarajan & Abeywardena, 2013; McGreal, Anderson & Conrad, 2015). Although 85% of Canadian post-secondary institutions offer some form of online education, only 35% report using any form of OER (Bates et al., 2017). There are three significant national open initiatives in Canada: Creative Commons Canada, the Council of Ministers of Education (CMEC) and the Tri-agency Open Access Policy, which offer some guidance for institutions on a national level. At the provincial level we see some powerful collaborations, such as BCcampus and Contact North (Ontario), which facilitate the sharing and development of Open pathways or credentialing (BCcampus, 2014; McGreal, Mackintosh & Taylor, 2013); however, support is limited by provincial boundaries. Within provincial jurisdictions there are also no guarantees of long term support. Alberta has recently seen the closing of eCampus Alberta, which was a time limited provincially funded model that advocated for OER, and in Ontario, the provincial announcement of “Ontario Online” in 2015 did not include funding for open education. At an institutional level we see leaders in open education, universities with a longstanding tradition of open learning, including Athabasca University and Thompson Rivers University in Alberta and British Columbia respectively, and the Teleuniversité du Québec (Bates et al., 2017). However, for small institutions, usually in the position where every student counts financially, developing a strategy for open education can be particularly challenging if
they are not in one of the provincial jurisdictions with a collaborative strategy for OER development and support.

In this paper we explore the question of how to implement open at a small institution and we propose that the answer must start with an institutional examination of values. Before engaging in open education, an institution needs to understand what it views as beneficial educationally rather than financially; in other words, it needs to examine its own context and values. In this paper we will examine the approaches of two small Canadian educational institutions, a college and a university, and how their respective values have guided the adoption and development of OER and open educational practices. This paper will share examples of two institutional OER approaches which are the result of iterative cycles of development towards an informed strategy based on educational aims. The first from a vocational college and the second from a predominantly teaching undergraduate university.

**Post Secondary Educational Reform**

Historically, much of post-secondary educational research has focused on examining teaching and learning in the classroom; however, we have seen a shift in research to address institutional policy and its impact on learners (Willcox, Sarma & Lippell, 2016). For example, the result of the 2011 Collaboration for Online Education Research (COHERE) examination of the intersection of technology and post-secondary reform in Canada demonstrated that technology has the potential to facilitate post-secondary reform, but there are no clear institutional policies or linkages to strategic directions and goals (Matheos & Cleveland-Innes, 2018). Since these 2011 results, there is a growing body of evidence both nationally and internationally that speak to the importance of blended learning, in particular, to
support educational reform (Allen & Seaman, 2016; Matheos & Cleveland-Innes, 2018). The higher education agenda has been a topic of discussion for the last two decades with a growing pressure to change now rather than later. A pan-Canadian approach to post-secondary reform has not been possible to date due at least in part to the jurisdictional (provincial) separation of educational authorities. However, from current literature an emerging list of fundamental components of post-secondary educational reform have been identified: accessibility, flexibility, performance, graduation pathways, cost/benefit outcomes for students, relevance, curriculum, lifelong learning (Matheos & Cleveland-Innes, 2018; Wilcox, et al., 2016). In discussing Higher education reform as facilitated by technology, Wilcox et al. (2016) caution that efforts will not be realized without the development of a strategic plan and supporting policies and practices to ensure its implementation.

**Open Technology Innovation and Disruption**

Recognizing the need for a strategic policy with regard to any technological innovation at the post-secondary level is critical. Open technologies have been heralded as critical disruptors of the way in which post-secondary institutions conduct business, particularly with respect to Massive Open Online Courses (MOOCS) (Siemens, 2013; Skiba, 2012; Yuan & Powell, 2013). For the purpose of this discussion, however, open technologies will not be limited to MOOCs, but rather the more general definition from McGreal, Anderson and Conrad (2015), which includes the provision for activities, educators and programs to support the development of both OER products, freely available courses, and materials, including MOOCs. The term disruption has its origins with the economic theory of Karl Marx, according to which development occurs as a result of the creative destruction of previous systems. When applied to modern technology, Clayton
Christianson is often cited in the context of the “innovators dilemma,” in which the technology prepares a new market and new values that overtake older paradigms. We see this occurring with open technologies, which provide the opportunity for almost unlimited replication of educational offerings over scales of participation that were previously impossible without the construction of coliseums. As post-secondary institutions seek to understand how open technologies impact how they do business, they feel the same pressures that must have been experienced by Kodak and the print/film industry with the advent of digital cameras and cell phones: adapt or become extinct. But the way forward is unclear. By now we are all familiar with the xMOOC and cMOOCs debate with regard to format and strategy for open technology adoption (Siemens, 2013). And building on this more recent literature in Canada has suggested that institutions think about Open Educational Practices, rather than product development in an open architecture that combines both open resources and open pedagogies to transform learning (Mamilleri & Ehlers, 2011; Carey, Davis, Ferreras & Porter, 2015). With so many mixes messages, it can be difficult for policy makers to determine the way forward within a small institution with limited resources. Current literature has suggested that institutional policy is key in enabling faculty to consider OER (Cox & Trotter, 2016). That has led to a technological design cycle of investigation, planning, implementing and evaluation to guide their adoption.

**NorQuest Example of Adoption**

One of the fastest growing post-secondary institutions in Canada, NorQuest College has achieved success in serving a diverse and traditionally underserved student population. A majority of students, approximately 55%, are new Canadians who need to update their linguistic and vocational skills to become employable. In addition, there is a growing number of Aboriginal learners, approximately 11%
The values and mission of NorQuest reflect the unique needs of these and other learners, emphasizing diversity and accessibility. For example, the College’s vision is to be a “vibrant, inclusive, and diverse learning environment” that, in accordance with its mission, “inspires lifelong learning and the achievement of career goals by offering relevant and accessible education” (NorQuest College, 2014, p. 20). Related to enabling career success are strategic priorities emphasizing workforce relevant educational programming. Further, NorQuest values include a provision for fostering “creativity, innovation and critical thought” (NorQuest College, p. 16).

Recently, the college has undertaken a strategic plan with ambitious growth targets that focus to a large extent on enabling underserved students and increasing their economic prospects:

According to Statistics Canada, in 2014, over 2.9M individuals in Alberta reported income. Of those, about 1.3M of whom earned less than $35,000. This is about 44% of all who earned income that year. We would only need to reach about 3% of this group to achieve our target number of learners. This leaves us a large pool to draw from even once you account for those that are not interested in furthering their education/income. (NorQuest, 2017, slide 4). These growth targets will help NorQuest further its other strategic priorities, such as creating an enhanced presence in the Alberta post-secondary education landscape and developing a unique market position in the Edmonton region.

OER as a disruptive force

NorQuest College has embraced disruption as a path to enhancing its presence and to achieving its ambitious growth targets. NorQuest College has outlined the importance of this disruptive approach: “We want to be disruptive in our
field - a **disruptive** post-secondary institution is one that pushes boundaries of how we work with learners, the community and employers to help everyone achieve their mutual goals” (NorQuest College, 2017, slide 3). This announcement has encouraged faculty to question what it means to be disruptive? According to Clayton Christensen: “Disruption is a positive force. It is the process by which an innovation transforms a market whose services or products are complicated and expensive into one where simplicity, convenience, accessibility, and affordability characterize the industry” (Christensen, Horn & Johnson, 2008, p. 11). Regarding NorQuest’s values and Clayton Christensen’s definition, with its focus on simplicity, convenience, accessibility and affordability, one can see how OER can become a key component of the College’s disruptive agenda. Christensen points to the outdated business model associated with traditional textbooks, characterizing them as “blockbuster books for large, undifferentiated masses of students” which “by their very nature are fixed and static” (2008, p. 131). OER are the means for NorQuest to realize its institutional values, its desire to become a disruptive educational force in the province, and to meet the needs of its diverse student body. OER can also encourage faculty creativity as they build customized learning resources for NorQuest’s unique student population.

Given the possibility of OER to help NorQuest fulfil its institutional values and goals, Curriculum Development has drafted a plan for OER awareness and adoption. The three phases consist of raising awareness, expanding the use of OERs and finally having them adopted into institutional policies, a process called institutionalization.

**Phase 1: Raise Awareness**
Currently NorQuest is in phase one of its OER adoption strategy, which involves raising awareness about OER amongst faculty and staff members. Essentially, this phase involves offering faculty workshops on OER, and addressing departmental meetings on OER use in college courses. The College has invited renowned OER advocates, such as Rory McGreal, to speak to faculty and developed a comprehensive library guide on OER, which details where to find them and how to cite them. As a part of this awareness campaign, NorQuest has joined a provincial OER community of practice, involving several provincial institutions.

**Phase 2: Expansion**

Having raised awareness, NorQuest is now witnessing the adoption of OER. The College plans to continue with its expansion efforts, reaching out to other provincial and national institutions for ideas and support on OER adoption. One institution NorQuest would like to partner with is Maskwacis Cultural College, a two-year indigenous institution that offers courses in basic literacy and university transfer courses (Khetarpal, 2017). As a centre of “excellence in academics and Cree indigenous knowledge” Maskwacis has a mission to “educate with discipline and compassion” and follows the guiding principle of “preserv[ing] indigenous forms of life and thinking” (M. Khetarpal, personal communication, January 24, 2018). Two years ago, Maskwacis determined that open education could help them meet the needs of their unique learners and help them realize their mission and principles. With a $30,000 grant from the Campus Alberta OER Initiative, Maskwacis has been very active in developing indigenous material to accompany OER textbooks in fields like Sociology, Earth Sciences, Indigenous Human Services and Cree Studies (Khetarpal, 2017, p.1). The money has also been used to hire Student OER navigators who mentor their peers in researching and developing OER resources to
supplement textbooks (Khetarpal, 2017). Open education has been successful at Maskwacis. According to M. Khetarpal, “OE practices allow us to be flexible with designing instructional content, reusable assignments and relevant assessments” (personal communication, January 24, 2018). Not only have OER enabled the College to develop unique learning materials with an indigenous perspective, they have also saved students money.

Students saved $8,000 in the first year of OER textbook adoption and it is hoped these savings will extend to $48,000 in the next three years (Khetarpal, 2017, p.3).

Maskwacis is an inspiring example for NorQuest College and the College hopes to partner with them on the creation and encouragement of OER.

**Phase 3: Institutionalization**

The final phase of NorQuest’s OER plan involves the institutional adoption of an OER strategy, which, as mentioned, would align with the College mission and goals. NorQuest would like to become a provincial leader in OER advocacy; where a significant number of faculty are actively involved in developing and sharing open educational resources. As a part of this institutionalization strategy, NorQuest will continue to expand its ties with other institutions and eventually join the Community College Consortium for OER, which includes 250 colleges in 21 states and provinces in the United States and Canada: https://www.oerconsortium.org/.

*Cape Breton University Approach to Adoption*
Cape Breton University is one of the youngest universities in Canada but has undergone considerable transformation since its foundation in 1951. It started as “little X” a satellite campus of St Francis Xavier University on mainland Nova Scotia. However, due to the demand of Cape Bretoners for their own fully fledged higher education institution, the College Cape Breton was formed in 1974 and renamed in 1982 as the University College of Cape Breton. In 2005, the technical and trades programs were removed and the university was (re)envisioned again to become Cape Breton University (CBU). Given that the institution was founded by public demand, the mission of the university has always been focused on the needs of islanders. A central aspect of CBU’s vision is to be “understood and respected for its uniqueness, sense of purpose, creativity in learning and the capabilities of its learners…: while also “ put[ing] learners first in a community-based educational environment that identifies and celebrates humanistic values while embracing creativity and innovation for the common good” (CBU, 2012). As such, the emerging strategy for open education was based in context, learners and creativity within the limits of available resources.

**Iteration one: Independent instructor interventions**

Beginning in 2014, a series of micro level course interventions have taken place in which faculty in the Education Department have explored the possibilities of openly using social media. The aims of interventions at this level were not to offer fully open courses, but rather, according to the instructors, to explore open education in the educational technology program through authentic engagement. There were three goals/outcomes intended for these interventions. Students would experience small scale affordable open education, experience a sustainable professional community of practice that was not tied to courses, and finally, dialogue beyond the
institution, thereby raising their own professional profile and that of CBU. All open interventions were based on the use of social media tools readily available to the public and were designed with a budget of $0.00. Social media and professional use is fraught with restrictions and problems in Canada and Nova Scotia is no exception with some of the most carefully considered policy regulations regarding information, privacy and online security. To mitigate the risk to privacy, information and liability, faculty adopted an informed consent approach using a waiver akin to the standard policy used for field trips; in short, they developed a social media field trip waiver (Snow, 2017). With the waiver in place, three interventions were designed, taking into consideration the workload and time limitations of the faculty. From the interventions conducted by instructors, students reported greater engagement with their peers; on a few occasions student products achieved viral status when shared on social media and the students learned to navigate open spaces. These interventions continue today, but they are limited in scope for the institution, they have important value to the Education Department, but stand alone from the institution.

**Intervention two: A Mi'kmaw Studies MOOC**

Former CBU president Dr. David Wheeler, one of several university presidents promoting provincial support for post-secondary tuition free enrollment, wanted CBU to enter open education more formally. His pilot project was the support of MIKM 2701: learning from the knowledge keepers of Mi'kmaki. This course was offered in a multi-modal format for both face to face and online students, as well as for credit, which involved payment, or non-credit (free/open). The format, though simple in appearance, was labour intensive for the faculty leads, then Dean of Uama'ki College Stephen Augustine and Dr. Ashlee Cunsolo, and the technical
support team. Three hour on campus lectures were offered to the 13 registered credit students and the session was broadcast through a partnership with Bell Media and offered on the local cable network in a live streamed and archived form. Emerging from the online participation was a request from participants to receive credit for their work and a certificate of participation was introduced for a small fee ($75.00), which was intended to cover the costs of processing the certificate. Participation, was measured by the submission of a series of reflections on the weekly classes submitted to course instructors at the end of the term. To encourage participation from the online students, social media was adopted in the same manner as in previous interventions by the Education Department. However, in this case, the impact was much larger; the course attracted more than 10,000 followers according to statistics gathered from email registrations, Twitter trends and Facebook. The course facilitators were quickly overwhelmed with the number of students contacting them by email. The set-up and removal of technical equipment for the three-hour course became a full day job for two university technicians, supporting and monitoring the social media became almost full time work for two other people. The scale was not sustainable. Despite the number of students who opted to take the certificate, it is unlikely the course covered its associated costs. However, cost recovery was not the goal, but rather awareness about Mi’kmaq culture and community engagement. An analysis of themes arising from participant reflections indicates the course was successful in meeting its goals of increasing awareness (Augustine, Root, Snow & Doucette, 2017). Despite its success, the university staff and faculty consulted were in agreement that it could not be repeated. The course was highly contextual and not scalable; part of the success of the course lay in the dynamic between the facilitators and their interaction with the participants. It was
determined that what worked in this instance could not be packaged and re-used to the same effect and, furthermore, that doing it did not align with the spirit of intent of open education at CBU.

**Intervention three: a sustainable strategy**

“Out of knowledge keepers we developed the open digital learning opportunities strategy. We call them Little Open Online Courses or LOOCs, in a 3 C model— that is credit, certificate or curiosity” (Bran-Barrett, MacDonald, Stanislwski, Baker, 2017).

Building on the previous interventions the refined goal of CBU became connecting with the local and international community while simultaneously supporting excellent teaching and learning design. The campus needed to pursue an institutional strategy that built on the best features from the two previous pilots; hence, the decision to pursue the 3C approach.

Any interested faculty can apply through the teaching and learning centre to offer an open 3C course. The 3C designation represents a course that will be offered for regular credit with a certificate model similar to that established in MIKM2701 and be fully open to the public (the Curiosity option). There is no singular design model for the 3C courses so faculty can teach in the way that best suits their needs; however, they can also access a host of supports aligned with the flexible 3C template which includes: a social media site moderated by a student teaching assistant who has been trained in moderating skills, supported registration in the form of an online learning specialist who becomes the first face of the university for many students, and assistance from the teaching and learning centre in the creation of video to support instruction and online learning design. Informed consent principles have been carried forward from previous interventions, as well as the tendency for multimodal courses. Although the campus had two technology
enhanced rooms, a simplified recording space was established in a flexible classroom to increase access and provide a professional stage for technology enhanced teaching. Since the first C3 offering in 2016, it has become clear that relationship building with the community was the driving force of the open education policy at CBU. The learners who opted to take open offerings are most often local and include a diverse population: senior citizens, shut ins, high school students, and simply interested adults. Participants often email the distance education coordinator to tell her about their course experiences and what the opportunity to participate has meant to them. The registration numbers have been much smaller than for MIKM2701. In the ten courses which have been offered as C3 since January 2017, there have been only 1700 registrants total, compared to the over 24,000 participants in one term for MKM2701. However, these figures reflect the evolution of a strategy that can support sustained growth over time.

Analysis and Discussion

In a comparison of the two small institutions strategy development, one can observe discrete institutional learning cycles or phases of development. Both institutions started with awareness, but through different approaches. In the case of NorQuest, awareness was and is being generated through faculty training, while at CBU it was generated through teaching graduate students. Phase two at both institutions saw partnership formation to support adoption. In seeking a sustainable financial model, in provinces where funding for open initiatives were limited, both institutions initially sought to find a financial benefit in using OER. At NorQuest the goal was and is direct savings for faculty and students through the adoption of no cost images or possibly OER texts, while CBU sought cost recovery for a large scale open course offering through a small certificate fee. At phase three, both institutions
will evaluate and build on previous plans, to develop a strategy that aligns with vision. While financial considerations are not removed from decision making, they are not the primary driving force. NorQuest outlined a key factor in their vision as making education accessible/affordable for low income earners. Consequently, the revised strategy builds on OER adoption and developing partnerships to provide an avenue for faculty to create more OER materials that can be used with students to decrease fees and increase accessibility. In contrast, CBU's mission is driven by its relationship with the local community. In seeking a sustainable strategy in the CBU example, the institution has sought a financially feasible approach to bring the community into relationship with the university through dialogue around special interest subjects in the form of C3 courses. If we analyze these reforms in the light of Zawacki-Richter and Anderson’s (2014) description of technology adoption in micro, meso and macro levels, you see both institutions commenced with micro explorations in teaching and learning in building towards a meso or institutional level change. In the case of NorQuest, innovation is partially a top down directive, and the reverse at CBU, with instructors leading adoption. Cox and Trotter (2016) would describe this policy evolution in terms of institutional culture, as it is not only the values but the culture of communication that impacts policy development. One of the advantages of a small institution is its ability to communicate and share learning from a variety of different perspectives from a more familial culture. Viewed in the context of Carey et. al.’s open architecture proposal, NorQuest has focused on the resource aspect, while BU has focused on the pedagogical aspect as starting points. However, as illustrated in both cases, these decisions were based on tensions over financial restrictions, faculty time and student engagement. With regard to financial restrictions, financial support directed platform design and choice in all pilots, but
was not the actual driving force for innovation which was tied more importantly to the mission of the institutions. In other words, decisions to open and build for open is not about gaining access to a greater revenue stream, but has perhaps the reverse intent, providing educational opportunities for potential students outside of the mainstream. This is a critical alignment of objectives of the students and the institution that when missing can cause OER implementation to flounder (Annand, 2015). The second key theme which emerged and is often cited in research literature is the time commitment for faculty to develop high quality material. In the case of NorQuest this will be achieved through partnerships with other organizations and front-end faculty training and engagement in the process of developing OER products, while at CBU the strategy is based on providing institutional support for the expansion of regular teaching opportunities to a wider audience. The third theme relates to student engagement and the type of relationship that the university and faculty want to build with students. Both CBU and NorQuest are motivated by increasing access, but arguably for different audiences and purposes. While NorQuest focuses on lowering costs for credit students directly, CBU focuses on no/low cost for wider community engagement.

**Conclusion**

Whether the starting point was policy to practice as in the case of NorQuest, or from practice to policy (CBU), analysis of both of these cases leads to some commonalities that can act as a road map for others. The implications reflect a cyclical design framework that is similar to traditional design models of investigate, design, create, and evaluate but includes an extra dimension of values centering on ensuring sustainability and leading to Higher Education Reform (Cleveland-Innes,
2017; Murphy, E., 2017). The medium is the message, or rather the message or bias of an institution's values is inextricably entwined in the selection of the medium.
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