Article

Blended Learning[1]: enabling Higher Education Reform

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Abstract

Blended learning research and practice have been areas of growth for two decades in Canada, with over 95% of Canadian higher education institutions involved in some form of blended learning. Despite strong evidence based research and practice blended learning, for the most part, has remained at sidelined in Canadian universities. The article argues the need for blended learning to situate itself within the timely and crucial Higher Education Reform (HER) agenda. By aligning the affordances of blended learning with the components of HER, blended learning can clearly serve as an enabler for HER.

Keywords: Blended learning, Higher Education Reform.

Introduction

We have been talking about Blended Learning for over two decades and, despite a growing body of evidence-based research, growth in the practice of blended learning at Canadian universities, lip service to it as a promising practice it remains, for most part, pocketed or sidelined in Canadian universities. In 2011 the Collaboration for Online Higher Education Research undertook a study funded by Human Resources and Skills Development Canada that corroborated its potential to enhance and transform Canadian higher education, but noted the absence of clear institutional policies and linkages to strategic directions and goals. Without these policies and linkages, the full positive impact of blended learning to move institutions ahead cannot be realized. The report reiterated its promise as a practice and the need for senior administration to provide the necessary policies and leadership to maximize its value.

Six years later, blended learning research and practice continues to grow with some of form of blended learning found at 95% of higher education institutions in Canada. The notable increase in the number of blended learning courses in higher education is complemented with increased student use of digital technologies.

There is a growing body of evidence-based research both within Canada and internationally. Policy and position papers continue to speak to the importance of blended learning in higher education, and is considered a practice more palatable

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and appropriate to decision makers in higher education. (Allen and Siemen, 2016). COHERE continues to hold annual conferences attracting both researchers, practitioners, and students from Canadian higher education, the 11th such held in October 2017 in Toronto. Despite these activities, blended learning still appears localized within departments and faculties, and rarely (with the exception of University of Ottawa) part of university wide strategic agenda. University of Ottawa has implemented a multi-year blended learning strategy with a goal to move 20% of it courses to a blended learning delivery model. Information about the University of Ottawa agenda can be found at https://tlss.uottawa.ca/site/blended-initiative.

Observing the larger higher education agenda, it is noted that Higher Education Reform (HER) has been a topic of discussion for the last two decades. This discussion intensified over the last decade with growing pressures indicating the need to reform the system, now. Higher Education Reform has become a global agenda with virtually every jurisdiction or region articulating a plan. Within the Canadian context, education and higher education fall under provincial not federal jurisdiction, so a formal, pan-Canadian agenda is not possible. However, HER is very much a part of discussions regarding higher education in Canada, albeit through Universities Canada, Canadian Ministers' of Education Council (CMEC)and other provincial initiatives, consortia, and collaborations.

A fundamental component of the Higher Education Reform agenda has been a discourse around teaching and learning. This conversation spans a range of areas including, but not limited to accessibility, flexibility, performance, time to degree, cost/benefit, outcomes and assessment, accountability, technology, relevance, curriculum, and lifelong learning. Turning now to blended learning and its affordances, it clearly can both facilitate and support an agenda for Higher Education Reform. By situating itself within this new space, it can claim its rightful place in leading higher education to new places. Essentially, it is time for blended learning to go big!

While many researchers involved in blended learning have long recognized the relationship between blended learning and reformed teaching and learning, it has not been widely communicated. . However a recent study (Wilcox, Sarma, & Lippell 2016) clearly identifies the potential of blended and online learning to impact teaching and learning and support HER , but caution that it can only be realized with the development of a strategic agenda, and concomitant policies and practices to enable its implementation. This potential for blended learning is corroborated by Murphy, (Oct. 21, 2017) in her keynote address at a research symposium called Blended Online Learning and Teaching - Higher Education Reform (BOTL-HER) entitled a Higher Education Reform: A call to arms for BOLT researchers. Within her keynote she evidenced the presence of HER globally and how blended learning can lead and facilitate HER in areas such as quality and innovation, accessibility, flexibility, affordability, relevancy, retention, and completion.

What Does the Research Tell us about Blended Learning?

Blended learning research is a growing and active area, both globally and nationally. In a recent study conducted by Zhang and Zhu (2017), they identified 103 published articles on blended learning. The most prevalent topics in this group of articles were design of blended learning (29) and evaluation (38) with research

identifying models for blended learning design and assessing the effectiveness of blended learning. As blended learning incorporates both face to face and online learning, the design research reflected aspects of and proposed models relevant to specific programs and disciplines. The absence of a model that quantifies proportions of face to face and online learning for blended learning is one of its strengths, enabling educational development teams to select the best blend for the learners and the discipline/program. Over half of the articles on evaluation of blended learning concluded that blended learning was effective in improving student success, examination results, and retention. A smaller group of research articles on student perceptions of blended learning predominantly indicated positive perceptions.

Vaughan has long been a proponent of blended learning and active researcher in the field (Vaughan, Cleveland-Innes, & Garrison, 2013). As a professor of Education at Mount Royal University, he was responsible for the introduction of a blended four year degree program. Vaughan's research (2014, 2017) has focused on the role of blended learning models to improve and enhance student engagement, which translates into better performance. Vaughan also sees blended learning providing an opportunity to interrogate existing curriculum and redesign with clearer outcomes, enabling students to engage with the content differently. It provides a space for faculty members to think differently about teaching and learning and think differently about assessment- all essential to HER. Vaughan and Cloutier (2017) in a student-faculty partnership longitudinal research study evaluated the effectiveness of a blended four-year education program delivered at a Canadian university. Using the NSSE framework, students completed surveys and were focus group participants at the end of their first and fourth year respectively. Students were positive about the blended learning model and recommended expanding online activities with the introduction of virtual office hours and social media for peer mentoring assignments.

Czerniewicz (2017) indicates perseverance challenges for non-traditional students in solely online learning experiences, but suggests that blended learning may provide better solution to strengthen retention. Lopez- Perez (2011) found that blended learning environments reduced attrition and resulted in an increased pass rates. Hartman (2010) found that 85% of the students taking blended learning offerings at University of Central Florida achieved a C grade or better.

Moskal, Dziuban, & Hartman (2012) draws upon sixteen years of experience in continuous improvement and evaluation of a blended learning model at University of Central Florida. Their years of experience and refinement of their model has resulted in positive institutional transformation. They describe blended learning as a way to bridge the old and new in an institution. Blended learning incorporates the integrity of the traditional academy and face to face teaching, building spaces for the integration of new technologies and platforms to improve teaching and learning. Critical to a successful institutional strategy for blended learning requires alignment of institutional faculty and student goals, resource reallocation, support for students and faculty and a robust infrastructure. While the model requires investment, the return on investment multi-fold reflected in improved teaching, learning, assessment, retention, performance and faculty and student satisfaction.

Along with other changes, faculty will have different role responsibilities in a blended learning environment. In a study by Cleveland-Innes & Gauvreau (2015), seventy-seven faculty at eighteen comprehensive academic research institutions in Canada

provide evidence of changing faculty views and activities in reference to teaching, whether faculty are engaged in online teaching and learning or not. Their argument rests on two interrelated premises. The first is that the phenomenon of blended and online teaching and learning is dramatically affecting faculty roles in higher education. The second is that the role of faculty member is saturated with requirements. Adding a teaching process that requires advanced teaching expertise and additional time commitments, which is sometimes part of blended and online learning, will not fit into the current role of faculty. Suggestions to remedy this issue for Higher Education Reform include adding occupational categories such as instructional designer and web-analyst to work with faculty and adding teaching faculty to departments, ones who are expert in learning theory and teaching competencies.

Blended learning also draws upon the Community of Inquiry work (COL), for information (see https://coi.athabascau.ca/). Garrison and Kanuka (2004) provide evidence that the blended learning model is particularly effective in supporting the community of inquiry. Akyol, Garrison and Ozden (2009) found that the use of a blended learning model reduces the time need to develop group cohesion, promotes higher level inquiry, and enhances student satisfaction by providing multiple forms of communication.

Michael Power (2008) approaches blended learning slightly differently in his development of the Blended Online Learning model. In this model, he proposes that face to face learning can be replaced by real time online activities e.g. web-based teaching, which are then supported by fully online activities. He sees this model as increasing accessibility in that students do not need to physically come to campus, but only be online at specific times for synchronous activities. While this model may increase access, it may not be the best path for traditional face to face universities who wish to maintain a component of classroom teaching within their blended learning model.

Wilcox et.al (2016) take a unique approach in an MIT Interdisciplinary study, Online Education: A Catalyst for Higher Education Reform. Their study presents a central role for online learning of in Higher Education Reform and in future models of teaching, stressing the importance that online/blended must be contextualized within learning and learning sciences, and the role of teaching remain essential but open to new roles. Critical to their research is the need to approach teaching and learning differently. They recognize that teaching and learning are central to faculty roles but that the faculty must remain open to moving beyond the individual model of teaching, e.g,, lecturer in a classroom. Revisioning teaching and learning must use an integrated research agenda where those with content knowledge come together with those with expertise in learning science, instructional design, education and society, and teaching and learning in new spaces. They promote the idea of a learning engineer, who is a creative professional who helps build bridges between these fields and develops additional infrastructure to help teachers teach and students learn. Learning engineers must integrate their knowledge of a discipline with broad understanding of advanced principles from across the fields of education. Finally, they speak to the importance of an implementation model with the creation of thinking communities to continuously evaluate the kinds of education reforms proposed here, and the identification and development of change agents and role models necessary to implement these reforms. Leadership remains a cornerstone

to moving this agenda ahead and the need to provide new skills for transforming legacy organizations such as higher education institutions.

What is the Potential for Blended Learning?

Clearly the research provides evidence that blended learning is an effective model to improve teaching and learning, retention, flexibility, accessibility, student satisfaction and engagement and the potential to be the spark for HER moving institutions in new much needed directions.

Seaman and Allen (2015) found senior administrators more favorable to blended learning, and consistently believe it would have greater promise and acceptance than purely online learning. Craig and Williams (2015) reinforce the importance of incorporating all technologies and positive advantages in online learning within a blended learning model, along with the positive advantages of the face to face environment. Using online tools and technology optimally enable blended learning to incorporate competencies and adaptive learning. Taplin, Kerr and Brown (2013) found that blended learning has the capacity to improve pedagogy, introduce flexibility in access to instruction and lower costs. Recognizing that the quality of teaching and learning is essential, issues of costs cannot be ignored, and lowering costs and improving learning are not necessary mutually exclusive. Twigg (2004) also provided evidence for a model that both improved learning and student success, while maintaining fiscal responsibility.

It is clear that the implementation of blended learning is a best practice for higher education and an enabler for HER.

Blended learning has the potential to facilitate:

- Improved student engagement and performance
- Improved design, learning outcomes, and assessment
- Improved retention and reduced time to degree
- Adaptive and competency based learning
- New literacies and collaborations
- Skills for lifelong learning
- Optimization of resources/cost reduction

Blended Learning and HER

There is evidence based research along with policy and position papers that point to value of blended learning and the compelling relationship between blended learning and moving an HER agenda forward. Despite this body of knowledge blended learning sits, for the most part, apart from the strategic direction of universities and the larger HER agenda. It is timely that blended learning researchers move from their current place in higher education, situating themselves within the HER agenda. The following table illustrates linkages between blended learning and HER to serve as starting point in locating blended learning within the HER agenda.

Blended Learning	HIGHER EDUCATION REFORM
Strengthen course design, clear outcomes, and assessment	Improved teaching and learning practices
Increased student engagement	Improved NSSE Scores
Integration of technologies	Technological literacy, skills for lifelong learning
Improved retention and student performance	Accountability
Flexibility	Reduced time to degree
Adaptive learning	Widen Access and participation
Optimization of Resources	Cost
Competency based Learning	Relevance of HE to workplace and society

Blended learning has much to offer the HER movement, not only as a participant but also as an enabler. Higher education is facing multiple pressures to reform and blended learning has a key role. It is time for blended learning to take the leap and get big.

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