Reciprocal Learning and Learners: (Re)framing the Post-Secondary Learning Experience to meet a Complex Future

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Abstract:

Reflecting upon experimentations in online learning and flexible course design in three post-secondary online courses, this paper discusses a democratization of learning through digitization. The author proposes a reciprocal learning practice that synthesizes key elements of collaborative learning, flexible curriculum design and multi-literacies to develop a learner-centric experience that emphasizes 21st Century skills. Through a (re)framing of teacher as experience and student as co-creator and (re)source, this paper discusses a dynamic integration of best practices in face-to-face teaching with online technological flexibility leading to learner empowerment and achievement through curriculum co-design.

Key Words:

Higher Education, Technology, Online Learning, 21st Century skills, Creativity, Reciprocal Learning, Engagement.

Introduction

Technological change is not additive; it is ecological, which means, it changes everything. – Neil Postman

Higher education has experienced major system changes with the advent of blended and online learning models; further complicating the educational landscape is a demographic reconfiguring within classroom models. There is a, democratizing and welcome, minimizing of the familiar and maximizing of the diverse in learner profiles. Unfortunately, while educators acknowledge times are changing rapidly, enquiries into learning have remained the same. As stated by Ashok Ganguly, former chairman of India's Central Board of Secondary Education, "it surprises us that as the world outside changes, the education system can remain static" (Stewart, 2012, p.122). According to

Neil Postman "we should be asking ourselves not just how to do school better, but how to do it decidedly differently" (cited in Richardson. 2013, p. 12). I have contemplated this question since the early 2000s when I noticed a change in learner demographics and when institutions began strongly encouraging technologically-enhanced courses.

What this encouragement toward technology has meant for me as an educator is a releasing of control over certain aspects of my job. I asked how might I create quality learning for all learners while also being an arts-integration specialist, a communications expert, a curriculum innovator and now having to be an authority in learning technology? While the first three roles mirror my preferences and skills, the latter was overwhelming and frightening. But, my innovative persona removed me from centre stage as it explored becoming something other. Not exactly a facilitator of learning, since facilitating requires a neutral position regarding outcomes, I became more of a jazz improviser providing opportunities by drawing upon and channeling the flow of learner energy toward positive, individualistic outcomes. I became more interested in showing how the mind works rather than what the mind thinks. This shift resulted in modeling a playing with intense curiosities, wonders, missteps and iterations in order to motivate all learners to do the same. Technology has now become my pedagogical assistant in educational innovation and learner engagement.

My practical response to the changing educational ecology lies in synthesizing best practices in face-to-face teaching with online collaborative learning and technological innovation. I suggest students and instructors (re)frame themselves in a new educational relationship of reciprocal learning that addresses 21st Century competencies (IBM, 2012) without forfeiting quality practices demonstrated by teacher experience. Online learning is emphasized in this paper, yet I do not see reciprocal learning as exclusive to the online platform. I advocate for an integrating of the educator as experience with the student as co-creator of and (re)source for an innovative learning landscape where technology is a means to learning and not an end in itself.

First, reciprocal practice will be defined in terms of its alignment with 21st Century employability demands and learner-centred needs, namely engagement, collaboration and knowledge construction. Then, I will share examples of reciprocal learning obtained through reflective action research gleaned from online and blended offerings at a post-secondary institution between 2011 and 2013. These examples will highlight how reciprocal learning can fulfill Caitlin Tucker's (2013) appeal for educators to create learning communities that value all participants as active contributors to the collective intelligence in the classroom. This paper suggests an integration of teaching experience and learner potential be seen as a way to (re)shape the current technologically-enhanced educational landscape into an iteration of a democratized educational continuum.

Defining the Reciprocal Practice

First, reciprocal practice is not a flipping or reversing of roles or techniques within the classroom. It is, rather, a practice of information exchange where new and continuous learning flows both ways. It is a co-existence and collaboration providing agency to all participants. Current classroom demographics indicate that many students already belong to knowledge communities based on prior learning and working experience;

thus, positioning students in an inferior role rests on outdated assumptions about who are the keepers and dispensers of knowledge, as well as who is in our classrooms and why. Likewise, moving toward a learner-centric classroom advocates a more agile curriculum where core texts and activities can, and should, be amended due to learner interests, new technological developments, and current events and situations within the global community. Adamson (2012) states

The systems under which the world operates and the ways that individual businesses operate are vast and complex – interconnected to the point of confusion and uncertainty. The linear process of cause and effect becomes increasingly irrelevant, and it is necessary for knowledge workers to begin thinking in new ways and exploring new solutions (para. 3).

Linear, static curriculum design may not accommodate the volatile, uncertain, complex, ambiguous (VUCA) world we live in. Learners' immediate, continuous, digital access to the changing world could make repeated content irrelevant by the next twitter post. Flexible pedagogy empowers learners to develop and practice the essential and transferable skills required of 21st Century employment (IBM 2012) and a VUCA future (Adamson, 2012). An adaptable approach to curriculum (re)positions the student as a (re)source for customized co-designed experiences solving collective challenges framed within learner-centric contexts. The instructor's experience in classroom dynamics, management and knowledge-building keeps the exchange of energies flowing by constructing a safe learning environment advocating risk-taking and innovative thinking. All participants, then, learn from each other and keep the curriculum evolving, expanding, proliferating and even spiralling into the next iteration of the course.

Using examples taken from three post-secondary classes, I will share the results of my re-framing of the learning community. I will discuss how my creative approach to assignments, assessments and delivery generated a dynamic learning experience for my students as well as myself. I will also show how reciprocal learning practices evolved over these three courses and utilized technology to create an environment honouring learner autonomy, relevance and competencies (Yuhas, 2014) in a way that even regulated, accredited curriculum can be discovered and delivered in this learner-empowered framework.

Key Pedagogical Principles

Developing clear learning outcomes, linking those outcomes to authentic assessments, differentiating content delivery, providing relevant and timely feedback has been identified as best practices for face-to-face teaching. These principles should be transplanted to the online environment with the acknowledgement that the terrain and the atmosphere is the same, yet different. It is the same since everyone wants a quality, well-designed experience. It is different in that external innovations and world events in a digital age have a greater impact on course relevance. Instructors might try sharing the responsibility of building dynamic online learning communities with learners who now become content (re)sources due to their probable accessibility to and immersion in the internet. Together information is shared, analyzed and assessed for continuous, reciprocal learning and for the development of a flexible curriculum responding to 21st Century employability skills.

Various reports on education and the future of work (C21 Canada, 2012; OECD, 2011; Mourshed, Chijioke, & Barber, 2010; World Economic Funds Future Jobs Report, 2016) have made it clear "highly creative and innovative people are the drivers of the 21st-century" (C21 Canada, 2012, p 13). Likewise, post-secondary institutions need to educate students for a future not yet imagined. We also need to prepare students for the disappearing of some imagined futures. Thus, essential qualities such as character, vision, flexibility, life-long learning and comfort with ambiguity and change are identified as necessary 21st Century traits and are overshadowing certain 20th century skillbased, fixed competencies. According to PISA (2011), as guoted by the OECD, "the competition among countries now revolves around human capital and the comparative advantage in knowledge" (p 14). Just as the definition of information consumer versus information producer has been dismantled by the internet, so too are educational roles and responsibilities. This state of social disruption in industry provides the ideal opportunity in education where the responsibility of course development becomes a shared practice looking back to the ideas of Dewey and Freire, while moving into the future with Google and Gates.

Creativity in Curriculum Design

While educators need to do things differently in this innovation-accelerated age, their changes need to be sustainable. Learning a specific device today may be redundant tomorrow. According to Mourshed, Chijioke, & Barber, (2010) it is not enough to change the specific content and the particular ways teachers teach; we must, in general, change how teachers think about teaching. To think differently requires thinking creatively. It requires embracing the elements of creativity, such as flexibility, fluidity, elaboration and novelty (Amabile, 1989; Drapeau, 2014; Osborn, 1953; Torrance & Safter, 1999), into the curriculum design process. It requires a letting go of who imparts and who receives knowledge. As instructors, we need to view the complexities of the world and our current educational situation as a wicked problem; education is a problem to be solved, not once and for all, but with a context-specific, time-limited, audience-defined solution. Viable solutions require viable relationships; I am proposing a relationship based on reciprocity.

This innovative relationship challenges the hierarchy of teacher over student and replaces it with the equitable labelling and positioning of all in the classroom as learners. We can then highlight a truly collaborative, creative and iterative learning process. This is not an easy task, however, since everyone comes to the educational landscape with different assumptions and expectations. Thus, clarity of purpose and a mentoring into this new reciprocal process is a necessary factor for everyone because we can't assume that all our students, according to Prensky (2010), spent their formative years surrounded by technology and "highly interactive and engaging pursuits" (cited in Lynch 2011, para. 3). We also cannot assume disengaged students stem from a disconnect between their social and cultural context and traditional education (Demetriou, 2003; Diket, 2003; Keith, 1999; Mulcahey, 2000; Payne 2005; Young, 1999). Disengagement can stem from cultural, social, psychological and digital differences. Even tertiary students immersed in popular technology can be considered new comers to the technology used in higher education. It is also possible many did not

experience participatory, differentiated, active learning methods. So, a reframing through a re-defining of everyone's roles in education may be needed.

This attitudinal empathizing and sharing of responsibility also satisfies industry demands by positioning technology as an 'assister in', rather than a 'resister to' quality, instructional experiences. Educators need to recognize "that technology can be used to improve traditional teaching practices as well as to create new means of helping students learn, and that both uses are legitimate" (Johnson, 2014, p. 85). Technology gives students the 'tools, skills and resources they need to continue learning on their road to mastery" (Tucker. 2013, p. 60). If students feel comfortable with one aspect of the learning process – in this case technology – they may be more willing to explore areas where they aren't as comfortable – essential content. The same can be said about instructors. In fact, inviting students to start from a position of strength, rather than a deficit position (Dweck, 2016) may thwart the fight or flight tendencies that curtail learning.

Thus, embracing technologies' ever-moving target may assist educators in fulfilling some of their traditional pedagogical concerns. These concerns existed even before the push toward online and blended learning and include ways to create collaborative learning communities, strengthen the teacher-student relationship, establish a learner-centred curriculum based on differentiated instruction, create content relevant to learner experience and prior knowledge, and building authentic assessments. But the list of pedagogical concerns doesn't stop there; educators have also pondered how they might incorporate character education, creativity, inclusive and equity objectives into the classroom while integrating 21st century skills and intrinsically motivating learners.

Three Qualitative Case Studies

From 2011 to 2013, I experimented with my pedagogical flexibility and fluidity in what became an unintended, participatory, action research project. The project began as a personal commitment to not replicate the stagnant reading and writing online experiences I had encountered. Instead, I wanted the thoughts and experiences of learners to provide life to the curriculum and to do that I needed to tap the assistance of the ever-shifting world of technology through my students. Experimenting with creative options for fairly traditional assessments and discussion posts, I discovered this research a priori and it has made all the difference in my online and face-to-face teaching and learning.

In the fall of 2011, I was given an online, mandatory communications class consisting of 48 students from various disciplines. The course traditionally began with a diagnostic writing assignment to help students get to know each other and for me to determine their writing ability. Accustomed to receiving brief biographical paragraphs amounted to no more than name, program and home town, I added multi-literacies to the assignment. Students were to create an autobiographical music video using a free, extremely easy online program. They were to upload personal images, select a thematic template and music, compose headings and titles, and then share their creations with the class on the discussion board. A response framework was clearly communicated and used throughout the course. Adding the multi-literacy component to the writing assignment actually illustrated Brian Boyd's observation that humans are

natural storytellers (2009) and want to be understood, even to strangers. Students wanted to explain their artistic (re)presentations of self and the customary biographical paragraph more than doubled in word count while generating authentic online discussions. Significantly, these extended pieces of writing provided ample material for my diagnostic and created a robust learning community sustained throughout the semester.

The assignment tapped into learners comfort with images, music and technology in order to build community. It was learner-focused, relevant and respectful of student experiences. It was differentiated since multiple means of representation, actions, expressions and genres, literacies were encouraged, and strengthened learner relationships by providing a two-four minute snapshot of what individuals cared about, where they were from, the experiences they had had, and where they wanted to go. The activity itself was innovative, creative and required critical and discretionary thinking. Selecting, arranging and reflecting on their choices required cognitive scaffolding enhancing the class' appreciation for its diversity through respectful discussion board responses. Learners celebrated similarities and engaged with differences. Through pedagogical fluidity and flexibility, we created a communal tone that was maintained throughout the semester with similar multi-literacy exercises and ritualized collective feedback.

Quantitatively, discussion board posts from 48 students reached just over 1500 for the first iteration of multi-literacy, self-selected, technologically-enhanced discussion board assignments. The results in 2011 could have been a happy accident; but, with the same number of students in 2012, responses hit just over 1800. By the 2013 iteration, discussion board responses reached approximately 2500 posts. My continual refining of the assignments included a more pronounced integration of multi-literacy with student-driven technological autonomy, and an invitation for learner-relevant content. This mix produced consistently high quality responses and authentic peer dialogue as determined by a simple, yet effective rubric.

The success of the discussion board, however, presented its own obstacle to adoption by others. Sharing these results with my colleagues raised workload concerns. This concern arose because my colleague's placed their experience of trite online posts onto my course's responses. I tried to assure them the reading of these responses was a pleasurable experience because I was witnessing learning, connections and community building. What was traditionally time spent as an evaluator became time spent as a co-learner collecting resources for highlighting with the class as well as inserting into the next course iteration.

Keeping with best design practices, the course's agility established a social presence, a collective instructional presence, as well as a cognitive presence (Garrison, Anderson & Archer, 2000). This was done through clear guidelines regarding online behaviour. The rubric was simple: points for original post and a minimum of two peer responses. But, the rubric also contained suggestions on how to generate respectful, inclusive, quality dialogue while challenging habits of mind. A routine framework transformed routine participation into communal rituals reflecting our learning community. Autonomy through multi-literacy choices and assignment due dates shifted the responsibility of learning from instructor to learner, making us responsible for

building and committing to a social, cognitive and instructional engagement. This also shifted the participants' identity from student to learner; a shift reflected in how I use these terms throughout this paper.

The three courses discussed here utilized the power of differentiated instruction by designing spontaneity and flexibility within the online format. This was established by consistent use of essential, divergent questions that provided crevices for relevant and unique learning. Such assignments gave students options pertaining to resources, presentation methods, and innovative spaces for sharing prior knowledge and constructing creative responses that valued individualized intelligences, talents and skills. The courses also supported risk-taking, problem-solving and innovative thinking by privileging process over product, iteration over perfection. Finally, this pedagogical approach used best practices for generating intrinsic motivation in learners by giving them freedom to choose assignments, strategies and even to shape the curriculum based on individual strengths, interests, and prior experiences (Burns, 2016; Drapeau, 2014; Freeman, Anderman & Jensen, 2007; Gregory & Kaufeldt, 2015; Hammond, 2015; Yuhas, 2016). Learners augmented the curriculum by suggesting readings and viewings; they shared technological resources that enhanced assignments beyond the minimum requirements; they learned the unevaluated outcome of agency when managing time.

According to Hammond (2015), embedding choice and flexibility into assessments creates a sense of agency or responsibility in learners and produces a growth mindset where challenges are embraced, setbacks initiate perseverance, effort is a path to mastery, and criticism is a road to deeper learning. From a practical perspective, this autonomy resulted in fewer late or missing assignments; two participants who missed the major assignment felt the necessity of telling me they took full responsibility for not managing their time, and not taking advantage of topic and deadline autonomy. This was their personal realization.

Monumental to this action research was a willingness to share my position with learners and democratize the learning environment through innovative, differentiated co-designed curriculum. Post-secondary educators must recognize teaching is no longer their exclusive domain, but the responsibility of multiple voices carrying multiple message(s). Technology has created "a platform permitting individual customers to serve themselves in their own way, at their own pace, in their own time, according to their own tastes" (Friedman, 2007, p. 455). This multiplicity signifies a collaborative and transformative educational framework of democratization through digitization. This shared communication act invites learners' educational and experiential histories into the educational forum and makes learning a creative and iterative process. This process encourages a sharing between stakeholders where learning exchanges are shaped by the 'true sense' of global thinking, a commitment to and acceptance of differentiated, multi-cultural ways of seeing and knowing, multi-literacies, and a deep respect for communal values constructing a strong sense of community. This educational ecology may lead to a robust class(less) democratized learning space where "people educate each other through the mediation of the world" (Freire, 1993, p 32). Imagine, a landscape synthesizing quality practices in curriculum design, assessment, and delivery

with communal, human-centred, innovative strategies supporting a growth mindset accelerated by technological innovation.

Undoubtedly, the dialogue surrounding face-to-face and online teaching is rich, passionate, and controversial. Pedagogical changes are definitely required when shifting to an online or blended environment (Baran, Correia & Thompson, 2013; Major, 2010). Research also indicates that traditional classroom concerns, such as attitudes, communication, interaction, and design elements, also impact online learning environments (Baran, Correia & Thompson, 2013). This paper suggests we build reciprocal learning environments based on the commonalities between traditional quality practices and cyber learning innovation and excellence within and across departments, programs, institutions, and even educational systems.

Conclusion

Quality learning practices involve diverse strategies. Democratizing learning involves engaging society's disparate voices and practices in a collaborative, co-creative learning community augmented by technology. This type of classroom experience rejects teacher-centricity and the view that educators are the only dispensers of knowledge (Freire, 1993). More importantly, it promotes a true modeling of continuous learning by making everyone in the system learners. Differentiated, creative, inclusive, reciprocal instruction engages learners in an educational continuum that, like the roles of those involved, is shifting with the availability of information and technological advancements. A reciprocal learning environment identities all stakeholders as vulnerable and accountable to the 21st-Century competencies identified by industry reports.

The 21st-Century requires new pedagogical visions. One such vision invites instructors to embrace reciprocal learning communities where new possibilities and potentialities exist. As I discovered in my three courses, reciprocal learning practices generate a sense of community and belonging that is linked to learner motivation and success (Freeman, Anderman, Jensen, 2007; Gregory, & Kaufeldt, 2015; Yuhas, 2016). The human element will always be present in the educational- technological landscape because technology doesn't drive change; human choices drive change. It is up to individuals whether they will be digital natives, immigrants, servants, masters or establish a new relationship building an online dialogic of action (Bahktin,1981; Freire, 1970) by democratizing education through digitalization. As reflective, creative educators, we need to identify ourselves as life-long learners and embrace a sharing of roles due to technology's rapid pace, then modify, adjust and iterate these strategies for communal learning experiences.

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