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Innovative Arts-Based Learning Approaches adapted for Mobile Learning

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Abstract

Online learning continues to evolve from computer-based learning to more focus on mobile learning. With this evolution comes the need to develop (and evaluate) instructional strategies effective in mobile learning. This work-in-progress features a description of four innovative instructional strategies adapted from approaches we developed, used, and evaluated successfully in computer-based online learning. These newly adapted strategies –poetweet, photo pairing, reflective mosaic, and the six-word story– all use arts-based approaches. In our past research we found similar strategies developed for online teaching encouraged interaction, enhanced social presence, and facilitated community. This paper features a description of these modified learning activities recreated for the mobile learning environment. We have completed preliminary testing of these newly revised learning activities in m-learning, and in the future we will formally study these to determine if arts-based strategies revised to suit m-learning create the same positive outcomes as were found when we used arts-based approaches in e-learning.

Keywords: mobile learning, e-learning, arts-based instructional strategies, interaction, social presence, community of inquiry

Introduction

With mobile learning there is the potential for learners to feel isolated detracting from their educational experience and ultimately from their learning. This sense of isolation may be due in part to lack of social presence, limited interaction with peers and teachers, and a lack of a sense of a learning community. In previous research we explored the influence of arts-based instructional strategies on these factors in online post-secondary classrooms (Perry & Edwards, 2016). Social presence was defined as "the ability of students and teachers to project their personal characteristics into the community of inquiry, thereby presenting themselves as 'real people'" (Garrison, Anderson & Archer, 1999, p. 87). Interaction focused on meaningful dialogue and collaboration between learners, and between learners and instructors. According to Thormann and Fidalgo (2014) when students experience a sense of community they feel safe and respected and this aids in learning.

Arts-based strategies as those founded in the arts, specifically literary, visual, musical, or drama mediums. Our earlier research found that interaction, social presence, and the sense of community were enhanced when arts-based approaches were used, in part because they encouraged creativity, helped to build rapport among participants, personalized interactions, cultivated trust, and promoted learner control (Janzen, Perry & Edwards, 2012a). We concluded that arts-based instructional strategies contributed to positive student outcomes.

As we are increasingly moving from a computer-based online learning milieu to mobile learning we are in the process of re-inventing and re-creating some of these successful arts-based instructional strategies. The biggest challenge of adapting these strategies for mobile learning is ensuring effective instructional design principles are used in the adaptation (Irby & Strong, 2015) and that the principles

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used are applicable to design of m-learning (Tseng, Tang & Morris, 2016). This paper demonstrates four of these innovative strategies.

All activities were offered in master's level online courses that were part of the curriculum for a degree in health disciplines at Athabasca University in Canada. Learners engaged in the activities during asynchronous courses in topics such as health education, organizational change, and organization theory.

Conceptual Framework

The conceptual framework for this approach comes from Vygotsky's (1978) Social Development Theory (SDT) and Janzen, Perry and Edward's Student-Instructor-Technology-Environment (SITE) model (2012b). According to SDT, social interaction is essential for cognitive development (Vygotsky, 1978). Applying SDT to mobile learning, if learners are provided learning opportunities that facilitate social connections with others (fellow learners and instructors) then learning should be enhanced. According to the SITE model, effective e-learning requires interaction among the student, instructor, and technology elements of the online learning environment (Janzen et al. 2012b). Further, as students interact with others, they become more engaged with learning and begin to have a positive and enjoyable experience which often leads to feelings of belongingness, safety, and comfort in the learning environment. When learners are in such a state there is potential for risk-taking and creative learning outputs (Janzen, Perry & Edwards, 2019). We are extrapolating this to mobile learning as well as it is a subset of online learning. The Community of Inquiry (CoI) theoretical framework holds that online learning is maximized when a group of learners form a community, engage in critical discourse and reflection, and experience social presence, teaching presence, and cognitive presence (Garrison et al., 1999). Together, SDT, the SITE model, and the CoI form the foundation for this ongoing research into the use of arts-based instructional strategies in mobile learning (see Figure 1).

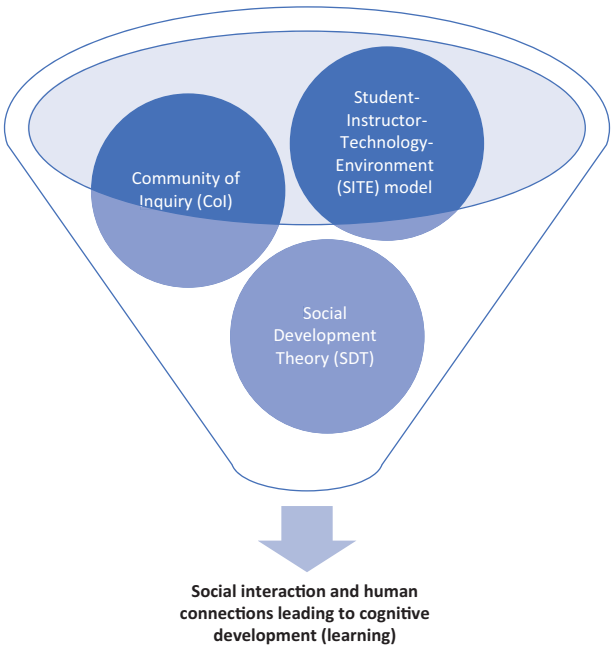

Figure 1: Conceptual Framework.

Arts-Based Instructional Strategies

The worth of the arts as teaching tools has long been recognized in face-to-face education (Clover & Sanford, 2016). Specifically, art, photography, literature, poetry, music, and drama have been reported as contributing positively to the in-person classroom educational experience. Stated outcomes of arts-based teaching strategies include reflection (McKay & Barton, 2018), creation of a safe learning environment, stimulation of dialogue, and student engagement in the affective domain (van der Hoeven, Srogi, Husman, Semken & Fuhrman, 2011). We found arts-based instructional strategies used in online graduate courses increased quality of interactions, enhanced sense of community, furthered application of course content, and helped learners establish group identity where ideas were respectfully shared and divergent perspectives admired (Perry, Edwards, Menzies & Janzen, 2011). These inexpensive, adaptable teaching interventions enhanced learning environments by encouraging creativity and risk-taking.

In sum, it seems that arts-based approaches humanize the online learning environment that some students find socially isolating (Melrose, Park & Perry, 2019). Fox (2017) agrees that online learners sometimes feel disconnected from peers because of the separation of distance and time. To overcome this sense of separation, Fox recommends learning activities that promote learner collaboration and focus on cognitive and social-emotional learning outcomes. Such outcomes are achieved in part through incorporation of arts-based activities (Fox, 2017). Astleitner (2018) focuses on the motivation that distance learners experience when they sense human presence of their teacher and classmates that results in a sense of community in an online classroom. Astleitner attributes student motivation and commitment to learning in part to "feelings of closeness and community" (2018, p. 14) among student learning online. Davis, Chen, Hauff and Houben (2018) agree that learning strategies that involve a sense of group and togetherness are essential as education moves from the traditional classroom to the web. Arts-based approaches are one way that this sense of humanness can be maintained as this transition occurs.

To be valuable in mobile learning, arts-based strategies need to be effective on small screen devices such as smart phones and tablets. Mobile learning requires teaching strategies appropriate to the limitations and strengths of mobile devices. Like computer-based learning, successful mobile learning requires strategies that forge alliances among instructors and students, between learners and the learning environment, and between learners and technology. This needs to be achieved by a melding of interactivity, creativity and technology. There is limited research related to development and testing of teaching strategies to achieve these outcomes in mobile learning.

To address this gap, we are revising some of our successful arts-based instructional strategies that have worked well in the computer-based learning milieu to be appropriate for mobile learning. Specifically, we have revised our poetry-based strategy called "Haiku it!" to mobile friendly "Poetweet", changed a photography inspired strategy called "Photovoice" to mobile appropriate "Photo Paring", and changed our quilting activity called "Conceptual Quilting" to an activity that can be completed using social media we call "Reflective Mosaic." Finally, we describe the six-word story activity that could work well in both types of learning environments. Each revised activity is described below.

Poetweet

Poetweet is a form of short poetry. Poetry potentially conveys human emotion, vague ideas, and complex feelings within the limitation of a few words. As is said of poems, they do not require a summary because "the poem is the thing" (van Manen, 2007). When student reflections are related

to human interaction, poetry provides an avenue to capture and share these experiences and recollections using a specific form.

To challenge students to drill down to the essence of course concepts and their experiences, we developed a teaching strategy called Haiku It! The activity proceeds in this way. Students are invited to reflect on a specific clinical experience or course concept and record their thoughts in a Haiku. The form and framework of the Haiku encourages students to be concise as they create their poems. In order to be concise students need to find a very clear understanding of the key elements related to a given concept or to distill the essence of their experiences. Further, writing and sharing reflective Haikus often provides an avenue for fulfilling affective domain learning outcomes as personal attitudes and feelings are self-assessed and then displayed through these poems.

Poetweet is a mobile friendly way for learners to create and share Haikus or other short poems that convey the essence of course concepts. Sharing these poems with the class through a tweet ensures a world limit is abided by. Students follow the same procedure as they would in Haiku it! with the difference being the venue for sharing their creations.

Others have written about poetry shared through twitter (although in these writings the poetry was not an element of online learning but a venture for poets to share their world widely). Specifically, these twitter poems have been referred to as micropoetry and twihaiku (Cripps, 2013). Those who have experience writing twitter poems comment that being forced to stay within the minimalist word count of Twitter compels them to get to the point and be precise with words. Such brief poems can create powerful learning.

An example of a poetweet in the form of a Haiku appears in Figure 2. This Haiku was written by a Master of nursing student who was taking a course on how to be a clinical nurse educator. The poetweet demonstrates the depth of understanding she has regarding the role of an educator.

Daily, teachers are learners,
Journey together.
Not long ago, you were me.

Figure 2: Example of a Poetweet

Photo Pairing

The second strategy is called photo pairing. In online computer-based courses we use an arts strategy called photovoice. Photovoice as an instructional activity involves an instructor posting a digital photographic image for the class at the onset of each unit of the course. The instructor generates a reflective question that accompanies the purposely selected image, inviting students to react, or give voice, to the photograph through a written conference posting (Perry, Dalton & Edwards, 2009).

To adapt this strategy to mobile learning we propose continuing to use images which are easily shared on mobile devices, but to reduce the text element of the activity. Specifically, the mobile adapted strategy is called photo pairing. Students are asked to locate and share two images that, when juxtaposed, present alterative views on a course theme or topic.

For example, in one instance students were asked to select an image that spoke to them about feelings of shame and blame in a work setting and then to juxtapose this image with another that provides a visual representation of an organizational culture of support. Next, students shared their selected images with the class. For students to successfully select these images that portray different perspectives on a topic, they need to comprehend the conflicting views. Figure 3 demonstrates the juxtaposition of these two images –one of a shame and blame workplace (3a) and the second image of a supportive workplace (3b).

Figure 3. Example of Photo Pairing

Figure 3a: Sen (2012).

Figure 3b: Rawpixel Ltd (2018).

Reflective Mosaic

The third adapted strategy we named reflective mosaic. It evolved from a teaching strategy we called conceptual quilting has been used in online graduate courses as a summary reflection activity. Students are asked to construct a virtual quilt that is comprised of ideas, metaphors, theories, and other details from the course that they found most meaningful. The "quilt" needs to be in a medium that can be shared electronically with the class. The construction of the conceptual quilt encourages learners to reflect as they interact a second time with course materials. Students comment that conceptual quilting helps them consolidate their learning and bring closure to the course. From a social interactive perspective, the sharing of the completed quilts is a way for students to acknowledge the impact that others (teachers and peers) have had on their learning.

Conceptual quilting can be adapted to mobile learning while still maintaining the arts influence and the opportunity for students to reflect on their learnings from a course. A new activity called reflective mosaic takes the essentials of conceptual quilting and creates a new activity that can be created and shared on mobile devices. Students are invited to comb through their course materials and learnings and put together a mosaic of ideas, themes, concepts, and notions from a course that they

want to remember and use in the future. This mosaic creation can take any form and use any social media platform they prefer. The finished mosaic can be shared with the class and instructor which could stimulate reflection and consolidation of learning in others. Figure 4 provides an example of a reflective mosaic creative for a graduate level course on education of health professionals.

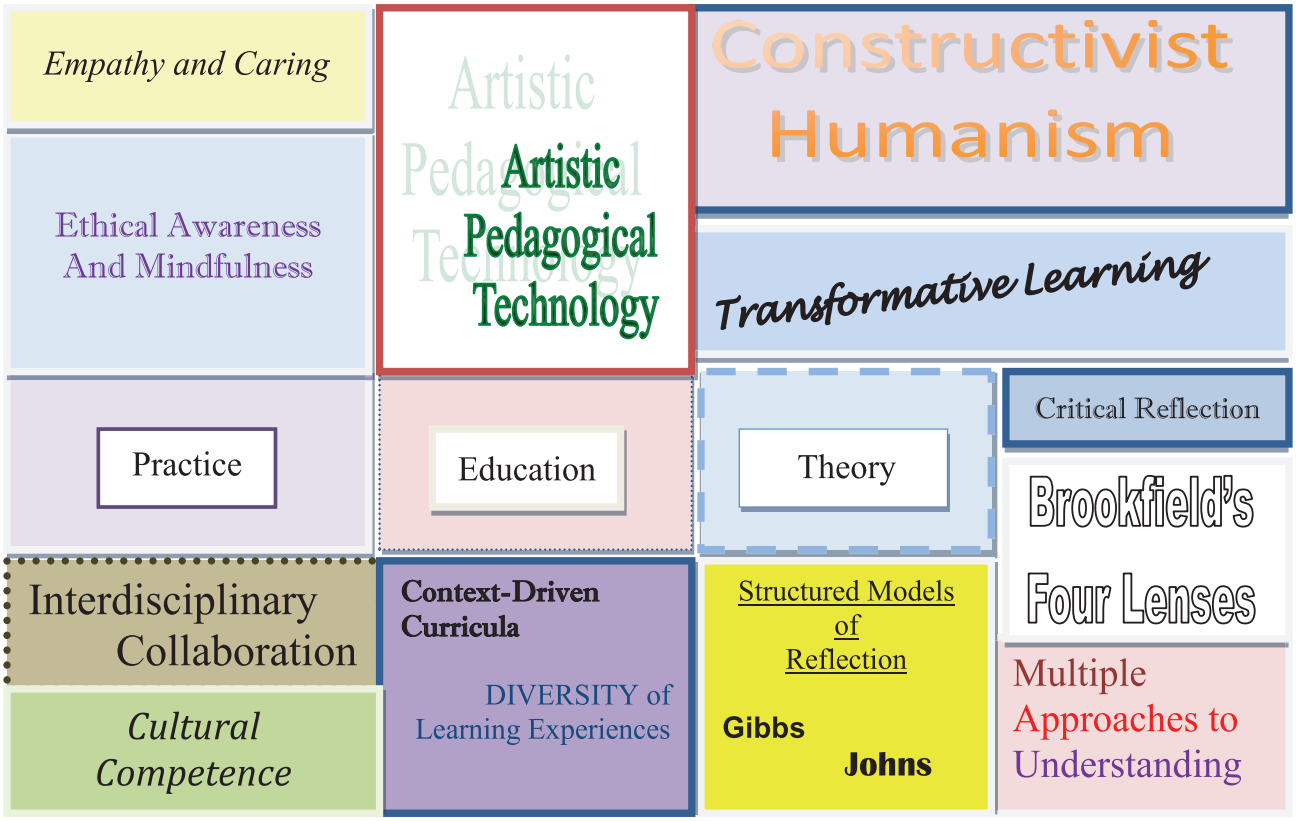

Figure 4: Example of a Reflective Mosaic.

The Six Word Story

Finally, the fourth strategy for m-learning is the six word story. Story-telling has long been a way of oral teaching in many cultures. A teaching approach called the six word story asks learners to convey any course related concept in a six word sentence. For example, if the course topic is grief one profound message is told by the story, "The heaviest coffins are the smallest." For a course topic resistance to organizational change a sentence story could be, "Reluctantly he changed is to was."

This strategy has been used successfully in online courses as a summary activity or as an activity to open discussion of a challenging topic. It seems this strategy could be equally successful in mobile learning, in part because of the brevity of the text used to convey depth of insight. Twitter would be a natural fit for such a learning strategy. The following is an example of a six word story written by a nurse to demonstrate the grief faced by a teenager dancer who lost a leg to an osteosarcoma - "Broken-hearted, ballet shoes come in pairs."

Conclusion

This project is in progress, so formal evaluation of success is not yet known. Although the adapted learning activities has been conceptualized, they have yet to be formally studied with mobile learners.

This will be the next stage of this project. There are many possible applications of these, and other, arts-based instructional strategies in mobile learning. Most of these activities use minimal text and are created to encourage sharing with class members and collaborative learning which is facilitated by mobile milieu. The potential for arts-based instructional strategies to be powerful teaching tools in mobile courses is encouraging.

Online learners, including those who use mobile devises as their "classrooms", are potentially experiencing the same feelings of social isolation as experienced by all students who study at a distance. The CoI model (Garrison et al., 1999), SITE model (Janzen et al., 2012b), and SDT (Vygotsky, 1978) all lead educators to the conclusion that social interaction is an integral element in successful learning. Instructional strategies that aim to help learners feel that sense that they are part of a community of learners, and that focus on social—emotional as well as cognitive learning outcomes, are essential to success with distance learning. Arts-based teaching approaches introduce the human element to the learning milieu even if the learning takes place at a distance. The small screen of the mobile device requires that all instructional approaches be adapted to work well on the limited viewing space of these devices. The four strategies proposal and demonstrated in this paper may be excellent approaches that educators can use to help create learner success in this increasing common teaching space of m-learning.

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