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Developing Critical Reflective Online Communities by Empowering Student Voice

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Abstract

This qualitative study examines the voices and learning experiences of students in online synchronous graduate courses by examining the role that student voice plays in developing authentic online communities. Transformational digital learning regards student voices as central to the process of learning in community, not extraneous to it. Effective online courses must be designed to allow constructivist opportunities for students to contextualize and integrate knowledge as well. With the wide variety and increasing landscape of new and innovative digital means of expressing concepts, placing students at the centre of the process is a digital affordance that holds the potential to engage students more fully.

The authors detail an analysis of students' digital artifacts created during two 12-week graduate courses entitled "Critical and Reflective Practice in Education". Each course was delivered through synchronous weekly Adobe Connect sessions. These artifacts or "Digital Moments" are used as evidence of the quality of the students' learning experiences, and a cognitive map of their challenges and successes. Students express powerful voices about their individual experiences. This paper articulates the process of developing a critically reflective online learning space, and examines how teachers can successfully chronicle students' voices and experiences through their digitally created artifacts.

Keywords: student voices, online, digital artifacts, reflective practice, learning community, pedagogy, transformative

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Introduction

With online education becoming an integral part of academic institutions and corporations worldwide, support for e-learning endeavors can be critical to the growth and development of an organization, thus making educators who are skilled in the complexities of e-learning a valuable commodity. It is clear that the world has become an information age where digital skills are considered essential to living, working and learning. 'Back to basics' now means empowering students with the confidence, competence and skills to manage, analyse and filter information, but also to create, develop and connect new information that solves pressing problems. It is essential in this powerful new learning world that pedagogy is twofold; we must support the development of students' digital skills to navigate and critically examine data in the information age, but we are also bound to nurture the personal and collaborative skills that students require to live and work in digital communities.

Anderson (2008) in proposing a theory of online learning, argues that online learning should be considered as a subset of learning in general, where the goal is to design a quality learning experience for students. He proposes that the quality of a learning experience is dependent upon four areas: a focus on the learner, on knowledge, on assessment, and on the development of a collaborative community (Anderson, 2008). We concur but extend this to argue that, even in an online environment which is centered on student learning, the pedagogy is a significant factor contributing to the quality of the student experience. Others such as Anderson, Cameron and Sutton (2012) agree that giving students the tools for digital creation is not enough. We argue that pedagogy must change and embrace technology in order to engage, educate and empower the students.

Societal dependence on technology in all aspects of life has altered what it means to be human as mobile technology becomes more ubiquitous and user-friendly. Chan et al. (2006) in their omnibus discourse on m-technologies point out that digital learning has become seamless in the lives of many learners. They suggest that seamless digital learning has its roots in social learning, meaning that we can take into account what we know about collaboration and communities of practice and integrate this into a new schema on learning (Chan et al., 2006). In the digital world of online teaching, this translates to altering what it means to teach and learn. In essence, then, this research re-examines the pedagogies of this brave new world through the students' voices and challenges higher education instructors to attend specifically to student voices when they design their online communities.

Theoretical Framework

There are three elements to the theoretical framework that serves as a foundation for this work. First, the notion of *critical reflection* is key to human learning and development. Higgins (2011) connects reflection and learning, defining reflection in the following way:

> [A] representation of human consciousness. Reflection as process or act refers to the means by which the human mind has knowing of itself and its thinking. Such a process is deeply embedded in the continuous relationships between action and reflection. (p. 583)

Historical notions of *reflection-in-action* (Schön, 1987; 1993) are reviewed as well as recent thinking by Kotzee (2012) that indicates that Schön's pivotal and important work may have neglected the social aspects of reflection. Greenwood (1993) in exploring nurses' learning also expands on Schön's (1987) conception of reflection to discuss concepts of "reflection-before-action" (p. 1186), demonstrating that reflection and action interact continuously to promote

learning. Other authors concur that there may be flaws in Schön's concept, because "he does not take account of the importance of forethought, or the need for planning" (Thompson & Pascal, 2012, p. 316). Reflecting back on what has taken place, which Schon (1987) terms the Monday morning quarterback, (p. 26) is another a significant form of learning. Cranton and King (2003) argue that critical questioning and reflection are at the heart of transformative learning.

A second pillar used for this research is the concept of *personalized learning*, which allows adult learners to constructively design their own learning journey in a continuous process of meaning-making. In the software used for their online learning, the instructors have the option of promoting students from participants to hosts which allows students to have more ownership of the screen. Allowing the students to share files, images and videos on screen allowed them to show different sides of their personalities to the class. For example, classes began with an activity called Digital Moments where students shared an image or video clip of their life. The activity was voluntary, but students shared widely about themselves.

Students express their own voices by experiencing and sharing critical incidents, digital moments and stories with others. It is these types of personal interactions between colleagues where critical incidents promote reflection and learning, which Griffin (2003) defines as the kind of moments that make you stop and rethink your philosophy. This personalized learning environment can be studied through qualitative narrative and arts-based inquiry (Barone & Eisner, 1997; Connelly & Clandinin, 1990; Beatty, 1995). Eisner (1998) states that "There is no body of codified procedures that will tell someone how to produce a perceptive, insightful, or illuminating study of the educational world. Unfortunately, or fortunately, in qualitative matters cookbooks ensure nothing" (p. 69). To encourage the significance of an event, qualitative

research moves the experience from digital storytelling to an object of reflection. In doing so, the qualitative narrative acquires educational meaning and purpose.

Merriam (1998) argues that the products of a qualitative research study are richly descriptive. The students' individual digital stories as expressed through the artifacts they create in this study are a critical part of this research and are the study's data. Teaching and learning in the classroom are dynamic; they do not exist in a vacuum, or in a sterile environment. Thus, we argue that the sharing of these student voices and artifacts are measures of their evolution as learners. Ultimately, every learning community rests on its ability to create a collective story that supports, nourishes, and respects all the individual members. It is through the telling and retelling of that collective story, both individually and institutionally, that a sense of collaboration can grow. As students reflect on their individual critical incidents with colleagues and peers, their authentic voices recount their experiences to the group and collaborative learning is promoted. Mezirow (1990) defines this as critical reflection in reference to fostering this type of thinking in adulthood, stating that critical reflection can help to challenge the validity of understandings from our prior learning (Mezirow, 1990). Both Griffin (2003) and Mezirow (1990) acknowledge the strong influence that prior experiences have on the development of learners and their philosophy of education. They concur that learning is fostered when adults are encouraged to reflect on their philosophy and examine their practice through the lens of prior experience and make this learning tacit.

The third pillar of the theoretical framework involves the development of *digital community*. To develop the student voice fully within online space, teachers need to relinquish some control, enabling students to have teacher privileges in the online setting where they can own the screen space collectively. Flavin (2012) reviews research on e-learning in higher

education in the U.S., Ireland, and the UK and concludes that the use of digital technologies has

been found to duplicate existing pedagogies in higher education rather than transforming them.

He describes the situation where a technology may be more familiar to the student than the

instructor as a "disruptive technology" (p. 103). He states, "When digital technologies are

brought into the classroom setting, the lecturer may have to relinquish some of their authority,

thus impacting on the 'rules' and 'division of labour' nodes in order to enable enhanced

learning" (Flavin, 2012, p. 104).

Cochrane (2012) describes the transformational aspect of online learning as a

reconceptualization of what it means to teach and learn within social constructivist paradigms,

both for the lecturers and the students. He argues that the features of a successful virtual learning

environment include:

1) Pedagogical integration of technology into the course and assessment;
2) Lecturer modelling of the pedagogical use of the tools,
3) Creating a supportive learning community, and
4) Creating sustained interaction that explicitly scaffolds the development of ontological shifts. (Cochrane, 2012, p. 125)

In summary, then, learning is supported by *reflection* (Schön, 1987) and the recall of

critical incidents and reflections about these incidents can form a rich source of learning for

adult learners (Griffin, 2003; Mezirow, 1990). Storytelling provides both a rich form of

description (Merriam, 2008) and qualitative data (Eisner,1998). The use of technology does not

necessarily mean that the reflection on the experience or the pedagogy will be transformative

(Flavin, 2012) but students and instructors may use technology in ways that prompt shifts in

understanding, deeper reflection and transformative learning (Cochrane, 2012; Cranton & King,

2003). We theorize that the presence of elements of reflection based on stories told and artifacts

shared through the affordances of digital technology can result in transformative forms of

learning. In this research study, we seek the evidence to confirm or modify this proposal (See Chart 1: Elements of online learning that contribute to transformative learning.).

Based on the three foundations of this theoretical framework, research was designed to respond to the question, "What evidence can be found to connect pedagogies employed in an online course to the indicators of the development of transformative forms of learning?" The methodology of this research study is outlined next.

Methodology

Ethics approval was obtained to study Digital Moments (artifacts) and their role in the development of graduate students' voices in their online community. All university protocols and consent forms to study the students' digital artifacts were obtained. Two researchers each taught the same graduate-level course focused on reflective practice in educational settings during separate terms with approximately 50 students.

Data consisted of descriptions and presentations of the students' critical incidents and other assignments from the class. The researchers examined all of the artifacts provided and coded them blindly. The key themes of student voice, narrative story, and their contribution to the individual's growth and the development of the online community emerged.
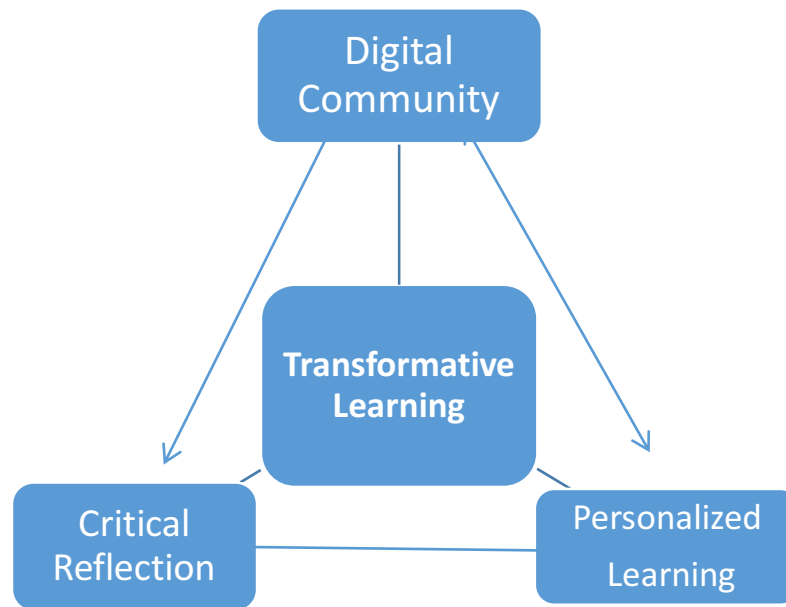
Chart 1. Elements of online learning that contribute to transformative learning

Data

Data were collected via online chats and synchronous online classes were recorded for review. Recordings were kept on a secure server located at the university. Audio and text data were used to analyze how students' digital artifacts were reflected in their conversations, telling of their personal and professional stories and their interactions with peers. Further, artifacts were examined in terms of the quality of their contribution to their online community. Students were asked to maintain weekly comments in Blackboard chat rooms and use this as a journal format to record their observations about their online community. A summary of sample student comments below demonstrates a cross-section of the data collected.

This was my last course of my degree and I wish I had taken this reflective course earlier in the program so I understood how important it is to reflect with colleagues.
I loved sharing my story each week.
Investing that time up front doing Digital Moments really helped us build our community.
I really took time to select my DM each week and looked forward to hearing others' comments.

This helped me to know how much our outside lives, kids, family responsibilities affect our concentration and focus as adult learners.
I felt I really got to know people in this course.
I have had some of these same students in other classes but I didn't even know their names so it really showed me how well this works to build relationships in online classes.
So much more personal than a MOOC I took last year.
I started using Digital Moments with my grade 5 class on smart board and they love it. It helps me know where the kids are at in an artistic way so they don't have to name their feelings, they can show me. That helps some of my needy students to participate.
I learned a lot about how important it is to have a place in class, to be listened to and to support other people.
I am an artist and I loved the way we could use paintings as our DMs.
It was my first online class and I didn't think I would get to know anyone but I really did, especially in breakout rooms as I was more comfortable talking in the small group.
This type of learning really suits my lifestyle and being a host in Adobe made us all feel responsible for the class.
There was a lot more participation with peers in this class which I enjoyed rather than listening to a lecture.
We started to connect outside class and I still tweet or Facebook some of my colleagues.
I love that Adobe Connect gives me the opportunity to connect with others and to share our thoughts and personal experiences in a safe and open environment. This makes it easier for me to share my thoughts without the fear of being judged or ridiculed as everyone is going through this learning process with me and sharing in the same struggles. With this type of environment I feel more comfortable and I am able to understand differences of opinion much more easily
Being a part of a learning community where students feel safe to take risks and share their thinking is paramount to my personal success and satisfaction as a student.

Chart 2. Sample Student Comments

Discussion of Themes

Personalization of Learning Environment

The students' comments in class indicate that, in general, they seek learning that is

personalized. They want to choose how to consume their learning as well as how they will share

it. They indicate that, for them, it is also important that the learning is purposeful. For example,

just the requirement that students participate fully in the online course using their cameras and

their microphones to contribute provides the message to them that you are honouring their voices.

The students spoke about the importance of using a flipped classroom model (Mazur, 2009) so that they could learn the materials in advance of class by working at an individual pace for the preparation. Several students commented that this pedagogical model gave students more responsibility and ownership of their learning. One student commented that the flipped classroom caused her to be more critical and reflective of the reading because she was not influenced by the view of the instructor telling her what was important. Instead, she had to work that out for herself.

Students also indicated that they felt that technology was helping them to personalize their learning. For example, allowing multi-media forms of presenting their assignments signaled to the students that they could personalize the evidence of their learning and it would allow them to work to their strengths. One student commented that just asking the students to choose a cartoon on a concept and share it with the class allowed students to contribute and build on each other's ideas.

One critical component that emerged was the need for students to *own* the digital learning environment. There were at least a few students every class who volunteered digital moments and stories about their week to the class. Through their shared images, cartoons, and critical incident stories, the class was introduced to the students' work sites, their children, partners, pets, and hobbies. In doing so, they became what the students described as "multi-faceted" people to each other. Another student commented that this activity "honoured our voices." They indicated that it also gave them an opportunity to participate outside of the system of evaluation since the

activity was voluntary. Through this process, they began to see that everyone participating in graduate learning has multiple competing interests, priorities and identities.

By allowing for artistic and creative modes of digital play, and starting each class by sharing Digital Moments to indicate readiness for learning, it became the students who co-designed the learning environment with the instructor. Blurring boundaries between the personal and professional space, while protecting the safety of all participants, allowed students to personalize their learning space both individually and as a collective. One student sums the experience of the digital moment activity nicely, stating,

> In this course, I was introduced to digital moments where students in the class took
> turns sharing a digital photo that was significant to them during the synchronous
> session. This immediately made me feel more connected to the individuals who shared
> their digital moments. When I shared my digital moment I felt valued by my class,
> which in turn made me feel more comfortable as a learner in the class community.

Digital Technology

The students' comments about their class indicate that they appreciate the affordances of online learning to allow them to work at their own pace. Unbound from the requirement to be physically present, students comment that synchronous, online learning meets their needs as busy adults in a practical sense. The students' comments move beyond the practical, however. One student commented that online learning allowed him to recognize that he had become dependent as a learner and needed to develop his independent learning skills. Another commented that being immersed in the online environment provides significant experiential learning. Initially some students indicated that they find the simultaneous nature of the video, audio and texting

somewhat overwhelming but realized that they would become more accustomed to the technology with increased exposure.

Digital learning opens up spaces – students indicated that they appreciated opportunities to build knowledge in presentations and wiki spaces. By allowing students to create digital artifacts that represented their learning, an equitable and open adult learning space emerged. Other learning spaces were technology-enabled as students indicated that they liked the use of an LMS so that they could upload curriculum content at their own pace. Some commented that they liked the affordance of a discussion forum so that they could problem-solve together online. One student commented that the online blog site allowed students to try out ideas on their peers before they spoke them in front of the full class. They also indicated that they liked receiving peer feedback online.

Community Centered: Sharing Critical Incidents as a Foundation for Transformative Learning

By sharing digital artifacts in small breakout rooms in Adobe connect, students decided what were the critical incidents from their work week, family life or their class that they wished to share through artistic means. These "digital moments" became the launching point for integrating their learning, and making meaning. We believe this can be built into the instructional design by providing ample opportunities for students to build positive relationships with each other and have open discussions. Thus learning may emerge and can be defined as "the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation and action" (Mezirow, 1990, p. 1). By telling their stories and expressing voices, adult learners collaborate and relate in community in very holistic ways.

Student artifacts and chat room comments indicated the key importance of social networking in class. No longer were students in an isolated individual environment like many had experienced in other distance education classes. They felt connected to and accountable to the learning community. In much of our day to day lives, it is "clear how integral the social dimension is to so many of the human actions we take for granted" (Kotzee, 2012, p. 9). It is also worthwhile to note that after the course had completed, several of the graduate students, themselves employed as teachers, continued to journal with the professor and began to use the "digital moment" strategy in their own public school classes.

Conclusion

Mezirow (1990) was an early advocate for the importance of critical reflection in developing transformative learning in adults. More recent authors (e.g., Cranton & King, 2003; Merriam, 2008) agree that adult learners can experience transformation in their learning and that adults experience transformative learning as "profound physical and psychological change" (Baumgartner, 2001, p. 15,). Students encouraged and challenged one another, and they took personal interest in contributing to the community because they had shared part of their adult narratives. There exists, as Higgins (2011) believes, a significant link between this kind of reflection and learning. Davis (2009) realizes that our pedagogy must change, that it isn't enough to simply add technology on to our already existing practices; we must infuse it throughout, just as it is fully integrated into the daily experiences of adolescents. She goes on to say that, "Teaching with technology is not just about how to use the hardware and the software, but is also very much about people, processes and a range of different interactions" (p. 149).

It is the authors' conviction that including the human element in cyberspace is not only possible, but should be essential, something that can be accomplished through the building of

personal professional relationships in online community, as well as the creation of digital

artifacts to allow creative expression of student voice. It is also important to acknowledge that

this type of critical reflective practice cannot be forced, but it can emerge in a safe and engaging

online classroom environment. We acknowledge Hobb's (2007) caution that,

> many course providers in a variety of fields have chosen to include a required
>
> reflective practice assignment for purposes of instilling a spirit of professional
>
> development. However the very notion of forced and evaluated self-exploration raises
>
> certain moral and practical issues. (Hobbs, 2007, p. 405).

It is our argument that when adult students are given the ability to express their voice in

class through digital means, they become empowered to own the classroom, reflect individually

and collaboratively, and create ideal digital learning spaces that work best to meet their needs.

Building communities of practice involves shifting roles of learners and teachers, opening

ourselves to what Ellis and Bochner refer to as "heartful autoethnography" (1999). These

findings, supported through class observation, group activities and the deployment of online

tools such as chat rooms, discussion boards, and breakout rooms allow for the facilitation of

large and small group discussions, thus providing the instructor with an overview of all that is

happening in the virtual class. Our findings remind us of Vettraino's (2010) admonition that

"Education is tied up so tightly in its own web of red tape and bureaucracy that real learning, the

rich and deep learning that needs to be there often, struggles hard to escape" (p. 77). By

empowering adult learners to find, and express their voices through the creation and sharing of

artistic and original digital artifacts, educators can develop the kinds of digital spaces wherein

richer learning can occur.

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