Empowering Knowledge-Building Pedagogy in Online Environments: Creating Digital Moments to Transform Practice:

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Abstract: The purpose of this paper is to examine a specific online pedagogical tool, "Digital Moments" that can be an effective strategy for building online communities in a knowledge building environment. While the paper will examine the specific techniques and teaching methodologies that enabled the authors to create authentic online learning experiences in undergraduate and graduate courses, it also analyses how and why this strategy moves beyond simple constructivist thinking to the complexities of teaching in the digital world. Knowledge building in online environments requires students to take risks, try new digital tools, and find the modalities that work best to express the new knowledge they are creating. This pedagogical approach views students as more than consumers of technology, but creators of new and innovative digital means of expressing concepts. Using both synchronous and asynchronous methodologies, the authors examined the highs and lows of translating meaningful face to face practice to the online environment. The paper examines teaching strategies used in a six week online graduate course using Adobe connect, Blackboard LMS and synchronous weekly meetings. Through the use of unique strategies such as "digital moments" and embracing creative thought, an authentic, constructivist community was created. The authors' journey to developing this authenticity, their online pedagogical style and an innovative, safe learning community has been chronicled using narrative qualitative inquiry in this paper. The writers' use of digital moments empowers students to create and have ownership of their own online community. This paper articulates their journey into the abyss of digitizing themselves as teachers; it examines the specific techniques used for best practice in online learning, while simultaneously celebrating the splash of colour that is essential to brighten digital learning environments.

Keywords: Online pedagogy; empowerment; knowledge-building communities, authentic practice

1. Introduction

In recent years the popularity of online education has increased significantly. This is in part due to its accommodation for anywhere, anytime learning, but it is also owing to a greater selection of high quality courses, as well as the emergence of more engaging learning management applications. With online education becoming an integral part of academic institutions and corporations worldwide, support for such endeavors can be critical to the growth and development of an organization, thus making educators who are well versed in the complexities of e-learning a valuable commodity. Although the growth of online learning is quite substantial, there are still many who believe that electronic courses are inferior to those that offer face to face contact. This endemic belief can stem from an appalling experience with online learning or simply because it is a non-traditional format that for some may invoke fear, anxiety or even complete disdain for that which is different.

It is clear that the world of 21C learners has become an information age where digital skills are considered essential. '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 social problems. It is essential in this powerful new learning world that we make our pedagogy two fold; we must teach the digital skills to cope and manoeuvre in this world, but we are also bound to teach the ethical parameters within which students live and work digitally. Creators of new knowledge must do so with the awareness that they are still part of a community, responsible to, and members of, that community. Thus, the pedagogical strategy of "Digital Moments" allows students and teachers to connect on a human level, while also embedding their learning in the technology that surrounds them.

Scardamalia and Bereiter (2006) state that we need pedagogical strategies that aim to

refashion education in a fundamental way, so that it becomes a coherent effort to initiate students into a knowledge creating culture. In this context, the Internet becomes more than a desktop library and a rapid mail-delivery system. It becomes the first realistic means for students to connect with civilization-wide knowledge building and to make their classroom part of it. (p, 98)

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By continuing to prioritize the relationship-building aspect of online learning, sharing digital moments creates a safe online environment for students to use imagination and creativity to express new knowledge. Placing high value in the learning community on the notion that students and instructors develop creative authentic work is a key part of empowering them to learn; it also allows them to take these strategies forward to their own professional environments and social contexts.

Knowledge building pedagogy is based on the premise that authentic creative knowledge work can take place in school classrooms, knowledge work that does not merely emulate the work of mature scholars or designers but that substantively advances the state of knowledge in the classroom community and situates it within the larger societal knowledge building effort. (Scardamalia & Bereiter, 2006, p. 99)

What follows is a narrative exploration of the writers' journey through teaching an online course, and the queries, struggles and victories that ensued along the way. Far from being separate from the digital environment, this paper reveals that our humanity remains front and centre amidst the online world. We are neither married to the technology nor divorced from it, but we emerge from it changed as teachers and learners. This story demonstrates also, that when teacher becomes learner, students find the courage to express themselves in a myriad of ways, including the powerful use of "digital moments". Authentic practice emerges; students immerse themselves in the digital tools and become the actors who choose which tools are best to guide the learning process.

2. Rationale of the study

In a digital world, technophiles often crave precision and logical rational answers. But our humanity can be both inconvenient and messy; unlike computers we are not often fixed with re-booting. This human – machine interface requires us to acknowledge that human stories tell a broader picture of how the digital journey affects and changes us. While this method does not generate precise, reproducible results, social scientists can accept that narrative accounts of individual case studies are valuable sources of data (Merriam, 1998). Story-telling casts the learner as the heroic protagonist who creates and re-creates the meaning of learning as he/she goes. Teaching and learning do not exist in a vacuum or in a sterile digital environment devoid of human emotion. Thus, the sharing of these stories through digital moments, along with their raw feelings and sentiments, may be the best measure of the narrators' evolution as digital learners.

Qualitative research approaches based on narrative methodology and story-telling are effective means through which theoretical constructs such as digital learning environments and adult education can be observed. Several authors, (Schon, 1987; Kilbourn, 1999; Eisner, 1998; Hunt 1987) discuss various facets of using these qualitative research methods to assess learning from the perspective of stories told by the self. A common thread among these authors is the knowledge of self as a professional practitioner through reflection on learning.

Literature on narrative study reveals that this kind of writing is an appropriate method to make connections that transform our knowledge as teachers. It is by examining the stories of individual teachers in the context of their environments, digital or otherwise, that we can gain insight into the professional expertise of teachers. Connelly and Clandinin (1990) state that "the central value of narrative inquiry is its quality as subject matter. Narrative and life go together and so the principal attraction of narrative as a method is its capacity to render life experiences, both personal and social, in relevant and meaningful ways" (p. 10). Bullough & Pinnegar (2001) state that "writing about teacher education practice may be best expressed in story form, where linearity gives way to a different sense of time, where emotion drives action" (p. 18). As such, the teaching strategy of digital moments allows the emotion to drive the learning and puts the students squarely at the centre of the process. Ultimately, the critical question of how pedagogy is transformed to an online learning environment is an evolving story which can be brought forward into a public discourse through sharing of digital moments.

Learning that occurs in digital contexts occurs in a world where information is rapidly evolving, where change is a constant, and the skill of analysing new data is essential. Recent work indicates that online learning, online communities and factors affecting participation are under constant review. (Cacciamari, Cesarini, Martini, Ferrini, & Fujita, 2013; Wegener & Leimeister, 2012; Griffin, McGaw & Care, 2012; Wang, 2012) This parallels what Schon (1987) historically refers to as learning to design in new contexts. Students in 21C digital environments must learn to parallel the process of what artists, designers, and professionals do when

approaching new and uncertain situations. Teaching students to think more artistically and creatively in a digital environment can help to prepare them and increase their expertise regardless of the professional environment they return to once completing the online graduate course. "Inherent in the practice of the professionals we recognize as unusually competent is a core of artistry" (Schon, 1987, p. 13). Thus, the rationale for using digital moments in online pedagogy is well grounded in the work of several authors who study the development of expertise (Bereiter & Scardamalia, 1993, Schon, 1987, Peters & Waterman, 2004).

3. Methodology

This project occurred in fourphases and was used to test the effectiveness of using "digital moments" as a teaching strategy to create authentic online communities. The challenge of creating an online community given a compressed timeline during a short spring term and the brief synchronous amount of time in class was daunting. Each week students and instructors submitted and shared a "digital moment" through pods in adobe connect. These digital moments could represent an emotion, a moment from their week, a quotation, youtube clip or art work. While the technique was simple, it was an extremely effective way to create online community. Digital moments allowed the participants and the instructors to share their stories, to bring their humanity to the learning environment in a safe and respectful way. Each person sharing a digital moment was telling their narrative, a method of educational qualitative inquiry that has a long history in educational research.

Phase 1 was a pilot project to try this new digital teaching strategy and it occurred over one term of teaching a graduate online course entitled "Authentic Assessment". Participants in the pilot phase were 21 graduate students and the instructor who was an Assistant Professor in the Faculty of Education. Classes met three times a week for three hours over a four week period in the summer term. Anecdotal reflections from students recorded in Blackboard chat rooms, audio recordings of Adobe classes, and journal notes from the professor were used to reframe and improve the strategy.

Phase 2 involved using the same digital moment teaching strategy in an undergraduate course entitled "Psychological Foundations and Digital Technology – Adult Education Focus". Participants in phase 2 were 26 undergraduate students in a Bachelor of Adult Ed Digital Technology degree in their 3rd year, the instructor, and a tutorial assistant. Students viewed two hours of video podcasts created by the instructor each week, prior to meeting in Adobe connect for tutorial for one hour per week over a twelve week period. Anecdotal reflections from students recorded in Blackboard chat rooms, audio recordings of Adobe classes and journal notes from the professor and tutorial assistant were used to reframe and adjust the strategy.

Phase 3 involved re-visiting the use of the "digital moment" strategy in a second term of the graduate course "Authentic Assessment". Participants in phase 3 were 23 graduate students and the professor. Classes met for three hours per session twice a week over a six week period in the spring term. Anecdotal reflections from students recorded in Blackboard chat rooms, audio recordings of Adobe classes, and journal notes from the professor were used to analyze the effectiveness of the strategy in developing a sense of online community. Student participants in the study gave informed consent and were given permission to withdraw from the project at any time. Digital moments were collected by a tutorial assistant and kept in an e-folder for future reference.

Phase 4 involved qualitative unstructured interviews of students in the grad class to find out how they had taken the strategy of "digital moments" forward in their own professional environments. The students' interviews were recorded and transcribed, analysed and coded for themes and reviewed. Reports of how this pedagogical strategy affected their own professional practice, their ability to create new knowledge and to foster knowledge building professional environments were included in the findings.

This paper uses qualitative methods to chronicle the journey of 23 students in Phase 3 and Phase 4 of the project, the lead professor and tutorial assistant through their six week online graduate course.

4. Data collection

Data were collected via online chats and classes in adobe connect were recorded for review. Recordings were kept on a secure server located at the university. Audio and text data were used to analyze how well the strategy worked in terms of students' perceptions of 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. It is also worthwhile to note that after the experiment 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.

5. Sample comments

It's so emotional

At the beginning I was so nervous and kind of cynical, so I thought "ok here we go" but now I really look forward to finding my own digital moment for the week and seeing everyone else's

I loved it!

I never thought I would get to know people online so easily

Doing this every week makes me actually ask myself how I am doing

I like guessing who puts what in their Digital Moment

I just started using this strategy with my own class and they loved it! Grades 5-6 students really opened up and I used it on the smart-board

This is a great way to get students to express how they feel without words

I think it helps to decrease the kind of stereotyping that you can get when you meet people face to face

It's really weird finally meeting classmates face to face and feeling like you already know them super well

When I used it with my own class it really helped me as a teacher to track where the kids were at

It's a safe way to express how you are feeling inside, sometimes I think technology is less personal but this was really personal

I actually shared with my peers, which I usually don't do in face to face settings

I found it interesting that you got to know people's sense of humour, without any real cues like you would get in a f2f environment, like body language

My friends reached out to me on weeks when I was struggling

It levelled the field for me as the teachers did it too, so we could see who they were as people, which made me want to contribute more

Really valuable! Best course I've taken in this degree

One week my digital moment was about a family member who had died, but she really had inspired me to go back to school so, it was really good to share it with the group

I am amazed at how well I got to know my colleagues in this class; I've had some awful online experiences and this was a refreshing change

6. Findings

Several key elements for building online community emerged as the study progressed. 1. Building relationships, 2. Risk-taking and valuing mistakes, and 3. Sharing our own narrative stories through weekly Digital Moments. The interplay of these first three factors was critical to understanding the lenses we each brought to the digital environment. The online community developed easily by sharing our humanity and vulnerability through weekly sharing of our Digital Moments. Further to this, interviews with the students to ascertain how their own learning and professional expertise had evolved demonstrated additional important themes. Among these, were; 4. Empowerment 5.Finding voice, and 6.Increased confidence and competence both using technology which spawned a greater willingness to experiment with technology in their own professional practice.

6.1 Building relationships

During the course of our six weeks of classes together, the online chat room became a place where students could share their personal stories through digital moments. This is what Connelly and Clandinin (1995) refer to as "collaborative story-telling: in our story telling, the stories of our participants merged with our own to create new stories, ones that we have labelled collaborative stories; a mutually constructed story created out of the lives of both researcher and participant" (p. 12). The value of story-telling enabled us to learn more about each other. Sticking to "the content" was important, but straying to the personal became equally important to the learning experience. The affordances of Adobe allowing the class lecture, presentation and simultaneous live chat mirrored the informal learning that occurs in a face-to-face environment. In fact, it was

ameliorated by the fact that the instructor was privy to all of the chat, so while it was challenging to attend to both, the formal and informal learning portions were seamlessly integrated. In a face-to-face situation, this may not have occurred as the instructor would not hear all side conversations. During the course, students became new parents, started new jobs, and shared stories of travel and what presented in their daily lives despite being in locations around the world. We said simultaneously good morning and good night to students in various time zones. And thus, through the use of digital moments, we shared our personal and emotional lives; real relationships developed. Beatty (1995) refers to this as the construction of personal professional practical knowledge. Each week a highlight of the class was having students arrive with enthusiasm to find out which digital moment would be shared by peers. Students new to the online environment were assigned a "buddy" to help them with any specific questions they had. In addition, giving students Adobe "host" responsibilities increased their empowerment and the sense of trust in the group. The inevitable mistakes did occur, with files magically disappearing or reappearing, but over the term the classroom became their own. This sense of ownership over the learning environment was essential to students taking risks in presentations and assignments. Teachers in online environments should not underestimate the importance of investing in community building activities, much as they might do in a face-to face-setting; in the digital setting, this is a virtual, and mostly sedentary learning space, so keeping students in the 'mental ready position' is essential to keeping them engaged and on task.

6.2 Risk-taking and finding courage

Understanding and accepting the important roles of failure and mistakes are keys to developing a successful online pedagogy. Students arrive with a wide variety of backgrounds, not only in the course content but also in technological skills. Thus, the development of confidence in the value of our mistakes, and the expectation to make mistakes are important. As Schon reveals, we feel like failures "whenever learning a new competence requires unlearning deep-seated theories-in-use or whenever in situations of uncertainty feelings of vulnerability and 'knowing what to do'" evoke a failure response" (1987, p. 290). It is important to cultivate our errors as sources of important information and pivotal learning moments. As athletes and other high performers do, analyzing our errors can be an important touchstone from which we can move forward. If students "hold unrealistically high expectations for their performance, once they become aware of their error, they believe they should produce complete and perfect interventions. They see error as failures and a blow to self-esteem" (Schon, 1987, p. 291). Learning from mistakes is a pattern followed by the best performers across professions. As sport psychologist Terry Orlick attests, failure can be instructive more quickly and accurately than any other learning experience (2000). Here again, using digital moments creates a safe and supportive learning community within which risk-taking is encouraged resulting in significant personal growth and innovative thinking in students.

That being said, our tolerance of mistakes is directly related to our ability to maintain focus and enthusiasm for learning. Monitoring the energy and engagement of online learners can be key to their success. This may mean tailoring assignments to their current skill level, rather than assuming that all students will perform at the same level and in the same way. It also means allowing for creativity and ownership of assignments, so that students can choose to demonstrate what they know in the way that makes the most sense to them, using the technology that best fits their usage. This level of meta-teaching is not unique to the online environment, but it is essential, since one of the lessons that students should leave with is the ability to choose which technological tool best suits their purpose; they should be able to critically analyse which ones work best and why, and they should have the confidence to use peer support to learn new modalities that they had not tried before. Again, the importance of a learning community, based on human interactions and relationships, can provide a foundation from which mistakes are no longer feared, but celebrated. Innovations are not products, but points on a continuum within which students can operate flexibly, based on their level of online skills. In a world where our access to information is becoming overwhelming, a discerning student should be able to select wisely the tool that is appropriate to answer the questions they pose. This, again, puts the curious student in the driver's seat, reduces fear of errors, decreases perfectionistic tendencies to produce a "finished product" and emphasizes the advantages of working together through our inevitable stumbles and errors.

6.3 Finding humanity in digital moments

While the challenge of transforming oneself to an online pedagogue was daunting, certain shifts in my thinking and values had to occur. This dissonance was both cognitive and emotional, and is described by Whitehead

(1993) as a 'living contradiction'. Trying to mould old ways of teaching into an online format does not work; there was no quick translation, since the transmission of information is no longer enough for 'real' and meaningful teaching. Truly authentic and transformative teaching and learning required certain elements that could, and would emerge in the online class. Group work, activities, and getting to know one's students still occurred, they merely appeared differently. Ultimately, it was only upon using digital moments online through adobe connect that my pedagogical approach shifted, and I was able to create and observe the development of a rich online learning environment.

Becoming 'real' online was a journey fraught with highs and lows, like any good adventure. It is clear that digital classrooms can provide uniquely human learning experiences. The gaps that I had anticipated in getting to know students, creating relationships between students online and designing a safe environment for taking personal risks in learning were not as scary as previously thought. Prior to teaching in this environment, I believed that "authenticity in teaching" would be more difficult online. In some respects, it is, but in our unfolding global world, perhaps we need to use this venue for reaching out to learners across the world. The technology was a powerful tool, but the humanity in the classroom remained untouched as the real driver of the learning experience. It is important to remember that the teacher-learner relationship cannot be replaced, nor does it need to be replaced by high tech solutions. The two must be woven together in an authentic and meaningful way, with both parties deciding how, when and why to use online environments. Margery Williams' classic children's tale of the Velveteen Rabbit sums up this notion:

"What is real", asked the rabbit, "does it mean having things that buzz inside you and a stick out handle?" "Real isn't how you are made" said the skin horse, "it's a thing that happens to you. It doesn't happen all at once. You become. It takes a long long time. That's why it doesn't often happen to people who break easily, or have sharp edges or who have to be carefully kept. Generally, by the time you are real, most of your hair has been loved off, and your eyes drop out and you get loose in the joints and very shabby. But these things don't matter at all, because once you are real you can't be ugly, except to people who don't understand" (1991, p. 32).

A further addition to successful online pedagogy is the preservation of what can only be termed "gumption" (Pirsig, 1974; Atkinson & Claxton, 2000). Our enthusiasm for learning in a digital space must be nurtured and maintained. It is a level of energy in class that can be transformed for the benefit of both instructors and learners. However, it is important to maintain this quality when faced with the inevitable fact that, well, the technology does not always work. Pirsig states this succinctly:

Gumption is a reservoir of good spirits that can be added to or subtracted from; it's the result of the perception of Quality; a gumption trap consequently can be defined as anything that causes one to lose sight of Quality and thus lose one's gumption for what one is doing. Watch out for gumption desperation, in which you hurry up wildly in an effort to restore gumption by making up for lost time. It's time for that long break (1974, p. 276).

Monitoring the level of gumption is a key component of online teaching success. Because we generally lack the face-to-face interactions, some elements of body language that might indicate disengagement cannot be perceived. Thus, the instructor must continually keep an eye on the level of energy and take as many breaks as needed to keep everyone focused and fully engaged. Using digital moments levels the learning field, and can successfully help both teacher and learner to maintain enthusiasm and 'gumption'. While this implies a level of trust in our teaching instincts, Atkinson and Claxton concur that this "indefinable but desirable quality of gumption" (2000, p. 54) is essential to good online pedagogy.

6.4 Empowerment – An Artist's Adventure with Digital Technology

As a traveller, an artist and an educator I have worn many hats over the years, but none have been more poignant than in my role as a student of graduate studies. For some people academic scholarship comes as natural as breathing, while for others it is a task far more daunting. For me school was neither easy nor difficult or very much fun. In fact, for the most part academic life held very little appeal until I discovered a more creative model through which to learn. Though I have long been an advocate for artistic expression and creative learning, prior to beginning this course of study nothing had prepared me for the transformational changes that would eventually occur throughout my professional practice.

From the concept of constructivism to the relevance of authentic learning, it was ideas such as these that led to the unearthing of more innovative methods for teaching and learning. So it is through this lens as both an educator and a student that I was invited to revisit the past as I evaluated prior practices and merged current theories with differing beliefs. In this selective incubator for higher learning, communities of practice developed, friendships were made, and collaborative projects tackled. Though new to this style of online teaching, it appeared to emerge seamlessly integrated from its use in a physical space to that of a virtual one, which seemed ideally suited to multi-modal learners like myself. In this shared space of digital expression and personal empowerment the traditional role between teacher and student, which was once was so clearly defined, has now become less focussed and far more transient than ever before.

In this altered universe where a teacher takes on the role of learner and vice versa, a more level playing field will ultimately emerge, thereby offering students a less intimidating environment in which to learn. Furthermore, the allowance to apply our learning through modalities of our own choosing was a strategic move that inspired visual learners like myself to achieve deeper understanding, especially when there were difficult concepts to be undertaken. Likewise, the endorsement of alternative processes promoted more original work, encouraged greater creativity, and supported freedom of expression; all of which gave students the confidence to delve into unfamiliar territory and take ownership of their learning in ways that were meaningful to themselves. This sharing of expertise can be seen as empirical evidence that communities of practice and the human spirit are alive and well in the virtual classroom.

6.5 Finding Voice

Students in this graduate course entered the experience having been part of the traditional university environment, where prestige of the instructor was based on achievements within a competitive world. While this world of the past may have been research-focused and knowledge-building, students did not feel that it allowed them to be creators of their own knowledge experience. Because of what Schon (1987) refers to as the competitive nature of the university, it became difficult if not impossible, and certainly not desirable to make mistakes in the creation of new knowledge. "Universities tend to see tasks or problems through the lens of their own subjects and courses, academic provinces are also political territories and interdisciplinary projects are quickly politicized" (Schon, 1987, p. 310). Thus, students in this course found that the removal of the competitive framework, and the subsequent development of a collegial and collaborative environment allowed them to find their own voices. In particular, it allowed them to ask for help with new technologies as needed, to offer help without expectation or reward, and to develop their authentic relationships with others. The idea that each individual voice held wisdom and artistry appeared to be foreign to the university culture, where certain types of knowledge were more privileged than others. When technical rationality is not balanced with autonomy and authentic creative practice, students stop using their own voices and the learning environment becomes stunted. It reverts to a traditional one where power structures favour the teacher. This is not what occurred when using digital moments. Students found voice each week, expressed themselves safely and honestly, yet in a context that was appropriate for a graduate course.

6.6 Confidence and Competence – Transforming Professional Practice

This pedagogical strategy enabled students to develop greater confidence and competence when using new modes of digital technology and to take it forward to their own professional practice. By feeling they could ask each other and the instructor for help, students were situated at the centre of learning experience, creating their own knowledge, translating it forward into their own professional worlds. This willingness to ask for help did not stop at the end of the course, as students began to create their own communities outside the university via Facebook, Linked-in and Twitter. As an example, one public school teacher in the course began to use the digital moments strategy with her grade 5-6 students. Having seen the powerful sense of community and safety it created, she used the smart board and an anonymous weekly submission to have students develop their own digital moments. Each Friday at the students' request, she posted the class's digital moments. Comments from these young learners indicated that it gave them more confidence because they felt more ownership in their learning environment. The teacher was able to teach ethical principles about appropriate use of technology to these young learners and reported that she believed that using digital moments had enabled her to do this.

7. Discussion

Several features emerged as key components of a good online community. First, there is critical importance to developing relationships and a sense of trust. Second, it is essential to create a learning environment where both the instructor and learner are taking risks. Third, there is great importance to injecting a human element to each class, including humour, grace, and emotion. And finally, it is important to address students' preconceptions and fears of using new technology. This, in itself can be a barrier which needs to be overcome. Digital moments were an extraordinarily useful strategy for humanizing the digital learning space. This pedagogical strategy resulted in empowering students to create their own adventures with digital space, to find their voices as creators of knowledge and to use their connections with others to develop greater confidence and competence using the technology. Further to this, students were able to leave the graduate course and apply what they had learned beyond the confines of the university. This translation to professional practice is a testament to the power of this simple pedagogical tool. It also underlines that we cannot eliminate the human aspect when working in digital learning environments; in fact, it is even more important that people connect to one another in human ways so they do not become lost in the sea of information and technology that surrounds them.

The author's initiation into the world of e-learning began by transforming a face to face course in Authentic Assessment to that of a digital platform. As is the case in most programs of study the participants enter the class with differing backgrounds, experiences, and levels of expertise, but ultimately it is how the instructor addresses these differences that determines student outcomes. By using digital moments, the style of teaching emerged seamlessly integrated from its use in a physical space to that of a virtual one, which was well suited to multi-modal learners and effortlessly connected that which made us different.

Moreover, the author's use of icebreakers and the sharing of personal information were methods used to establish interaction, as well as initiating dialogue between members of the class. These activities were essential in building personal connections, encouraging students to adopt the role of mentor, and in becoming sources of inspiration for one another. As the course evolved these initial activities along with hosting privileges in Adobe connect fostered greater independence and gave students a sense of empowerment. By the same token, our acknowledgment that failure can be a highly instructive tool helped to minimize the burden on students who often see mistakes as a purely negative measure of their abilities.

It is the author's conviction that exploiting the human element in cyberspace is not only possible, but should be essential, something that can be accomplished through the exploration of relationship building exercises, as well as the utilization of assorted tools employed in building communities of practice. These findings, supported through 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.

8. Conclusion

The journey to developing an online pedagogical style has been chronicled in this paper. But the outcome of the struggle still must be student success. At the end of this course, students produced original work, combining their creative skills and unique talents with the appropriate piece of technology to demonstrate they had mastered the concepts. One student constructively used her life experiences in travelling, her photographic arts and her background in art to assemble a video which was truly inspiring. Her ability to use the technology as a vehicle through which she could express her learning, her way, is the best barometer of success a teacher can have. Another student, with seven years of teaching experience and new to the program, expressed distaste for and a lack of comfort using written text. He integrated the literature on the course to a video which is a model of alternative means of assessing students in digital environments. While a few of the students produced assignments with traditional modes (written work), the predominant feature was that once one student had done something original, the others wanted to learn how to do it. Students taught students; they taught their instructor. As a teacher, my barometers for a successful class in a face-toface environment were not that different than online: the creation of supportive meaningful learning experiences: human interaction and sharing of the vital emotional components of learning; valuing and cherishing our mistakes and the important learning that emerges therein: and finally, the best of all, wanting to come back for more.

Working and living in the digital landscape requires that we do more than just build knowledge that is measured, assessed and framed by what we currently know. It requires us to step into worlds as yet unknown; to create new knowledge, and to use that knowledge to begin to address some of the complex social problems that exist. Students in these courses began to realize the power of digital learning environments, but they also came to realize the power they had within themselves to manage, invent, and create learning that worked for them. Both individually and collectively, confidence and competence increased.

The new challenge is initiating the young into a culture devoted to advancing the frontiers of knowledge on all sides. At the deepest level, knowledge building can only succeed if teachers believe students are capable of it. This requires more than a belief that students can carry out actions similar to those in knowledge-creating organizations and disciplines. It requires a belief that students can deliberately create knowledge that is useful to their community. (Scardamalia & Bereiter, 2006, p. 118)

While technology is a wonderful tool, the use of digital moments can be an effective strategy to bring humanity to the online learning environment. One may conclude that the relationship between teacher and student is an important element in e-learning that cannot be easily replaced with high tech tools. By embracing this journey through the telling of our stories using digital moments, we share emotion and empathy; it serves to remind us that when working with technology or beginning something new one can feel both intense frustration as well as sheer exultation. Instructors must embrace these often strong emotions in themselves and their students with courage and conviction.

It is important to note that both co-authors experienced this teaching style as students with the lead author. Their inclusion in this paper is testament to the power of digital moments to create lasting relationships in online environments. They too are advocates for creative expression, multi-modal learning, and the inclusion of alternative forms of assessment. Besides the large body of research attesting to the merits of a more creative approach to learning, it also nurtures multiple intelligences and allows the more timid or those left behind to ultimately find their voice. Moreover, there are some things that just cannot be articulated through text, and words cannot always convey what you wish to say. So perhaps it is time to not only transform one's digital pedagogy, but to also transform academia's traditional shades of grey with a little splash of colour in every digital moment.

References

Atkinson, T. & Claxton, G. (2000). The Intuitive Practitioner: On the Value of Not Always Knowing What One is Doing. Philadelphia.PA: Buckingham Open University Press.

Beattie, M. (1995). Constructing Professional Knowledge in Teaching: A Narrative of Change and Development. New York, NY: Teachers College Press.

Beetham, H. & Sharpe, R. (2013) Rethinking Pedagogy for a Digital Age: Designing for 21C Learning. Routledge.

Bereiter, C. & Scardamalia, M. (1993). Surpassing Ourselves. Peru, IL: Open Court Publishing.

Bubb, T. E., McDonald, D., & Crawford, C. M. (2012). Meaningful Connections: "Going the Distance" in Distance Learning Through the Design and Generation of Community Building Online Learning Interactions. In H. Wang (Ed.), Interactivity in E-Learning: Case Studies and Frameworks (pp. 274-304). Hershey, PA: Information Science Reference. doi:10.4018/978-1-61350-441-3.ch013

Bullogh, R. & Pinnegar, S. (2001) Guidelines for quality in autobiographical forms of self-study research. Educational Researcher, 30(3), 13-21.

Cacciamari, S., Cesarini, D., Martini, F., Ferrini, T. & Fujita, N. (2013), Influence of participation, facilitation styles and metacognition reflection on knowledge building in online university courses. Computers and Education, 58(3) April 2012. 874-884.

Connelly. M. & Clandinin, J. (1990). Stories of experience and narrative inquiry. Educational Researcher, (June-July), 2-14. Chicago, IL: University of Chicago Press. Eisner, E. (1998). The Enlightened Eye: Qualitative Inquiry and the Enhancement of Educational Practice. Upper Saddle River, NJ: Prentice-Hall.

Griffin, P., McGaw, B., Care, E. (Eds.) 2012, Assessment and Teaching of 21st Century Skills Springer XVI

Hunt, D. (1987). Beginning with Ourselves. Cambridge, MA: Brookline Books.

Kilbourn, B. (1999). For the Love of Teaching. London, ON: Althouse Press.

Merriam, S. (1998). Qualitative Research and Case Study Applications in Education. San Francisco: CA: Jossey-Bass.

Orlick, T. (2000). In Pursuit of Excellence. Windsor, ON: Human Kinetics.

Peters, T. & Waterman, R. Jr. (2004). In Search of Excellence. New York, NY. Harper Books.

Pirsig, R. (1974). Zen and the Art of Motorcycle Maintenance. New York, NY: Bantam Books.

Scardamalia, M. & Bereiter, C. (2006). Knowledge building: Theory, pedagogy and technology. In K. Sawyer (Ed.) Cambridge Handbook of the Learning Sciences (97-118). New York: Cambridge University Press.

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- Schon, D. (1987). Educating the Reflective Practitioner. San Francisco, CA: Jossey:Bass.
- Wang, H. (2012). Interactivity in E-Learning: Case Studies and Frameworks (pp. 1-408). Hershey, PA: IGI Global. doi:10.4018/978-1-61350-441-3
- Wegener, R. & Leimeister, J.M. (2012) Virtual learning communities: success factors and challenges. International Journal of Technology and Enhanced Learning. (IJTEL) 4 (5/6) 383-397.
- Williams, M. (1991). The Classic Tale of the Velveteen Rabbit. Philadelphia, PA: Courage Books.
- Whitehead, J. (1993) The Growth of Educational Knowledge: Creating Your Own Living Educational Theories. Bournemouth, UK: Hyde Publications.