BUILDING COLLABORATIVE ONLINE COMMUNITIES THROUGH DIGITAL MOMENTS

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Abstract

This paper describes a pilot study of online graduate students’ responses to a pedagogical strategy for developing social presence in synchronous online graduate courses. This work is grounded in current research on the impact of social presence in the development of interactive, creative online communities. The article describes a teaching strategy for increasing student engagement through the use of creative and artistic expression, then measures the responses of 25 graduate students enrolled in masters level courses. Using individual share pods in Adobe, students uploaded Digital Moments, defined as digital artifacts that described from a personal or professional perspective the events of their previous week. This technique replicated a similar relationship-building process that often occurs at the beginning of face-to-face classes. Using Digital Moments as a way to build inclusion in two synchronous graduate courses, the authors describe how this teaching strategy increased student participation, developed student ownership of learning, and encouraged collaborative processes between participants. The development of greater social presence allowed class members to connect in ways that increased accountability to each other while developing collective ownership of, and responsibility for, the learning environment. This teaching strategy makes a significant contribution to digital pedagogy. Emerging themes included the importance of social relationships in learning, creative and artistic expressions of learning, teacher-learner-teacher role shifts, the valuing and devaluing of traditional and non-traditional representations of knowledge, and the barriers and challenges of implementing Digital Moments. While it is important to note that there as many differences in online courses as there are in f2f environments, it is clear that the human aspects of fundamentally good teaching and assessment remain untouched. This paper analyses and interprets the value of using Digital Moments through digital artifacts produced by students and Adobe Connect class recordings.

Keywords: Online Learning Communities, Social Presence, Digital Pedagogy.

1 INTRODUCTION

The purpose of this pilot study was to implement an arts-based community-building strategy in a digital online learning space called Digital Moments and to measure through a mixed methods approach the impact of this pedagogical strategy on social presence and student engagement in online graduate courses. The researchers used an online survey to garner student responses who were enrolled in two graduate courses over two semesters.

The theoretical framework used to analyze the use of Digital Moments and their role in creating engaging and productive learning communities is based on the role of creativity in an academic context [1], arts-based qualitative inquiry and pedagogy [2], and critical reflective practice [3] [4]. Davis [5] argues 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 individual students and teachers. She reiterates 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” ([5] p. 149). One of the significant challenges for online educators is to maintain student engagement and build social presence amongst a community of learners from different geographical and cultural spaces, who may never have the chance to meet face to face.

Keengwee and Kidd [6] and Coppola, Hiltz and Rotter [7] state that there are three faculty roles in online learning spaces, including cognitive, affective and managerial. The cognitive role is connected with the intellectual processes of learning, information storage, and thinking, while the affective role is influenced by the relationships between students, faculty, and the classroom environment. The managerial role relates to class and course management [8]. Developing and teaching online courses requires specific sets of skills that faculty must acquire in order to be successful in this new paradigm of learning and teaching [9]. Other authors [10] refer to the challenges instructors face when designing online learning experiences that challenge learners to develop deep and meaningful learning experiences. Further,
several authors speak to the role of building relationships through affective or social presence in online communities, and these “affective tasks comprise behavior related to influencing students’ relationships with the instructor and with other students in the virtual classroom environment.” ([7], p. 537)

In relation to the theoretical background and purpose of investigating *Digital Moments*, this project aims to measure the affective impact that this strategy has on the social presence in the online learning community.

1.1 **Purpose**

This paper examines a simple, yet powerful pedagogical strategy used in two graduate online courses to create engaging learning communities. The authors’ first goal was to implement a strategy that would replicate the relationship-building moments which naturally occur as students enter a face-to-face class before the structured learning begins. The second goal was to measure students’ responses to this community-building strategy through a 12 question online survey using a 7-point Likert scale, as well as semi-structured questions that allowed qualitative anecdotal responses. Each week students met synchronously in Adobe Connect. Classes of 20-25 students entered the virtual room to find individual share pods or personal virtual screens over which they each had control. Within their individual pod, each student uploaded a *Digital Moment*. The content of the pods could include a variety of pictures, quotes, colours, or links to describe in a single snapshot how the person was feeling, or events that had happened during the previous week. As the course progressed, students began to arrive earlier to class, in advance of start times and began to look forward to connecting with classmates and sharing their own *Digital Moments* with others. As a unique pedagogical strategy, qualities which one might not normally associate with traditional online learning emerged: empathy, humour, risk-taking, compassion and a shared sense of community. From a group of distinct individuals whose learning lenses were geographically and culturally diverse, evolved a close-knit community of learners where the playing field was levelled, and the traditional roles of teacher and learner became less perceptible.

2 **METHODOLOGY**

2.1 **Phase 1 Digital Moments Implementation**

This was a pilot project to implement a new digital teaching strategy, and it occurred over two terms of teaching two graduate online courses entitled “Authentic Assessment” and “Critical and Reflective Practice in Education.” The total number of individuals in both courses was 54, the total number surveyed was 47, and 25 students responded. Participants in the implementation phase were 54 graduate students, and the instructor was an Assistant Professor in the Faculty of Education. Classes met once a week for four hours over a twelve week period in the fall/winter terms. Anecdotal reflections from students recorded in Blackboard chat rooms, audio recordings of Adobe classes, and journal notes from the professor were used to provide additional qualitative data.

2.2 **Phase 2 Participants**

The total number of students enrolled in the two graduate courses was 54. Of these, a population of 47 students were sent an online survey that asked 12 questions with responses based on a Likert- 7 point scale (where 1=Strongly Disagree, 2=Disagree, 3=Somewhat Disagree, 4=Neutral, 5=Somewhat Agree, 6=Agree, and 7=Strongly Agree). Of the 47 students sent the survey, 25 responses were received which indicated a 53% response rate. Gender of participants was noted with a 1 or 2 (Female/Male), with 21 participants identifying as female and 4 identifying as male. Student participants in the study gave informed consent and were given permission to withdraw from the project at any time. Their participation in the research was not related to their academic grades in the class, and the research survey was designed and data collected by a second researcher who was not the course instructor.

2.3 **Data Analysis**

The Likert Scale survey, based on a Likert- 7 point scale where 1=Strongly Disagree, 2=Disagree, 3=Somewhat Disagree, 4=Neutral, 5=Somewhat Agree, 6=Agree, and 7=Strongly Agree. The 25 participants answered an online survey to provide responses for each of the 12 questions. Responses for each question were averaged numerically to result in an average score (1-7) for each of the twelve questions.
The two open-ended questions relating to benefits and challenges of Digital Moments were coded qualitatively and analyzed along with instructor field notes from classes to determine themes, and a word search of the responses was also performed for keywords “community,” “social presence” and “connections”.

3 RESULTS

The numerical average of responses to each of the 12 questions is indicated here, with 1 being correlated to a Strongly Disagree response and 7 being correlated with a Strongly Agree response. These average scores are reported in Table 1 below.

Table 1. Attitudes Toward the Use of Digital Moments (n=25).

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean (SD)</th>
<th>% Agree¹</th>
<th>% Disagree²</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt Digital Moments were conducted in a respectful way.</td>
<td>6.8 (0.4)</td>
<td>92%</td>
<td>0%</td>
</tr>
<tr>
<td>Digital Moments created a greater sense of community for me.</td>
<td>6.6 (0.7)</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>I felt safe when participating in Digital Moments.</td>
<td>6.6 (0.6)</td>
<td>96%</td>
<td>0%</td>
</tr>
<tr>
<td>The expectations of participating in Digital Moments were clear to me.</td>
<td>6.5 (0.8)</td>
<td>96%</td>
<td>0%</td>
</tr>
<tr>
<td>Digital Moments improved connections with my peers in class.</td>
<td>6.4 (0.9)</td>
<td>92%</td>
<td>0%</td>
</tr>
<tr>
<td>Using Digital Moments is an effective teaching strategy in online learning environments.</td>
<td>6.2 (1.3)</td>
<td>92%</td>
<td>4%</td>
</tr>
<tr>
<td>Digital Moments energized me at the start of the class.</td>
<td>5.9 (1.4)</td>
<td>88%</td>
<td>4%</td>
</tr>
<tr>
<td>Digital Moments made the class engaging for me.</td>
<td>5.8 (1.5)</td>
<td>84%</td>
<td>8%</td>
</tr>
<tr>
<td>Digital Moments supported my overall learning experience.</td>
<td>5.7 (1.4)</td>
<td>88%</td>
<td>8%</td>
</tr>
<tr>
<td>Digital Moments increased my motivation in class.</td>
<td>5.2 (1.7)</td>
<td>64%</td>
<td>12%</td>
</tr>
<tr>
<td>Digital Moments encouraged me to take risks in my learning.</td>
<td>5.0 (1.5)</td>
<td>72%</td>
<td>12%</td>
</tr>
<tr>
<td>Digital Moments improved connections with my peers outside of class.</td>
<td>4.8 (1.8)</td>
<td>52%</td>
<td>20%</td>
</tr>
</tbody>
</table>

¹ Includes Somewhat Agree, Agree and Strongly Agree responses
² Includes Somewhat Disagree, Disagree and Strongly Disagree responses

3.1 Overview

This survey data based on responses by 25 of 47 graduate students participating in 2 online courses reports on the results of 12 questions that were numerically rated on a 7-point Likert scale. The questions were each framed positively, and as a result, agreement of a positive impact of Digital Moments would result in a higher score. It is interesting to note that the average of all 12 questions was a score of 5.95/7, indicating that 85% of participants found a positive impact of Digital Moments on creating community.

An analysis of the answers to the additional anecdotal questions of 1. What were the benefits of using Digital Moments if any? and 2. What were the challenges of using Digital Moments if any? resulted in the following themes being coded and identified:

(3.2) the impact of developing social relationships, (3.3) the role of creativity as an element of an engaging online community, (3.4) teacher-learner role shifts in online spaces, (3.5) the de-valuing and re-valuing of types of knowledge representation using creative qualitative pedagogies, and (3.6) an overview of the benefits and challenges associated with this pedagogical strategy.

3.2 Developing Social Relationships

The use of Digital Moments began to take on a life of its own during the scheduled class time. Some students created their own learning communities on Facebook and LinkedIn in order to stay in touch once the course had ended. However, others felt that it added to the online synchronous community but did not have a significant impact on their connections outside of class. The average score for question 6 that discussed the impact of connections outside class was still a 4.72, the lowest score, indicating
that on average there was less connection outside of classes. For some students, Twitter feeds were used to follow each other and sustain friendships and learning experiences during the course. A total of 6 of 25 students discussed the idea that they had not experienced this strategy in other graduate courses and inquired as to the possibility of taking an additional course using this type of community development. These extended connections made through technology created a web within which students connected on a personal level, a professional level, both emotionally and digitally. This is evidence that “learners are responding to the new technical and social opportunities with little help from the formal education system” and there is “evidence of deep networking and knowledge building in learners’ informal practices” ([11], p. 551). Learning that is situated in digital worlds must also have a social component to be effective. Kearney, Shuck, Burden and Aubusson [12] concur that learning is a social endeavour. They identify three distinct features of mobile or virtual learning that include “authenticity, collaborations and personalization” ([12], p. 2). They refer to a socio-cultural model for virtual learning and the importance of “enhanced collaboration, access to information and deeper contextualization of learning” ([12], p. 2).

### 3.3 Creativity

Kaufman reveals that “school is not simply about tests and ‘checking boxes’ of topics and assignments. Rather, schools today should have a mission of developing students as individuals and igniting their creativity” ([13], p. 79). Students in this project began to unleash the bonds of traditional online courses they had taken and began to flourish in the freedom of creative practice. Instead of mandating blog postings or required written reflections, students were invited each week to find their own way, either visually or in words, to describe their learning. Each challenge, each success, became framed by both the personal and professional aspects of their lives, and the learning was constructively shaped by the context of the learner. At the same time, ironically, they began to take more responsibility for their own learning. Being encouraged to choose their own Digital Moments to express their learning empowered them to discover the intimate bond between real freedom, self-responsibility and creativity. While many stated they had been enculturated in a history of learning environments that emphasized the importance of marks and grades, with the power perceived to be situated with the instructor, many revelled the return to a playful state of learning that allowed freedom, innovation and a deeper level of responsibility. In previous online courses, the keeper of knowledge had been the instructor. Instead, the expertise of each class member began to take an important place. As roles shifted, the class became a safe place to experiment with new ideas and new technology. While still bound by the university’s requirements for final grades, the importance of this waned as the experience of learning gained greater prominence. This reciprocal relationship between grades and actual learning may be explored in future work. No longer bound by the fear of the result, creative thinking, as encouraged by Digital Moments, allowed for divergent paths, decided and determined by the learner in conjunction with the instructor.

### 3.4 Teacher-Learner-Teacher Role Shifts

During the course, the roles in this professional learning community became almost indecipherable. While still within the university context, the instructor fulfilled the responsibility to assign grades to students. However, in the learning environment, the power differential became almost invisible. The students with expertise in particular technologies took on the role of instructor, the teacher became the learner, thus empowering learners with the confidence to take risks, make mistakes, and ask for help. This supports the notion that 21C learners must be able to think critically, be problem-solvers and work collaboratively [13]. In particular, for 21C learners in a virtual classroom, they must be able to go beyond the class and use their digital literacy within the context where they work and live. “It is obvious that not only learners but also teachers need to acquire 21st-century competencies as well as become competent in supporting 21st century learning” ([14], p.408). In order to create authentic online communities and learning tools, teachers need to learn how to design environments that support the development of creativity, and the assignments, assessments and learning tasks that support meaningful, contextual and socially constructed knowledge [10]. McNeill, Gosper and Xu [15] surveyed academics and found that many continued to target lower order learning outcomes. They state that “universities increasingly value the skills such as problem-solving, critical thinking and creativity, yet the curriculum needs to be designed to support and scaffold the development of these skills, and integrating them into assessment strategies has proven a challenge. While new technologies have sometimes been heralded as having the potential to address an apparent gap between the rhetoric of curriculum alignment and assessment practice in universities, academic practice is slow to change, and the uptake of new tools to support the development of higher order skills remains relatively low” ([15], p. 283).
This research argues that as Digital Moments are implemented, they may help to develop learning environments that support the facilitation of creative and arts-based pedagogies, and, further to this, they may encourage more relevant 21C learning outcomes for students.

3.5 De-valuing and Re-valuing

The implementation and acceptance of arts-based and creative pedagogical tools meant a significant ‘unlearning’ and ‘revaluing’ of what it means to demonstrate one’s knowledge. It became important to unpack how each learner had developed their values about the importance or lack of importance of marks and grades versus the value of the learning process itself. Students began to see how the development of friendships and simple human qualities like trust, caring and compassion were the real foundation for creating meaningful learning experiences. It also helped them to begin to trust themselves; they began to believe there was an authentic self in each learner who could choose which direction to go, which tasks were personally and professionally relevant, and which were best left to others. The level of passion and interest became more important than the grade, and this represented a significant shift in values. As Kaufman states “development of these skills is purposefully integrated within core content areas in ways that help students find relevance in their work, a characteristic central to motivation and learning” ([13], p. 79). Contrary to traditional educational frameworks, wherein the power is centred in the instructor or the institution, this model required a re-valuing of where the fundamental responsibility for learning resides - within the learner.

3.6 Benefits and Challenges of Using Digital Moments

Responses to the open-ended questions regarding the benefits and challenges of using this pedagogical strategy indicated that a significant proportion of students (n=24) reported positive effects on the development of community. There was a response that described the strategy as resembling therapy, suggesting that the process delved too personally into what was shared by participants, that the exercise seemed forced and unconnected directly to the learning of content (n=1). However, another participant countered this by noting that there was always an option not to participate, so there was freedom to choose if/when to participate and when to listen and observe (n=1). Further, it was mentioned that the process required reflection of critical incidents [14] and that unless participants had considered their Digital Moment prior to the start of class, it appeared less meaningful (n=1). Another responded that although the process took up time in class, the positive benefits outweighed the investment of sharing time (n=2). Finally, a word search of the data found the word “community” in 8 of the 25 responses, “connections” in 5 of 25 responses and “social” in 1 of 25. Comments indicated that with such a high level of social capital, community members got to know one another very well, and as a result of the more personal connection, students committed to each other, to themselves, and to a high standard of work.

4 CONCLUSIONS

This research explored an arts-based creative strategy for enhancing the development of student engagement in online graduate courses. In this pilot study, the authors found that Digital Moments can have a significant impact on the development of a sense of online community in participants. As Brinthaupt [16] states, online educators are tasked with the duty to “explore methods of fostering student engagement, stimulating intellectual development, and building rapport with students when teaching online. This analysis provides a much-needed “art of teaching” set of recommendations that complements the “science of teaching” best practices approach to online pedagogy.” [16], p. 1). This project suggests that arts-based Digital Moments can encourage students to contextualize their role in the community, to learn more about peers and the instructor, and to become more open to meaning-making in their online courses. Garrison and Cleveland concur that “design had a significant impact on the nature of the interaction and whether students approached learning in a deep and meaningful manner. Structure and leadership were found to be crucial for online learners to take a deep and meaningful approach to learning.” ([10], p. 133).

While creative approaches to developing online learning spaces present some challenges, including the traditional grades-based cognitive approach to learning of many higher education and institutions, Atkinson and Claxton [17] discuss the cultural value judgements placed on cognition as a higher order of knowing than aesthetics and intuition. “The distrust of intuition and the inability to see how and even perhaps why it could be incorporated into education reflect three hundred years of European cultural history. The Enlightenment picked out just this single way of knowing and, in raising it to a high art,
implicitly ignored or disabled others: those that were not so clinical and cognitive and were instead more bodily, sensory, affective, mythic or aesthetic, in a word, intuitive.” ([17], p. 32).

As a pilot project, there are some limitations to this research, including a small sample size, self-report data, and a population that was not gender-balanced, being predominantly female respondents. While there is no evidence that gender played a role, it may be a condition to investigate in future research. In addition, the scale used to collect data could be expanded to provide a fuller picture of student reactions to Digital Moments. In addition, future research could expand to include focus groups and one on one semi-structured interviews to the methodology.

In conclusion, Atkinson and Claxton observe, “teaching is a highly specific process but one which nevertheless has similarities with others involving the performance of complex and diverse skills in real time and in contexts that are unpredictable and constantly evolving” ([17], p. 4). Online instructors are tasked with the challenge to develop digital communities with the kind of social capital and presence to engage students, decrease attrition and improve learning outcomes. While we may be aware of institutional barriers or traditional models of learning, the digital world demands that we adapt and evolve, using creative, socially constructivist and community-based approaches to learning. Although Vettraino attests 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” ([18], p. 77), it is imperative that digital educators begin to explore arts-based strategies to engage and challenge online students. While some educators may argue that fun and play do not have a place in academia, these authors argue that many of our greatest innovations have emerged from creative exploration and the numerous mistakes that often occur in positive, social and playful contexts. As such, using arts-based strategies such as Digital Moments can create a community of learners who take risks and support one another, thereby coming up with original thoughts and ideas that may never have come to by taking a traditional “distance education” course where learners often feel isolated or alone.

This project provides one example of a pedagogical tool that can be implemented to attain the goal of improved social presence in online learning communities.

REFERENCES


