Developing Creative and Critically Reflective Digital Learning Communities

W. S. Barber, S. L. King

Abstract—This paper is a qualitative case study analysis of the development of a fully online learning community of graduate students through arts-based community building activities. With increasing numbers and types of online learning spaces, it is incumbent upon educators to continue to push the edge of what best practices look like in digital learning environments. In digital learning spaces, instructors can no longer be seen as purveyors of content knowledge to be examined at the end of a set course by a final test or exam. The rapid and fluid dissemination of information via Web 3.0 demands that we reshape our approach to teaching and learning, from one that is content-focused to one that is process-driven. Rather than having instructors as formal leaders, today's digital learning environments require us to share expertise, as it is the collective experiences and knowledge of all students together with the instructors that help to create a very different kind of learning community. This paper focuses on innovations pursued in a 36 hour 12 week graduate course in higher education entitled "Critical and Reflective Practice". The authors chronicle their journey to developing a fully online learning community (FOLC) by emphasizing the elements of social, cognitive, emotional and digital spaces that form a moving interplay through the community. In this way, students embrace anywhere anytime learning and often take the learning, as well as the relationships they build and skills they acquire, beyond the digital class into real world situations. We argue that in order to increase student online engagement, pedagogical approaches need to stem from two primary elements, both creativity and critical reflection, that are essential pillars upon which instructors can co-design learning environments with students. The theoretical framework for the paper is based on the interaction and interdependence of Creativity, Intuition, Critical Reflection, Social Constructivism and FOLCs. By leveraging students' embedded familiarity with a wide variety of technologies, this case study of a graduate level course on critical reflection in education, examines how relationships, quality of work produced, and student engagement can improve by using creative and imaginative pedagogical strategies. The authors examine their professional pedagogical strategies through the lens that the teacher acts as facilitator, guide and co-designer. In a world where students can easily search for and organize information as self-directed processes, creativity and connection can at times be lost in the digitized course environment. The paper concludes by posing further questions as to how institutions of higher education may be challenged to restructure their credit granting courses into more flexible modules, and how students need to be considered an important part of assessment and evaluation strategies. By introducing creativity and critical reflection as central features of the digital learning spaces, notions of best practices in digital teaching and learning emerge.

Keywords—Online, pedagogy, learning, communities.

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I. INTRODUCTION

IN recent years, online pedagogy has continued to evolve, yet it appears that the dependence on instructor-centred pedagogies is becoming an impediment to quality education in a digital and learner-centred world. With increasing access to high speed information through web 3.0 tools and affordances, the nature of education is rapidly changing. Personalized education, available to anyone with a mobile device, is ubiquitous and we have a "fundamentally leaner-driven model of education, where the traditional provider-centric of institutions is challenged. The rationale for this second view is drawn from the recent rise in personal technology, particularly the emerging situation where the power of personal technology is often seen to outstrip the technological provision of the institution [1, p. 1744].

This paper reports on the creation of community in a fully online learning space, through the use of arts-based inquiry, creative and intuitive learning sessions, student-centred approaches to learning, community ownership of the learning process and co-creation of learning environments through socially constructivist and inclusive pedagogical strategies. As Parker states "Teachers who use non-traditional methods feel thwarted by the traditionalism of their students, their students' parents, and some of their colleagues: 'Stop doing this 'touchy-feely' stuff with students. Cover the field, make them memorize facts, and show them how to compete. If you don't, you put them at disadvantage in the real world of work'. The irony is clear the *real* world of work is the source of much pedagogical experimentation and change, precisely because conventional top-down teaching does not prepare students well for the realities of the world." [2] As a result, educators need to seek new models for the practice of effective teaching, particularly in online settings where learner distraction is maximized, where learners often feel isolated and alone, and disengagement can be a discouraging result [3].

Instructors also need to be willing to give up the teacher-centred power of past models of teaching, and learn to become part of the learning experience as facilitators. Flavin iterates that "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" [4, p. 104]. Thus, this paper examines the experience of a graduate course in Critical and Reflective Practice, where specific emphasis was placed on creativity, critical reflection, arts-based and student-centred strategies, and the co-design of learning environments with instructors acting as facilitators and guides. Over the course of this 36 hour graduate course,

25 students were grouped into small breakout teams of 4-5 students, giving them a better chance to know one another, to challenge one another in safe yet critical environments, and to work together to produce original and intuitive work. The course took place for three hours per week in a web-based synchronous video session, where students participated in real time on camera in small and larger group sessions. Each week, students began class with an artistic creation or digital moment, aimed to use their creative minds to show others where they were at in their learning journey, and to use their intuitive sides while interpreting others' creations. This led to the development of community ownership, positive personal relationships that spanned beyond the professional environment and a sense of community belonging. By using this socially constructivist and arts-based tool, students were able to share their stories of learning as a narrative throughout the course. This resulted in the development of a FOLC, with elements of cognitive, social, and digital presence [5].

II. THEORETICAL FRAMEWORK–LITERATURE REVIEW

The interplay and interdependence of several elements provide the theoretical foundation for developing high quality online communities. The need for creativity, use of personal intuition, development of skills in critical reflection in a safe environment within which to share critical incidents, and a socially constructivist approach that invites, includes and celebrates the experiences of learners, are key elements. All of these combine to create effective FOLCs.
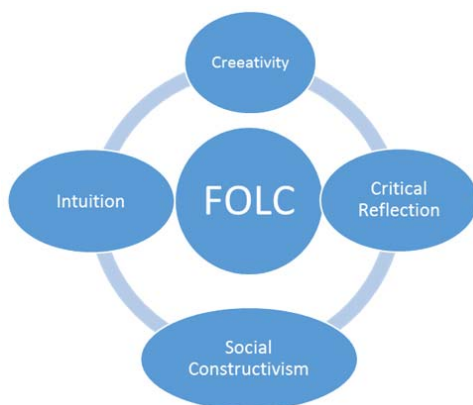

Fig. 1 Elements of Creative Critical FOLCs

A. Creativity

Schon reveals that "university-based professional schools should learn from such deviant traditions of education for practice as studios of art and design, conservatories of music and dance, athletics coaching and apprenticeship in the crafts, all of which emphasize coaching and learning by doing, with the help of coaching [6]. In the traditional academy, this type of thinking tends to be de-valued, as a 'lesser than' sibling of ideas that can be numerically measured, counted and compared. Yet, the nature of the problems facing students and teachers is complex, global and diverse, so it is evident that new and more creative approaches to education are required.

Parker states, [2, p. 12] "if we want to grow as teachers, we must do something alien to academic culture; we must talk about our inner lives – risky stuff in a profession that fears the personal and seeks safety in the technical, the distant, the abstract". In order to develop dynamic and emergent learning communities, it is essential to allow student creativity to emerge. Unfortunately, trapped in an academic grading system which often squashes original thought, "creativity could get you anywhere from and 'A' to an 'F'" [7]. For example, "in a lab setting when everything goes wrong or is indeterminate or is so screwed up by unexpected results you can't make head or tail out of anything, you start thinking laterally" [7, p. 108]. Clearly, new pedagogical approaches are needed to move instructors from previously lauded teacher-centred models that do not work, to personalized and student-centred approaches for digital spaces.

B. Intuition

Largely regarded as a mystical and non-measurable construct, intuition can ironically provide great opportunities for building bridges and solving community problems in online environments. Intuition has been defined by Claxton [8] as "the appearance of informed action or judgement without attendant thought". One may question what the role of intuition might be in academic inquiry, and Miller [9] reveals that it is a type of "self-learning, through the process of contemplation, one learns to trust one's own deeper intuitive responses". By using arts-based creations to develop affective connections between learners, instructors can tap into the intuitive side of learners' minds, and engage them more fully in the process of learning. Further, as an instructor, intuitive pedagogy provides a tool to know and understand students more fully, to create an atmosphere of greater trust, risk-taking and personalization. As a teacher you "don't feel set off against them (the students) or competitive with them. You see yourself in your students and them in you. You move more easily, are more relaxed, seem less threatening to students. You are less compulsive, less rigid in your thoughts and actions" [10].

C. Critical Reflection

Schon [6] has been a leader in his work on reflection-in action and reflection as a key skill in developing professional skills. Although some in academia press forward with competitive and content-based examinations of knowledge, even as that knowledge is rapidly outpacing them, "silence and meditation are often linked with the creative process, and some performers also feel that it enhances their concentration. Even science might find a role for meditation. Einstein, for example, felt that solitude was fundamental to scientific discovery" [9, p. 132]. However, it is also essential to move beyond Schon and note that Kotzee [11] emphasizes the importance of social dialogue and interactive reflection with others. This was also an important element in the small group reflections of each class session. Further to this, each group shared a weekly critical incident that had spawned a change in perspective, or raised a question to discuss. Griffin [12] refers

to this as a means of using critical incidents to spur reflection and changes of cognitive direction. However, it is important to note that in many academic settings, students do not do mandated reflection authentically. Hobbs [13] raises the realistic question of whether students fake these reflective pieces to please the instructor or to get grades. Conversely, Higgins [14] discusses the critical link between authentic reflection and meaningful learning.

D. Social Constructivism

Students often stated during the course that by actively sharing and listening to others' stories and narratives using artistic means, they felt more receptive to others' ideas, perspectives and diverse contributions. "By being more calm and detached I am also more aware of other people's concerns and priorities. Thus, ironically, my detachment has facilitated greater unity and connectedness with those people, issues and concerns" [9, p. 132]. By sharing arts-based creations at the start of each online session, students were able to share in new ways, and by gaining increased confidence that they were each individuals, with different learning needs, they had valuable experiences to share with the community. While the aesthetic dimensions of knowing are often under-valued, arts-based inquiry can open learners to other ways of knowing, rather than preferentially rating logic and scientific methods above affective matters of the heart, often represented in art, music and dance [15]. This paper discusses how aesthetic ways of sharing our lives can be a socially constructivist way to build online communities that have meaning to the learners. In fact, it can be argued that "there is too much practical wisdom that tells us that the images created by literature, poetry, the visual arts, dance, and music give us insights that inform us in the special ways that only artistically rendered forms make possible" [15]. We are human beings, even in our digital classrooms, thus we must bring artistic elements to these communities to bring our "felt life" [15] to the online experience. As Eisner states, "humans are sentient creatures who live in a qualitative world. The sensory system that humans possess provides the means through which the qualities of that world are experienced" [15]. Thus, to improve the experience of online learning, it is imperative that we bring our sentient selves and our human qualities to the digital learning experience.

E. FOLC

Recent work by Childs et al., and Van Oostveen et al., refers to the social, cognitive, and affective elements of FOLCs [5], [16]. Key elements of this model include:

- Learning conditions promote sense of safety, openness and trust.
- Learning environment supports personal self-disclosure, and is open to emotions and feelings as preparation for critical reflection.
- Activities encourage the exploration of alternative perspectives, problem solving and critical thinking.
- Learning environment promotes learners' sense of autonomy, engagement and collaboration.

- Feedback, self-assessment and self-dialogue are used to assist the process of transformative learning [16].

This paper reveals some of the sub-levels of their FOLC model, dealing with the specific creative, intuitive, critically reflective and socially constructivist elements required to develop an effective online learning environment.
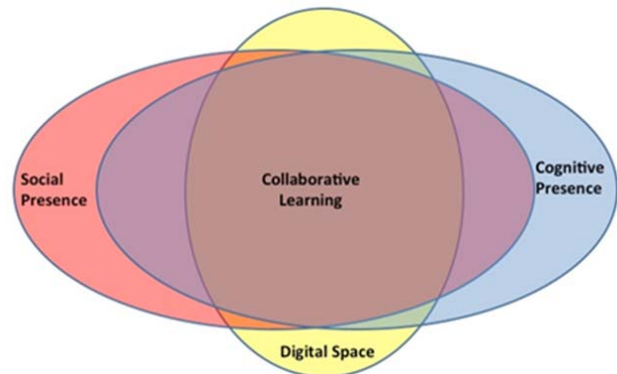

Fig. 2 Van Oostveen's Elements of FOLCs [16]

III. METHODOLOGY

This paper was a qualitative study of one graduate education class of 25 female students at varying stages in their degrees.

A. Phase 1

Students filled out a pre-survey asking them to rate on a Likert scale to what extent they had experienced online courses in the past based on the five elements of Creativity, Intuition, Critical Reflection, Social Constructivism and FOLCs. The 5-point Likert scale rated from 1-Strongly Disagree, 2-Disagree, 3-Not Applicable, 4-Agree, 5-Strongly Agree.

B. Phase 2

Students filled out a post-survey asking them to rate on a Likert scale to what extent they had experienced in this online course based on the five elements of Creativity, Intuition, Critical Reflection, Social Constructivism and FOLCs. The 5-point Likert scale rated from 1-Strongly Disagree, 2-Disagree, 3- Not Applicable, 4-Agree, 5-Strongly Agree.

C. Phase 3

In breakout groups of teams of 4-5 students, each week students spent 5-10 minutes at the start of class and shared artistic representations (photos, prose, quotes, art, music, videos). The artefacts that students share weekly were collected and a selection is included in the Outcomes/Findings section.

IV. Outcomes/Findings

A. Phase 1 and Phase 2

TABLE I
PRE-POST AVERAGE SCORES FOR STUDENT RATING OF CONSTRUCTS

Construct	Pre-Survey Likert Average	Post-Survey Likert Average
Creativity	1.3	4.5
Intuition	0.8	4.0
Critical Reflection	3.8	4.8
Social Constructivism	2.5	4.5
FOLC	1.9	4.8

B. Phase 3: Artefacts

Fig. 3 Student Artwork – Reflection on Personalized Learning

Fig. 4 Student Artwork – Reflection on Process in Learning

V. Conclusions

Learning communities in the digital age are complex, diverse, global and complicated. This paper has examined the experience of one graduate course in education, encompassing 25 students in a 36 hour course entitled Critical and Reflective Practice in Education. The theoretical framework for this work was based on the use of creativity and intuition, within a 5-pronged foundation including critical reflection, social constructivism and FOLCs. Using qualitative arts-based inquiry [15], 25 students in a graduate level course shared weekly Digital Moments, enabling an affective and personal component to emerge in the digital community. Results of this case study include the emergence of several key points. Given that education is no longer in a position to maintain teacher centred pedagogy, new directions in online teaching demand that instructors relinquish power. While this may be a struggle,

it is an admirable one that respects the process of good education in the digital world. As Parker states, "the value of the process is not to be judged by whether the person's problem has been 'solved'. Real life does not work that way. This process is about planting seeds – as in authentic education –and there is no way of knowing when, where, or how those seeds will flourish. Good teaching cannot be reduced to a technique, good teaching comes from the identity and integrity of the teacher" [2]. In conclusion, developing creative and critically reflective online learning communities is not rocket science. If we think that digital education means leaving our humanity behind, we will cease to have the creativity, intuition, social connection or affective responsibility to solve problems. Complex issues require creative solutions, and bringing our humanity to the digital world is one of the constant elements of best practices in online education.

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