

Reflective Pedagogy: Making Meaning in Experiential Based Online Courses

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Abstract

The use of reflective pedagogies has long been considered critical to facilitating meaningful learning through experientially based curricula; however, the use of such methods has not been extensively explored as implemented in virtual environments. The study reviewed utilizes a combination of survey research and individual interviews to examine student perceptions of the meaningful learning which occurred as a result of their participation in two Web-based courses that utilized reflective pedagogies. One course focuses on topics related to service-learning and the second on placement-based internships. Both were instructed using online coursework based in reflective pedagogies to compliment on-site placements within local communities.

Introduction

Instructional approaches which facilitate reflective, critical dialogue provide students with opportunities to make meaning from experiential based learning. When facilitated via Internet, curricula emphasizing such pedagogies hold the potential to guide and encourage a diverse range of students as they make meaning from learning situated in experiences. The increased integration of technological tools (such as synchronous conferencing platforms, asynchronous discussion structures, social networking environments, video sharing websites, and so forth) in educational programming provides the means to implement instructional approaches that are current, relevant and efficient (Jonassen, Davidson, Collins, Campbell, & Bannan Haag, 1995).

As a result of their survey of academic leaders at 2,500 United States institutions, Allen and Seaman (2009) report double-digit growth rates in online post secondary enrollments for the sixth consecutive year, clearly indicating a preference among this student population for studying using educational media (p. 5). As technologies are increasingly integrated into curricula, there is a growing need for the development of strategies which mobilize ways to create collaborative, interactive and relevant applications specifically within the framework of experiential learning (Howell, Williams & Lindsay, 2003). Moreover, the introduction of technology into practice-based learning allows broad access which enables the development of diverse learning communities that may not be possible among geographically bound college populations. Collaborative learning which is constructed in such communities has the potential to reach beyond a single classroom to impact local communities on uniquely personal levels. The potential for reflective pedagogies to facilitate significant learning for distant students engaged in applied studies is specifically explored in this study.

Literature Review

To frame a discussion related to the development and implementation of reflective pedagogies in applied settings, literature focusing on the importance of providing opportunities for guided reflection in experientially based learning was explored. Moreover, because the courses examined in this study were conducted in virtual classrooms, literature related to online instructional delivery as it relates to experiential learning was also investigated. Previous research indicates that the definition of experiential

learning is widely interpreted, analyzed and debated, however, for purposes of this study it is defined as a set of structured learning activities that promotes critical inquiry and reflective discourse through a deliberate combination of technologies and instructional methods such as structured discussions, directed writing assignments, and on-site placements in local communities.

Primacy of Reflection to Learning from Experience

The methods by which reflection is taught to students within the contexts of life-long and experiential learning have been of specific focus over the last several decades. Many educators have identified critical inquiry, engaged dialogue and reflective practice as essential to furthering substantive learning in experiential settings (Boyer, Maher & Kirkmann, 2006; Kolb & Kolb, 2005; Marsick & Mezirow, 2002; Taylor, 2000). Boud, Keogh and Walker (1985) suggested structured reflection to be key to learning from experiences; Eyler, Giles, and Scmiede (1996) elaborated, identifying structured reflection as critical to meaningful academic learning. Daudlin (1996) specifically defined reflection as central to "... the process of stepping back from an experience to ponder, carefully and persistently, its meaning to the self through the development of inferences" noting that engaging such processes forms the foundation for future decision making and behaviors (p. 39).

Strait and Sauer (2004) found that experientially based learning enabled students to both "...sharpen the focus of their own instruction and learning [as well as] deepen their level of inquiry through questioning, making connections, and honoring multiple perspectives" (section 5). Opportunities for reflective learning facilitate cognitive, affective and moral development (Jones & Abes, 2004; Strain, 2005; Wang & Rodgers, 2006); without such reflection learning is not sustainable (Chickering, 2008). The development of critical thinking and meta-cognitive skills are particularly important outcomes of students' participation in applied learning experiences (Ash, Clayton & Atkinson, 2005).

Eyler, et al. (1996) found that for reflection to be meaningful it must be continuous, connected, challenging and contextualized. Connected reflection facilitated through engagement in asynchronous discussions that utilize guided questions emphasizes the importance of integrating experiences with academic learning. Both continuous self-dialogue and collaborative inquiry made possible by

participation in activities constructed within synchronous conferencing platforms require individual reflection and group processing to occur before, during and after structured learning experiences. The process of challenging students' self reflective methods as demonstrated through the use of web-based journals and e-portfolios encourages them to critically think in new ways, producing unique and individualized approaches to problem solving. Knowledge, then, results from the culmination of navigating, internalizing and transforming learning experiences (Kolb, 1984).

Reflective Learning in the Virtual Classroom

Berger Kaye (2010) identified reflection as an important component to facilitating the development of civic, social, cultural and language literacies in experiential learning. Web-based courses that feature reflective practice as the foundation for pedagogy have emerged as a structured means for students to not only engage with their local communities, but also to participate in collaborative inquiry and discourse with geographically dispersed peers. In the same way as learning occurring in physical settings is dependent upon effectively engaging all members of the service triad (that is, members of the virtual learning community, the instructor and colleagues/peers at on-site placements), so it is in learning environments that enable engaged reflection utilizing emerging technologies (Boyer, Maher & Kirkman, 2006).

Palloff and Pratt (2007) found the combination of active discussions and structured assignments to form a foundation for both individualized reflection as well as collaborative learning when utilized within technology rich classrooms. Similarly, Tseng, Wang, Ku and Sun (2009) found technologies to profoundly impact learning as a result of their capacities to facilitate interaction and communication. Shea's research (2006) indicated that distant students report a strong sense of learning in those online classes that provide open environments for discussion, mediation and resolution of difficult dialogues that ultimately reinforce complex understanding. Learning technologies provide a particularly important link between on-site learning experiences and classroom activities; such media become even more significant when the primary mode of instructional delivery occurs via the Internet (Straight & Sauer, 2004). Discussions structured to facilitate reflective inquiry are particularly effective when facilitated in a virtual environment: instructional methods promoting explorations of, for example, issues related to social equity, are easily migrated for examination in Web-based classrooms (Meyers, 2008).

Garrison, Anderson and Archer (2000) found virtual classrooms indeed provide environments in which reflective discourse can be fostered and critical inquiry nurtured to extend positive, collaborative educational transactions. They propose a three-tiered approach for the delivery of meaningful learning experiences via the Internet; their “Community of Inquiry” approach provides a comprehensive framework that reinforces the development of critical thinking skills within a context of reflective pedagogies which utilize a range of media. This model indicates that experiential learning is initiated as a result of cognitive presence (e.g., the ability to construct meaning through ongoing reflection and discourse), sustained through evolving social presence (a support to the cognitive process that enables the development of relevant relationships that encourage ongoing engagement), and results in learning as an outcome of teaching presence (the design of instructional methods that intentionally reinforce critical reflection and inquiry). The “Community of Inquiry” model not only establishes a framework for realizing the potential for the use of reflective pedagogies in virtual environments, but also identifies important components to high quality and accessible learning. Miller (2010) observed that such pedagogy “... recognizes that how we learn should reflect how we live and learning should be an active process that is resource-centered and inquiry-based and that develops the student’s skill in collaborative problem solving” (para. 9).

The role assumed by technology in web-based courses is so significant that it has the potential to become an “intellectual partner” with students as they pursue learning goals (Huang, 2002; Jonassen, 2000). When used in conjunction with instructional methods that promote inquiry and collaboration, technological solutions become important components to facilitating experiential learning (Meyers, 2008). A Web-based learning management system provided the technical infrastructure for the online classes, featuring a variety of mechanisms to enable ongoing communication and interaction among peers, instructors, on-site colleagues and the learning environment itself. Additional technological applications were integrated as relevant to curricular goals and manageable by participants in such ways as to move beyond simple information sharing to the development of substantive dialogue related to meaningful learning rooted in applied experiences (Barab, Thomas & Merrill, 2001).

Both instructional methods and educational technologies were selected based on their capacities to support goals to: 1. facilitate collaboration, promoting work with peers to generate shared learning goals and solve common problems; such activities are made possible through the integration of virtual

conferencing platforms that enable text, audio and video interactions; 2. ensure continuous one-to-one and one-to-many communications in order to facilitate reflection upon readings and discussion of placement experiences, by using email, chat and blogs; 3. enable information management to distribute course content using file sharing, text-based lectures, podcasts and ebooks; 4. exploit and/or minimize geographic differences through the strategically combined use of synchronous and asynchronous activities and events; 5. promote consistent and universal access by implementing standard minimum requirements for software, hardware and bandwidth; 6. advance functionality to promote skill development related to general use, navigation, and a range of applications and plug ins; 7. archive relevant artifacts from the courses, such as learning objects and transcripts collectively created by the membership; and, 8. coordinate a range of administrative functions that typically accompany instruction, such as identifying participation patterns or generating and recording assessment data (Barab, Thomas & Merrill, 2001).

Methodology

Research Design

The exploratory nature of the study led to a qualitative approach to the research design. The purpose of this study was to explore students' perceptions of reflective pedagogy in experiential based courses offered online. Exploring possible learning and potential impact was gained through a qualitative design aimed at constructing this information through a brief survey and accompanying interview. This study's approach examined the phenomenon of experiential learning and reflection on the learning through narrative writing and other media. The field of qualitative research is constantly challenging the distinction between that which is "real" and constructed, that all events are made real through interaction, discourse, conversation and narratives (Denzin & Lincoln, 2005). This study attempted to understand the phenomenon of learning through the combination of qualitative surveys and interviews.

The qualitative nature of the survey provides student narratives and perceptions of reflection. The brief seven-question survey was created to collect demographic information and initial reactions to reflective pedagogy. General demographic information collected included age, gender, major, academic level, ethnicity, and frequency of online courses taken. Open ended questions such as, "How do you define reflection?" "How do you best make meaning for the experiences you have?" "What forms of reflection

are required for the course you are currently enrolled in? and “What other types of reflection would be useful for you to make meaning of your experiences?” were asked. The final survey question asked participants for their willingness to participate in a follow up interview.

The primary task in interviewing was to understand interview statements and the meaning assigned to them (Kvale, 1996). The interview design allowed for both main and probing questions (Ruben & Ruben, 1995). Main questions were prepared for the interview ahead of time and were consistently delivered to all participants. Additionally, probing questions were used to clarify participants’ responses as appropriate or needed.

Fifteen students participated in an interview either via telephone or Web-based audio conferencing, which lasted 20 to 40 minutes in length. The interview gathered direct quotations, a basic source of raw data essential to the qualitative study (Creswell, 1994). Such direct quotations revealed the respondents’ emotional presence in the learning experiences, the ways in which they organized their worlds with respect to individualized learning and reflection, their thoughts about what was happening, their experiences, and their basic perceptions (Patton, 1980). Direct quotations provided meaningful information with regard to the participants’ perceptions of their learning and the meaning and impact of a reflection as result of participation in an online course.

Participant Selection and Recruitment

Potential participants were contacted by gaining access through the institution’s academic department in which the courses were offered. Participants in four experiential based courses that focused on internships and service-learning were contacted. At the time of request, 53 students were enrolled in one of the four experiential based courses. Once a list of possible participants was verified, individuals were contacted via e-mail with a link directing them to the online survey. Of the 53 students contacted, 37 completed the survey for a return rate of 70%. Of the 37 that completed the survey, 21 consented to be interviewed and 15 were actually interviewed.

Data Analysis

Lawrence-Lightfoot and Davis (1997) suggested researchers explore a study’s themes before collecting initial data; by researching the topic area before collecting data. Research was initially accomplished

through a review of literature and reflection on personal experiences as both students and faculty members instructing in online learning environments.

Three ways of organizing and reporting the data gathered, description, analysis, and interpretation, were used (Wolcott, 1994). In the final analysis, transcripts from the interviews were read and re-read; data that aligned with the refined codes were highlighted. Phrases and words were used to determine codes for each participant. Emerging themes were identified in those instances in which similar ideas surfaced in three or more student transcriptions. Once all of the emerging themes were studied, relationships among those themes were examined.

Participant Profile

As previously noted, a total of 37 undergraduate students responded to an invitation to participate in this study. Of the 37 students who responded to the brief survey, 21 were between 20-24 years of age, 9 were between 25-29 years of age, 5 were between 30-40 years of age and 2 were between the ages of 41-55. Thirty students identified themselves as Caucasian and 7 self identified as a minority; 3 were African-American, 1 was multiracial and 3 were Latino/a. The majority of students responding were female, with only 11 respondents male. Ten students stated that they only took classes online and 27 students took both classes in both online and face-to-face formats. The majority of students were in their fourth year of full time coursework where five students were in their third year, one was in their second year and two were in their fifth year. Of the 37 students who responded, 21 stated that they typically take 0-1 online course a semester, 14 typically take 2-3 online courses a semester and 2 take 4-5 online courses a semester.

Students participating in this study identified themselves as majoring in a wide range of disciplines. Business, including management and accounting majors, were the most represented with 13 students; 6 students studied computer science; 6 students studied criminal justice and legal studies; 4 students majored in communications; political science had 2 students represented; and, global studies, history, psychology, mathematics, biology and chemistry each had one student represented. Twenty two of the students in this study were motivated to take one of the experientially based online courses because it fulfilled a general education requirement, 9 students responded that it fulfilled a requirement for their major and 5 reported motivation to enroll out of personal interest. Of the students who responded to the

survey, 26 were enrolled in an online service-learning course and 11 were enrolled in an online internship-based course.

Reflection: In Their Own Words

In order to better understand students' perception of reflection as a whole, both on the survey and during the interview, study participants were asked to define reflection. Of the 37 survey responses, 32 students defined reflection in terms of analyzing and learning from past experiences, 3 students mentioned learning from present experiences, one student mentioned future learning and one student defined reflection as involving past, present and future experiences.

On the survey, one student responded that reflection was, "The process of examining the actions and reactions of situations and scenarios in order to understand the deeper meanings and process it took to come full circle." A second student described reflection as, "Looking back at your experiences and examining what you learned from those experiences." Yet another student defined reflection "...as the process of thinking back upon what you have experienced over a certain period of time and assessing what you learned from that experience." A fourth student wrote that reflection meant, "Pondering experience and assessing what can be learned from it." When we followed up with this same student during the interview, she defined reflection as "Thinking about experiences and then figuring out what can be learned from it. In every experience there is a lesson to be learned." This student explained how one could reflect and learn from everything he/she does. She continued by noting, "...reflection becomes a habit rather than something you have to do for a class." Each of these students defined reflection as examining past experiences and making meaning from lessons learned.

Four students during the interview specifically defined reflection as being an active process in which a person is engaged in his/her own learning, an often-challenging process. One student stated, "...reflection requires the ability to engage in a higher level of personal honesty, a willingness to engage in self-directed positive criticism and a rejection of 'easy answers'." Another student defined reflection in terms of "...actively analyzing previous perceptions and emotions and reevaluate the circumstances that influenced them. Not easy stuff."

One student defined reflection in terms of looking at past, present and future experiences. On the survey he reported reflection to be "... the process of analyzing an event for relationships pertaining to the past, present, and future." In the interview, this same student was asked for his definition of reflection and he responded, "Critically thinking about what happened, what is happening and what will happen. There are so many connections to our experiences; reflection helps us see all of the relationships between them." Better understanding of the participants' definitions of reflection and the reflective process provides a strong context for exploring their perceptions related to reflective pedagogy in an online environment.

Structured Reflection

Students participating in the survey were asked to identify those forms of reflection used in their online experientially based courses, selecting as many answers as applicable from the following four methods: reflection journals, essays and papers, online discussions, and Web-based interactive presentations. Of the 37 participants: 36 students identified using reflection journals, 28 described using essays and papers, 20 noted using the online discussion feature as a form of reflection, and 3 responded that they presented through the courses' Web-based conferencing platform as a form of reflection.

All 15 students interviewed agreed that each of these methods facilitated reflection and, as such, extended their learning in the online experientially based course(s). During the interview, a follow up question from the survey relating to the types of reflection used in the course was asked. Students were asked, "On the survey you stated that the course you are enrolled in uses different types of reflection. Are these types of reflection helpful?" Fourteen of the 15 students responded that all reflection types used in the course were helpful. One student specifically said, "Yes, these types of reflection were helpful. When I think about it, all types had some benefit to my learning. A new way to think about what I was doing at my site." A second student, who self-reported that she took all of her classes online, stated the structured reflection opportunities provided had a particularly positive impact on her learning, responding;

All of the reflection types were useful in this class. The journals made me continually reflect on the experience I was having at my site. The essays pushed me to critically think about new material and relate it to my experience and the online discussions got me to think about my opinion in relation to others. This was a way different experience than any of the other online

classes I have taken. I really learned in a whole new way. I wish more online courses were like this.

When asked whether structured reflection provided him with the best environment to critical think and learn about his experience, a third student stated, “I never thought about making meaning from an experience until it was discussed in class. I never even thought about online discussions as reflection, but this course helped me understand that.” The same student went on to explain how he had “never been in a class that was so powerful. I rolled my eyes when I saw structured reflection in the description, but it turns out that this has been so applicable to life.” This student further explained that the opportunities for structured reflection provided in the online courses had a positive impact on his learning.

Facilitating Opportunities for Structured Reflection

During interviews, students shared their perceptions of the structured reflection opportunities in the experientially based online courses in which they were enrolled. While all students reported that the reflective nature of the course resulted in a positive impact on their learning, several students specifically noted that this perception changed over the semester. For example, as a semester began several students reported negative attitudes toward the reflection required in the course. However, they continued by noting that this perception changed over the course of the term due to the range of methods offered for structured reflection.

Reflection journals. Both of the online experientially based courses examined in this study implement journals to facilitate structured reflection. The internship course requires students to write each time they are at their placements; the service-learning course requires that an entry is made per every four hours of community service. Overall, students indicate that maintaining written journals is a means of reflecting especially beneficial to their learning. One student enrolled in an online service-learning course noted, “The reflection journals were so helpful in forcing me to think about my service experience. I have never journaled before, but I really think that it helped me get the most out of my experience.”

A second student reported, “After this class I think I will journal more often. I was negative about it at first, but once I felt more comfortable with it, it made sense. It turned out to be a good thing” While this

student explained initial negative feelings about recording structured reflections a written journal, he came to understand the benefits by the end of the class. A student enrolled in the internship focused course said, “I journal personally and did not want to do it for this class since it was required. However, I totally get why it is important and when the class ended I was glad I did it.” While this student wrote in her personal journal, she was not excited to do it for class because it was a requirement. While initially reluctant, she eventually reported the benefits from such a course requirement.

Reflective essays. A second method, the use of formal written assignments in the form of essays and papers, is used in the online service-learning class. During the interview process students explained reflective essays were especially beneficial to their learning. One student noted, “We did two reflective essays in the course I was in. It was such a different way of analyzing material and then relating it to my community service experience.” This student reported that such assignments forced her to relate the course material to the service experience in the class. Another student stated, “I struggled with the reflective essays we had in class. It was a good struggle. I mean, when I got done relating two historical leaders and figuring out how that informed my service, I got it. What a clever assignment.” This particular student explained how relating two historical leaders to the service she performed was a challenge, but ultimately rewarding. In responding to reflective essays as a form of structure reflection, a student said, “The essays pushed me to apply what I read to what was going on with me at my site. What a cool way to think about the [course] material in a new way.” Each of these students stated that these structured written assignments had a positive impact on their learning.

Online discussions. Structured questions guided online discussions in both experientially based courses. Guided questions focused around course materials reinforced learning outcomes, requiring students to integrate applied experiences at internship or community service sites with theoretical concepts. One student explained that she typically disliked required discussions assigned in online courses, but enjoyed this feature of this specific course because it enabled her to consider her own experiences. She reported,

I normally hate it when we are required to post thoughts for our class, but I really loved it in this class. It was not as formal because we were bringing in our own experiences. It allowed us to build relationships that I don't have with other classmates in my online courses.

Another student stated, “I loved the questions our instructor posed. They were thought provoking and got me thinking about how the material applies in real life.” A third student responded, “The discussions posted on our class site were very cool. That was the best way for me to reflect. I normally have to talk things out and this was the same thing. This was better than the journals.” This specific student identified that reflecting through discussion rather than writing in a journal provided her a more productive option for meeting course goals, noting that asynchronous online discussions were a better fit to her learning style. Building relationships through online discussion was another benefit that made a positive impact on students learning. A student who self-reported only taking online courses said, “Myself and another student always seemed to be on the discussion board at the same time. We were talking in almost real time. It was a great way to reflect on the material.”

Discussion

The process of reflection as a means to cognitive and affective development, particularly as facilitated in web-based courses, was a new concept for many students. One student explained that while she had heard the word “reflection” before the class, she had not considered its meaning; the class in which she participated enabled her to “test it out.” A second student remarked that she “... actually looked forward to this class because it took what I was doing and allowed me to learn from that instead of regurgitating new information.”

In order to provide opportunities for students to reflect on individual aspects of learning and self-report identified impacts, each of the 15 students interviewed were asked, “Has the reflective nature of this course made an impact on your learning in any way?” All students interviewed unanimously reported that the reflective nature of the online experientially based courses had a positive impact on their learning. From these responses, three themes emerged including: building relationships with classmates, increased learning through application of theories, and identifying reflection as a new way of learning.

Building Relationships

Twenty-seven percent of students responded that activities promoting reflection assisted them in building relationships with others in the course. This achievement was particularly important in as much as participants were geographically dispersed throughout the United States. One student specifically

noted, “Having reflection be a part of online courses made me more connected to others in the course. When you share personal thoughts it builds relationships.” A second student reported,

I would not have said this in the beginning of the semester, but after this class I am a believer. I believe that reflection is a powerful thing, especially in online classes where often you are an island doing your own work not really interacting with other classmates. This was a positive way to interact with folks across the country, heck, world doing cool things.

Expanding Learning through Application

Using real world experiences around which to frame various theories related to applied studies was also a common perception of students; in fact, thirty percent of students specifically stated they felt their learning was positively impacted through reflection on connections made between theoretical concepts and practice. One student stated, “I know I learned more because I would always be thinking about how to make connections for my journals and reflective essays. I was in the grocery store shopping once when I realized I was thinking about class.” Another student said that he brought various “ah-ha” moments he had during online discussions into his professional conversation, noting, “I just feel that I learned more in a well-rounded perspective.”

Identifying Reflection as New Way of Learning

Eighty percent of students interviewed for this study reported the greatest impact the reflective nature of the online experientially based courses offered a new approach to critical thinking that enabled meaningful and deep learning that extended throughout multiple areas of their lives. One student explained, “I would say I learned more in this class because of the reflective nature...I like people and like digging deep. Making it a requirement made me find time to reflect.” Another student said,

We heard several times in our class how reflection was making meaning from experiences. Once I really got that, I started looking at this class and I guess learning in a totally new way. Not to sound cheesy, but I can be a learner of life and learn from anything and everything. I just need to reflect – make meaning from whatever it is.

Several students noted that learning about the concept of reflection actually enabled them to change their learning styles and processes. One student reported,

I am so thankful I learned about this concept of reflection. It took me about half of the semester to really get why reflecting on what you do is so important. As our instructor constantly said, to make meaning from what you learn.

Implications

The results of this study indicate that reflective pedagogies have the potential to dramatically facilitate and extend significant learning when implemented in online learning environments. In such classrooms meaningful learning consists of cultivating a capacity for self-awareness through opportunities for structured reflection, developing collaborations to explore individualized awareness and perceptions, understanding complex theoretical concepts within a framework of cognitive processing, and applying reflective material resulting from both individual impressions and collaborative relationships in both academic and “real world” contexts. These pedagogies become even more significant when delivered as a means to connect geographically dispersed students in the development and achievement of shared learning outcomes.

Boyer, Maher and Kirkman (2006) as well as King (2002) substantiated the link between the integration of new media in curricula and meaningful opportunities for learning, noting that such connections are made stronger in virtual environments in their potential to extend beyond individual classrooms, impacting the organizations and larger communities in which students serve. Most notably, students’ perceptions of the potential for structured reflection to positively impact their learning related to individual as well as collaborative learning, and both active (for example, participation in discussions) and passive (such as recording impressions in journals) means of reflection were perceived to be beneficial.

Practical Teaching Strategies

Eyler, et al. (1996) identified that for reflection to be meaningful it must be continuous, connected, challenging and contextualized. To ensure such relevancy it is critical that curricula impose structures that enable a scaffolding of students’ insights, interpretations and analyses. Because meaning making results from both individual and collective processes, reflective pedagogy most appropriately seeks to balance instructional direction with learning autonomy. Such strategies can be negotiated through using

open-ended questions that guide discussions, constructing parameters in the development of journal entries, and framing reflection within the context of targeted readings and assignments, as well as by encouraging honest and respectful interactions and communications with peers at placements as well as in virtual classrooms. It is noteworthy that these approaches are similarly well suited for both virtual and on ground learning environments; however, they appear most appropriately used in asynchronous virtual settings in which students have opportunities for considered, thoughtful and well-researched responses.

Posing opened-ended questions (e.g., as used to direct the content of discussions, essays and journals) is key to guiding the process of reflection; students particularly value an emphasis on interpretation as opposed to predetermined conclusions and generalizations. Questions that specifically relate their learning experiences and evolving outcomes, thoughts, and feelings allow students to focus on very unique and individualized ideas and impressions. Open-ended questions such as, “What were your initial reactions to the site at which you are working?”, “What has been the biggest lesson you have learned while engaged at your site?”, or “What are some of the challenges you face in your experience?” enable students to capitalize on opportunities to create language around sometimes challenging, elusive and contradictory thoughts, feelings and conclusions.

The use of narrative journals promotes critical reflection insofar as its focus is structured to facilitate insights and analyses formed in response to assignment requirements. For example, the instructors for the courses of focus for this study require that reflection journals include a minimum of 20 unique entries, each consisting of 500 to 750 words; such parameters reinforce the importance of reflective processes to overall learning and development as well as provide often-needed guidance related to expectations and learning outcomes. Additionally, students are instructed to limit descriptions of factual content of journal entries to 25 to 40 words per entry so that their narratives specifically convey subjective insights, reactions, thoughts, feelings and lessons learned. Moreover, questions strategically introduced enable sequenced learning; for example, the inclusion of non-imposing questions, such as, “What do you think about the resources (monetary, human, etc.) available to service recipients at your site?” as a course commences provides groundwork for students as they form responses to more difficult questions, such as, “How would you distribute limited, but much-needed resources to those who receive services at your site?”

Implementing guidelines related to interaction and communication, for example, requiring honest and respectful responses between peers in online discussions, and framing reflection in the context of readings are two additional strategies that promote inquiry and self-discovery. Creating a community of learners who values honesty, respectfulness, and support as well as challenge and confrontation is important in promoting the development of reflections that are productive and meaningful; modeling this level and style of communication is critical to creating a constructive classroom environment. Framing reflection on experiences within the context of specific readings similarly reinforces student learning related to both curricular content as well as individualized experiences. For example, focusing reflective discourse and self-inquiry around reading current events or biographies enables opportunities for comparison, contrast and analyses that reinforce learning outcomes.

Pedagogical Challenges

While reflective pedagogies provide a rich context in which to examine experiential learning in a virtual environment, it is important to acknowledge challenges inherent in providing highly interactive experiences to a distributed group of students placed in diverse service placements and settings. For example, assisting students with a range of learning styles and preferences to develop skills in reflection and critical inquiry requires a substantial commitment by educators; such a commitment of time and focus competes within current contexts of maintaining growing enrollments. For example, students may be reluctant to make themselves vulnerable by recording personal impressions within large classrooms; such concerns must be dealt with directly and immediately so that students are able to continue to reap the benefits of developing reflective skills and abilities.

Certainly the participation of students from around the globe enables access to a wide variety of experiences that promotes interdisciplinary thinking and collaboration. However, assisting students to integrate such diverse experiences as they struggle to form individual identities requires a consistent level of engagement and motivation by both students and teachers. Sustaining an awareness of highly personalized meaning is especially challenging in asynchronous classrooms where interaction is not instantaneous.

Finally, the continuous integration of evolving technologies into instruction while meeting curricular goals, monitoring student capabilities, and managing provider needs requires ongoing attention, often necessitating curricular modification as applications are developed and updated.

Conclusion

As evidenced by this study, reflective pedagogies provide a framework in which to facilitate the achievement of a wide range of competencies and literacies. This approach appears particularly powerful in web-based learning environments in which critical inquiry and engaged discourse are complimented by participation in “real world” on-site experiences. The synergies possible when geographically dispersed students join to explore issues related to experiential learning, civic engagement, and “making a difference” in local communities provide an exciting context for additional study; these synergies are boundless when reflective pedagogy and experiential learning combine with technology-based systems that enable broad access to educational opportunities.

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