A CASE STUDY OF EELEARNING Using Technology to Create and Facilitate Experiential Learning

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This study used a case study methodology to document an example of how technology was used to engage students in an experiential eLearning (eeLearning) process in order to enhance student learning, student engagement, course relevance, and interaction in an undergraduate course delivered online. While online course delivery has become an accepted and common practice over the past years, creating experiential eeLearning requires unique strategies and approaches. Using computer programs that encourage creativity and experiential learning can facilitate the learning process.

INTRODUCTION

While the benefits of experiential learning activities have been well documented for traditionally delivered classes, little focus has been placed on creating experiential learning opportunities or studying their impact within the online learning environment. The need to engage and motivate students has been demonstrated by many to be a critical factor of eLearning. The use of technology in education (e.g., Bannan-Ritland, 2002) and distance education (e.g., McCann, 2006; Rabe-Hemp, Woollen, & Humiston, 2009; Stein, Wanstreet, & Calvin, 2009) have been studied extensively. Velez and Cano (2008) reported that "Students will have a greater likelihood of emotionally and cognitively engaging in a course when the instructor demonstrates verbal and nonverbal immediacy" (p. 84). The authors further stated that these behaviors may be related to student motivation and that "instructors need to exercise care and consistency in portraying positive, encouraging gestures and expressions" (p. 84). Faculty and students perceive "open communication" and "using a variety of instructional methods" (Gaytan & McEwen, 2007, p. 129) as strategies to encourage quality in online course delivery. Hillman, Willis, and Gunawardena

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(1994) stressed the importance of providing students the skills to effectively participate in online settings. One might argue that in order to achieve these goals, one must use the right tools to accomplish the goal at hand. Zhang (2005) concluded that "using a variety of media in distance education milieu could meet the needs of students with diverse backgrounds" (p. 52). Northrup (2002) also noted, "variety and strategies presented within the confines of a course appears to yield positive perceptions among students" (p. 223). In a qualitative study focused on describing the online experience of an adult learner, Stein et al. (2009) shared that "the transactional distance gap can be a troublesome space for an adult trying to create an identity as an online learner" (p. 309).

As the number of students taking online courses grows, and the learning styles of these students broaden, it becomes increasingly important to incorporate online learning tools and activities that allow appropriate experiential experiences for the targeted students. "Online enrollments have continued to grow at rates far in excess of the total higher education student population, with the most recent data demonstrating no signs of slowing" (Allen & Seaman, 2010, p. 1). Students enroll in online courses for a variety of reasons that can range from location issues, job obligations, preference, or course availability (Gaytan & McEwen, 2007). Gustafson (2007) reported that flexibility to complete coursework at diverse times may relieve pressures reported by students. Thus, the concept of "anytime, anywhere" becomes one that can greatly benefit students. The question of whether a course is delivered online or face-to-face is often not the question that will determine the quality of that course. However, in a study conducted by Dobbs, Waid, and Carmen (2009), it was found that "online course experience matters in terms of some of the perceptions of online courses" (p. 23). The authors found that students who had experienced online courses tended to have positive perceptions of courses delivered online. As shared by Gayton and McEwen (2007), additional research is needed "to explore more innovative, efficient, and effective instructional and assessment techniques for the online environment" (p. 131).

One of the greatest challenges facing educators in today's technology-enhanced world, especially veteran educators, is transitioning from an age-old position of providing information to a new status as a "chief orchestrator" of learning. The use of technological tools to create experiential learning is one way of easing this transition. Technology has the potential to meet the needs of learners and thus improve student performance (Turney, Robinson, Lee, & Soutar, 2009), whether in the hands of instructors or students. However, technology is most often addressed in the context of being in the hands of instructors or facilitators (Jepson et al., 2005; Meloncon, 2007). Technologies placed in the hands of the students have the potential to create an experiential process in an eLearning environment. The combining of electronic learning and experiential learning has been defined as "eeLearning" (Trevitte & Eskow, 2007). While teaching and learning technologies may vary and interpretations of experiential activities may fluctuate, the consideration of whether students can be empowered to learn and engage in eeLearning can assist in determining if certain technological tools have value.

As orchestrators of learning, educators must be open to new ways of accomplishing learning goals, with a stronger emphasis on creating learner-focused environments that allow for personal experiential learning activities. Bellah et al. (2008) shared that "meaningful learning occurs when new content is introduced in the context of the learner's experience" (p. 20). Bellah et al. (2008) cited Caine, Caine, McClintic, and Klimek (2005) in identifying the major tenets of brain-based learning as "orchestrated immersion, relaxed alertness, and active processing" (p. 20). These tenets fit well with the process of experiential learning. Zull (2002) provided compelling biological reasoning for engaging students in activities beyond traditional lecture. The

author provided detailed explanations as to how "sensing" leads to "integration" and the forming of "meaning" (p. 137) and thus it is the details in our experiences that make the difference in the meaning that we construct. Zull stated, "We must see through the student's eyes" (p. 141). Zull further explained that in order to accomplish this task, we must re-look at the subject matter we are presenting and attempt to view this material as if we were viewing it for the first time. This will enable us to view the material as our "sensory input" first experienced it. "One of the most important and powerful aspects of experiential learning is that the images in our brains come from the experience itself" (Zull, 2002, p. 145). Thus, instructors must strive to allow students to build experiences that can be retained and associated with previous experiences.

The issue of weaving social learning and social interaction into the fabric of online learning is gaining interest among educators as social networks (e.g., Facebook) have been adopted rapidly by a new generation of learners. While there are many types of interaction taking place within social networks, many of them mimic the attributes of experiential learning—and it is all happening in the virtual world online. Social learning, described as involving interaction among cognitive, environmental, and behavioral factors (Bandura, 1977), has the potential to bridge the distance gap in online courses and is gaining interest among eLearning researchers. Hill, Song, and West (2009) explored the application of social learning theory in the online environment and shared that social learning "offers promising opportunities" (p.100). However, the authors stated that "social interaction in the form of writing is challenging due to the lack of facial expressions, body language, and tone of voice" (p. 99). It is important for students to be able to share their personal identity in the online classroom (Rabe-Hemp et al., 2009).

Experiential learning and the use of technology in education have been widely studied as separate areas of research but only limited research has focused on the impact of incorporating technological tools to create experiential learning online. The theoretical framework for the case study shared in this paper is based upon the foundation of education research on the value of experiential learning. Kolb (1984) defined experiential learning as "the process whereby knowledge is created through the transformation of experience" (p. 41). He further explained that this approach to learning is cyclical and experiential in nature. Kolb's model focused on the use of concrete experiences combined with reflection and feedback to enhance learning. Roberts (2006) summarized the process of experiential learning as cyclical, requiring initial learner focus, interaction with the subject of study, reflection, and finally the development and testing of generalizations. Svinicki and Dixon (1994) provided lists of instructional activities that can facilitate the movement of learners through the learning cycle of abstract conceptualization, active experimentation, concrete experience, and reflective observation. However, the question arises as to how these experiential activities can be effectively accomplished in environments outside of the traditional face-to-face classroom given that Roberts (2006) reported that "experiential learning is defined by the context in which it occurs" (p. 27).

The concept of applying technology to create experiential learning is exciting; however, it is important to realize that educators are only in the infant stages of learning how to maximize these experiential learning outcomes. The nature of online course delivery presents challenges in regard to building experiences that are experiential. Karatas and Simsek (2009) conducted an experimental study that compared face-to-face and online delivery of a course. The authors stated that a possible reason for the online students scoring slightly lower than the face-to-face students was "that there is limited time for the students to state their thoughts in their own words and it is expected for them to 'read' and 'write' on the computer medium" (p. 71). As technologies continue to emerge and evolve, it is important that these technologies are examined and

shared with the broader community. It is not known which of these technologies could allow effective and efficient experiential learning and could address the concern shared by Karatas and Simsek. Gaps in the literature will continue to occur as new technologies become accessible for use in educational settings.

PURPOSE

The purpose of this case study was to describe the use of interactive technologies (i.e., Centra, an online conferencing system; Camtasia, a screen recording program; and SnagIt, an image capturing program) to enhance the learning environment with experiential learning activities for undergraduate students enrolled in an online course.

METHODOLOGY

Dooley (2007) described a case study as including "the setting, characters, events, problems, and conflicts, much like a richly detailed story" (p. 35). As patterned by Dooley, this case study tells the detailed story of using electronic technologies to create an experiential learning experience for the students. Participants in the study were purposefully selected because they had been involved in the instructional design and technology course under study. Data were collected throughout each 4-month academic course during the spring 2007 and spring 2008 semesters. Twenty-seven students were in the sample and 22 of the 27 students submitted all documents.

The data used to write the case study included reflections and observations of the instructor along with documents submitted by the students as part of the course. Lincoln and Guba (1985) attached the following adjectives to documents and records: "available," "stable," and "rich" (pp. 276-277). It is because of these aspects that documents resulting from the course were tapped as a part of the case study. Students were encouraged to reflect on their current level of knowledge and understanding in areas related to both the topic of instructional design and the use of technology in general at both the beginning of the course and at the end of the course through the use of individual self assessments that encouraged students to document why they believed their knowledge was at a particular level. In addition, students submitted a reflection paper at the end of the semester that responded to a request to share "the most important concepts gained from the course," "what they learned to make them more or less interested in the field of instructional design," and "three ways that what they have learned could be applied in their daily life." It is important to note that students were not directly requested to comment on their use of the technology addressed in this case study. Comments regarding the use of SnagIt, Camtasia, and Centra were shared by the students within their individual responses without prompting. Institutional review board approval was received to review the documents and include this component as part of the case study.

Prior to examining the documents submitted by the students, identifiers were stripped and a number was assigned in order to maintain confidentiality of the students; thus, the author was not able to associate statements from a student to a particular semester. Documents were coded S1 through S22 to allow comments from each student to remain associated and provide an audit trail of responses. This process also provided a means of ensuring trustworthiness. Documents were reviewed in aggregate. Data analysis was conducted using the constant comparative method in which "each incident in the data is compared with other incidents for similarities and differences" (Corbin & Strauss, 2008, p. 73). This process allowed categories to emerge and documentation of themes across the data. Triangulation of data was accomplished through the review of documents, instructor reflections, and student feedback. Counts and percentages were reported in findings to document relevance. It is recognized that the potential for

bias existed given that the author served as the instructor for the course and the research instrument. In order to overcome bias, the researcher reviewed data in aggregate after identifiers were stripped from the data. In addition, input was sought from colleagues familiar with eLearning in the interpretation of data.

RESULTS AND DISCUSSION

The following narrative provides a detailed description of the characters involved in the course including the instructor and the students, the setting in which the course was taught and how it was delivered, the events involved in the course including the use of the technology and the structure of the assignments, and the results of the course including student reaction to the course and the technologies.

Characters Involved: Instructor and Students

The instructor of the course was an experienced educator, with over 10 years of technology-based education experience, who had delivered multiple university courses online. The instructor had experience using the technologies (Camtasia and SnagIt) in the creation of materials to deliver courses but had not required students to use the technologies as a tool to submit assignments previous to this course.

Students enrolled in the course participated during spring 2007 (11 students) and spring 2008 (16 students). All students were undergraduates and 8 out of 22 (36.4%) voluntarily shared that this was their first online course. Both male and female students were enrolled and participated in the course.

Setting: Course Description and Delivery

The course entitled "Instructional Design and Technology" was delivered online during spring 2007 and spring 2008 by the author. Both semesters were taught in an identical manner using an online course management system, Blackboard Vista (Blackboard Inc., Washington, DC). The overall objective of the course was to introduce instructional design as it related to technology-enhanced instruction. Effective strategies for creating engaging content were shared. The goal of the course was to provide an overview of instructional design and technology. Specific course objectives included: (1) Gain an understanding of the technology-enhanced environment, (2) Recognize what "instructional design" means in a technology-enhanced environment, (3) Understand when the use of technology is appropriate, (4) Recognize possibilities and opportunities available with technology-enhanced instruction, and (5) Gain skills in using Centra, Camtasia, and SnagIt. The text, *The Essentials of Instructional Design: Connecting Fundamental Principles with Process and Practice* (Brown & Green, 2006), was used as part of the course.

Course requirements consisted of: class participation (15%), unit quizzes (20%), unit logs (20%), unit assignments (30%), and a presentation (15%). Class participation was defined as partaking in discussion board postings and periodic online meetings via Centra. Unit quizzes consisted of objective questions delivered via the course-management system. These quizzes were available for 1 week and could be taken two times, with the highest score being recorded. Unit logs involved reflection questions that were posed each week related to the unit content that required the student to react and respond to specific elements of the material. Examples of questions ranged from very general questions such as, "Which of the events shared in your chapter reading did you find most interesting?" to action-oriented questions such as, "Write one goal and three objectives supporting that goal following the ABCD [audience, behavior, conditions, and degree] approach." Individual feedback on unit logs was provided each week.

Setting: Technology Description

There were three technologies that students were required to use during the course: (a) Centra (Saba Software Inc, Redwood Shores, CA), (b) Camtasia (Techsmith Corporation, Okemos, MI), and (c) SnagIt (Techsmith Corporation, Okemos, MI). Centra is an online conferencing system that allowed the class to meet live in a virtual meeting area similar to a traditional classroom. Through the use of microphones, students were able to speak, use chat, and share PowerPoint presentations during live meetings. Camtasia is a screen-capturing application that not only allows the capture of full-motion screen recordings, but also has the ability to export the recording to a variety of video formats. Camtasia can be used to guide someone through a website or demonstrate how to use a computer application. Anything that is visible on a computer screen can be captured using Camtasia and can include both audio narration and the display on the computer screen. SnagIt is an image-capturing program that allows one to select and capture images of anything on the computer screen. This software allows one to show exactly what they see by taking a picture of the region of the screen desired. Users have the ability to add comments and notations to the images captured. Often these images are saved as a "jpg" or "png" file type that can be easily shared with others.

Events: Use of Technology in the Course

During the first week of class, students were instructed that the technologies would be used throughout the course as part of their assignments. Students were also instructed on how to gain access to each of the programs. During the second week of class, students received detailed instruction on the use of these three technologies.

Unit assignments required the use of one of the technologies (i.e., Camtasia or SnagIt) and consisted of specific requirements. Examples of unit assignments included:

- "Locate an example of training delivered via the Internet that is a good example and of interest to you and submit still images and video (using SnagIt and Camtasia) depicting the training."
- "Select a website related to 'Needs Analysis' and record a 1-minute video explaining why you selected this website. Then, visit the site 'Various Approaches to Needs Analysis' and select an approach listed that interests you. Capture the approach using SnagIt."
- "Select an activity with which you are familiar. (It should not be one of the topics shared as an example.) Conduct a task analysis on the topic following one of the approaches shared in the textbook. Use PowerPoint to create a presentation that shares an overview of your activity and the task analysis that you conducted. Record a video of you presenting your PowerPoint."

The assignments varied in breadth and depth and were designed to encourage students to interact with the content in a manner that was experiential. Specifications such as video length, number of images, and expectations were provided for each assignment.

There were a total of five Centra sessions during the course. One session was a live session presented by the instructor focused on a unit of instruction, modeling best practices in using a Live Online system. Three sessions involved individual student presentations focused on applying course concepts in a job setting. Students were required to prepare a 10-minute presentation that connected course content with the real world and share that presentation via Centra. The purpose of the presentation was for students to demonstrate skills in presenting using an online conferencing system (i.e., Centra) and to provide a connection between course content and real-world application. The final session involved guest speakers currently employed as instructional designers. The guest speakers provided an overview of their involvement in instructional design as a career. Following the presentation,

students had an opportunity to ask questions. Students unable to attend the live sessions were required to watch the recorded session and submit a one-page summary.

Events: Facilitation of Experiential Learning

The course requirements were designed to encourage and facilitate experiential learning as students completed assignments using specific technologies. Learners were engaged in a concrete experience (i.e., locating a particular website related to the topic), reflected on that experience in both audio and text, conceptualized what was observed, and finally tested the observation by applying the experience to their own situation. The following strategy was used to encourage engagement while using the technologies. Students were provided activities that involved the use of the technologies in three unique ways: (1) Students were encouraged to find an answer to a particular question or locate specific information, cite it properly, and quote it directly. Students were not required to restate what they had found in their own words, but rather report what they had found; (2) Students were requested to relate a particular finding to themselves personally, not report what they found, but rather explain what they thought of the information, whether they found the information to be accurate, and explain how it related to the topic at hand. The information presented was their opinion—not a right or wrong response; and (3) Students were requested to create new information based on a particular concept such as explaining how the topic at hand could be applied or by explaining what changes they would make to increase relevancy.

Using these three approaches, the instructor was able to encourage the students to learn how to use material found more appropriately without focusing on the actual citation of material in all cases. It is the belief of the author, that if instructors only focus on having students provide summaries with citation, there is the risk that the activity could be disruptive to the learning process instead of adding to the learning process. Experiential learning was facilitated by posing appropriate and relevant questions, not by creating an assignment that would tempt students to plagiarize, but instead encouraging the students to locate and use information, report what they found, and build off that information.

Results: Student Reaction to the Course and Delivery

While reaction to course content and delivery varied among students, the majority of students (20 of 22; 90.0%) indicated the course was a positive experience. Some students (6 of 22; 27.3%) indicated apprehension about taking an online course. As one student stated, "Coming into this course I was very nervous" (S8). Another student stated, "I was against the idea of an online class before I took this course because I thought education could not be conveyed as well using distance education, but now I realize how incredibly effective it is. I have to admit that now I am a fan of online courses and would quickly take another if I could" (S2). Another stated, "I feel that I gained not only a greater understanding of instructional design, but also some life lessons along the way" (S1). And yet another shared, "There are a lot of important concepts that I gained from taking this course" (S12). Based on comments shared by students, one can see the connection between the use of the technology and the impact that use had on their overall engagement in the course. As one student stated, "[The] class gave us the opportunity to be more creative in researching and/or learning about each unit's topics, as well as presenting those topics in ways that were fun and represented our own unique styles" (S21).

Based on the review of documents submitted by the students, the experiential methods employed using technology engaged the students with the content. Most of the students (19 of 22; 86.4%) reported in their reflections that they were not familiar with the content of "instructional design" prior to the course. As a

result of the course, multiple students indicated that they gained an interest in the field of instructional design (S2, S3, S4, S8, S9, S10, S11, S12, S14). This engagement was revealed in comments: "At the beginning of the semester ... I thought to myself that ID [instructional design] was a pointless field and that I would never have to use it. As I made progress through the course, I began to embrace and appreciate the instructional design field" (S5). "I would have to say that throughout the semester I have enjoyed learning about ID [instructional design] and the processes involved" (S10). "Before this course, I honestly had never even thought about instructional design as a possible career choice; I really didn't even understand the depth of it. Now, I want to become a high school teacher and integrate methods I have learned from this course to make math more appealing to students" (S6). As shared by another student, "I knew absolutely nothing about instructional design before this class so I would say that my eyes have definitely been opened up to all the opportunities that this field has to offer" (S14).

Results: Student Reaction to the Use of Centra

A review of comments related to the use of Centra revealed that the Live Online conferencing system was perceived as a useful technology in the course. In regard to student presentations, one student commented, "All the presentations were very informative and well executed" (S14). Another stated, "Overall, I really enjoyed the presentations" (S11). A student that had listened to the recordings shared, "After listening to the guest speakers, it was an event I am sad that I missed!" (S3). In fact, students that wrote summaries often indicated that they "regretted" (S2) missing them because they really enjoyed the content that was shared.

Based on student comments, it is possible that use of the technologies helped students feel more connected. As shared by one student, "Looking back I am very impressed with the course because I feel closer to my instructor than in any other class" (S2). Another student shared, "I enjoyed this class and getting to know my professor and classmates in this different way" (S14). Technology was directly mentioned by some students: "Now I know that Centra can be used to bring the class together no matter what the distance" (S16).

Results: Student Reaction to the Use of Camtasia and SnagIt

The following student comments reveal the important role that technology use played in the delivery of the course: "While using SnagIt and Camtasia, I honestly thought of different times in the past and in my future where I could use these programs" (S3). "I feel I learned a lot through the course and feel that I expanded my technical knowledge as well" (S1). "Learning to use SnagIt and Camtasia have been quite interesting to me and not seeing a need in them at first I have to admit I use the programs on my own personal endeavors now" (S2). "With the use of programs like SnagIt and Camtasia, I can record exactly how to complete the task and send it to her [my mom]" (S6). "The most important concept that I am going to be able to take with me after this class is finished is the amount of knowledge that I have gained about technology and other technological programs" (S7). "Those assignments were way out of my comfort zone and I felt pleased when I was able to complete them on my own" (S14).

Students revealed that over time they became comfortable with using the technologies. As one student stated, "I found SnagIt to be very easy. While Camtasia is not quite as user friendly, it is still fairly easy to navigate" (S15). Another stated, "The software systems that we had to use throughout this class were very interesting and were a great experience as well" (S18). Another shared, "This was my first time I have used the programs SnagIt and Camtasia and it was a new experience for me" (S14). As one student stated, "Initially, I was alarmed by the idea of having to use the two

computer programs because I am not very familiar with computers, but the more I used them, the more I was amazed at the interesting stuff I could do with them" (S13). Another student stated, "When the course first began I was intimidated and overwhelmed by everything from SnagIt and Camtasia to the live Centra learning sessions and now I not only feel comfortable in all these areas but I am intrigued by how useful they can all be as well" (S22).

Not all students found the programs easy to use. As one student stated, "Camtasia continuously gave me server difficulty in saving and submitting my assignments" (S19). However, the same student commented, "[I] thoroughly enjoyed the SnagIt portions of my assignments" (S19). Another stated, "I am technologically illiterate and the program looks very overwhelming at first" (S17).

It was interesting to find that many students reported that once they learned how to use the technologies, they extended use of the technologies to activities outside of the course. Student comments included: "I found [SnagIt] very useful and have actually used it for other class assignments" (S14); "I love SnagIt, I use it frequently in emails and PowerPoint presentations" (S17); "After completing my SnagIt and Camtasia assignments, I realized that both of the programs could be very beneficial for me to use" (S16); "I also have enjoyed using the computer programs SnagIt, Camtasia, and Centra over the semester" (S21); and finally, "Perhaps the most beneficial or applicable concept that I have learned during this class is how to use Camtasia and SnagIt" (S5).

CONCLUSIONS

The observations and data collected during this case study support the idea that interactive technologies can be used to enhance the learning environment with experiential activities in an online course. Technologies such as SnagIt, Camtasia, and Centra offer ways to allow students to express themselves and increase sensory input, thus increasing the chance to engage students and enhance learning. "Part of the art of changing the brain is recognizing the existing neuronal networks in a learner and inventing ways for her to use them. She will do the rest" (Zull, 2002, p. 118). While any particular technology is not required to accomplish this task, it was concluded that the technologies shared can facilitate this process.

The technologies enabled students to be expressive and innovative in their assignments and allowed the instructor to "look over the shoulder of a student" and observe the individual activities and learning processes exhibited. The technologies allowed the instructor to "hear the voice of the students" as the students explained and identified material found in literature on the Internet—similar to a traditional experiential learning process. As shared by McCann (2006), incorporating "highly interactive components" (p. 21) into online instruction is important. Consequently, it was concluded that the technologies addressed in this case study provide an opportunity for instructors to incorporate active components that allow students to use sensory inputs more effectively and encourage deeper understanding by engaging the students and providing an enriched learning experience.

Student comments and course observations indicated that use of the technologies encouraged experiential learning by allowing students to gain ownership of their ideas and communicate their ideas clearly. The technologies encouraged authentic submissions by allowing students to use their own voice and express their ideas both pictorially and through audio. This finding provides a mechanism to address the issue shared by Rabe-Hemp et al. (2009) regarding the need for students to be able to express themselves in ways that "encourage students to present their personal identities in collaboration with other students" (p. 213). This finding also adds further support to the need to employ diverse instructional strategies (Gayton & McEwen, 2007).

A critical conclusion related to the importance of faculty providing clear instructions and timely communication with students as to

the use of technologies. Based on comments by students, one cannot assume that students are arriving in the college classroom as computer-literate individuals. This finding was consistent with Zhang (2005) who shared the importance of providing technical training for students. While the technology should not become the focus of one's course, it should be noted that students required careful and specific instruction in order to overcome technological barriers. This finding supports the early work of Hillman et al. (1994), which focused on the importance of learner-interface interaction in distance education. An unanticipated finding related to an informal means of verifying that students were doing their own assignments. An ongoing challenge associated with online classes is the issue of "cheating"; however, use of these technologies provided a simple nonintrusive mechanism, while not absolute, to identify students by hearing their voice. It is recommended that further research be conducted to determine additional methods to address this issue.

Readers are cautioned that this case study reflects the experiences of the students and instructor involved in the course described and cannot be generalized to the broader population. However, it is the author's hope that the reader will benefit from the case study by realizing the new opportunities that exist for the use of technology to encourage experiential learning in online settings.

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