ONLINE PSYCHOLOGY: TRIAL AND ERROR IN COURSE DEVELOPMENT

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ABSTRACT

Online courses appear to be the future if colleges and universities choose to increase enrollments with students who need more flexibility in scheduling. The challenge has been to create a course that is rigorous with the limitations to physical presence of the instructor and the parameters inherent in technological delivery. This article relates the planning and execution of such a graduate psychology course in the area of lifespan development. The instructor decided a hybrid course, one that had elements of both online delivery and limited campus attendance, would be appropriate for the initial transition from physical attendance on campus to online delivery and interpersonal interaction. Important teachable moments for the instructor included creating community with 36 online students, number and breadth of assignments, and evaluation. Logistics, such as having students submit assignments online, correcting coursework, and returning documents to students with constructive comments, were some of the challenges to both instructor and students. The delivery infrastructure was Blackboard, and the instructor had attended training on the new features to streamline online teaching for both instructor and students. The successes, challenges, and summative decisions for future courses are shared.

Keywords: Online Teaching, Psychology, Developmental, Graduate.

INTRODUCTION

Although there has been a steady increase in enrollment in regional universities, the increases are becoming smaller. Many hypotheses exist for this limited increase including the economy and more limited fund availability for student loans. Universities are concerned with how to meet the needs of potential students so as to raise enrollment and, thus, benefit from added tuition totals.

Earning degrees has taken roads less traveled in the recent past. Concerns about cost and flexibility of attendance have caused online classes and degrees to be re-examined. Online colleges and degrees offer more choices for potential students. However, a disadvantage of online courses and degrees is the much higher dropout rate when compared to a residential college. Although a residential college would consider 30% to be a high attrition rate, some online programs may have as much as 70% dropout rate. The Department of Education studied effectiveness and found that online teaching is just as effective as face-to-face instruction, yet procrastination tends to be another disadvantage of online classes. Regarding flexibility, a student may be six time zones away and able to complete a course (Frey, 2009). Thus, convenience and flexibility appear to be the watchwords for students who work full-time and/or have family responsibilities that prevent them from attending an on-campus program.

Many in academia have frequently denigrated online courses and online degrees as being less rigorous and diploma mills. There are spam items that reach many e-mail accounts even advertising an ability to receive an online master's or doctoral degree within two weeks. Yet there is published research that documents the success of online classes in teaching various academic areas. For example, a number of studies have acknowledged the effectiveness of online courses for teaching grammar (Abuseileek, 2009), educational technology (An, Shin, & Lim, 2009), problem-based learning (Sendaga & Odabasi, 2009), cardiovascular pharmacotherapy (Crouch, 2009), technical communication (Pickering,

2009), and literacy education (Peterson & Slotta, 2009).

Not every subject is conducive to online instruction. Wynegar and Fenster (2009) found that when teaching college algebra, the traditional lecture delivery system produced the highest grade point average and one of the lowest failing rates of all teaching strategies including computer-based instruction, online instruction, and television instruction. Yet, O'Callaghan (1998) found that computer-assisted instruction in college algebra resulted in students who exhibited better understanding of mathematical functions. Although O'Callaghan's students expressed higher opinions of computer-assisted instruction over traditional lecture, exam scores did not significantly improve when computer-assisted instruction was used (Stephens & Konvalina, 1999; Tilidetzke, 1992). To clarify the matter further, Lindsay (1999) found that only 58 percent of students exhibited successful understanding when using computer assisted instruction, whereas 90 percent using paper and pencil resulted in successful scores. Lindsay's conclusion was that students using the computer algebraic system had difficulty interpreting the computer output, a problem with which students were not faced when using paper and pencil techniques. Thus, a number of variables likely contribute to successful traditional and online courses.

Seven principles considered best practices in undergraduate education were provided by Chickering and Gamson (1987). They are summarized as follows:

- promotes contact between instructor and students;
- encourages cooperation and reciprocity among students;
- creates opportunities for active learning;
- provides immediate feedback;
- requires attention to task;
- conveys expectations of superior performance; and
- respects diversity and multiple intelligences.

These best practices in undergraduate education generalize to graduate education and on-line classes as well. Payne and Johnson (2005) studied student perceptions of success in online graduate programs.. Students reported that the quality of online courses was equal to on-campus courses. Instructors were quick to respond to questions, and students found ways to connect with other students. Ferrari, McCarthy, and Milner (2009) studied the concept of student engagement. They found that student motivations were categorized in three ways: mastery orientation, performance-approach orientation, and performance-avoidance orientation. These orientation types were stronger in highly engaged students with the mastery orientation goal increasing most significantly in engaged students.

Del Valle and Duffy (2009) investigated learning strategies of students in online courses with one-on-one mentoring. Although there is widespread concern that students will have difficulty managing time in online courses with high levels of student freedom, it was found that the vast majority of learners were very effective in their learning strategies. Likewise, Elvers, Polzella, and Graetz (2003) found no significant differences between an online class and a lecture class on measures of procrastination. Thus, the potential of distance education environments to provide high quality self-paced learning and accommodating different learning strategies, which is difficult to do in group-paced courses, appears worthy of exploration.

The purpose of this paper is to share the trial and error learning as the instructor of a graduate developmental life-span course attempted to put the course online. A hybrid course, one with elements of both online delivery and limited campus attendance, was selected to make the transition from physical attendance on campus to online delivery. There were 36 online students, and all successfully completed the course. Nevertheless, the instructor believed she had discovered successes and mistakes as the course progressed. The following sections will provide research related to certain aspects of online teaching, the instructor's attempts at incorporating the aspects, and the success of the endeavors. The delivery platform was Blackboard, which had advantages and disadvantages of its own.

Creating Community

Preece and Abras (2003) explored the challenges of teaching human-computer instruction online. The challenges were identified as:

(i) Developing relationships

(ii) Showing enthusiasm

(iii) Balancing time versus activities

(iv) And creating and managing meaningful design projects (p. 391)

The researchers acknowledge that creating community in the online courses is the key. For example, to reduce isolation the researchers suggested ice-breakers or get-acquainted exercises. Pallof and Pratt (1999) suggested a community framework of teamwork, collaborative learning, shared goals, and active creation of knowledge and meaning.

Vesely, Bloom, and Sherlock (2007) explored key elements of building online community with 62 participants, 14 faculty members and 48 graduate students at a regional university. The researchers surveyed perceptions of instructors and students related to community development in online courses. Results indicated that 85% of students thought a sense of community was important, and 94% experienced a sense of community in their online course. Likewise, 100% of instructors believed that student learning improved with a community atmosphere. Students thought instructor modeling was the most important factor in building online community, whereas instructors ranked it the least important. Both instructors and students gave similar rankings to students' interest and priority for the class and to the need for sufficient time for discussion and interaction. Finally, instructors viewed interaction and dialogue in creating learning activities as the most important element, whereas students ranked it as least important. They thought that interaction and dialogue with their peers was helpful but not the most significant element in creating a community atmosphere in online courses.

The hybrid course's first assignment was to have instructor-arranged dyads interview each other and write a brief paragraph that was then posted on Blackboard with a digital photo of the interviewee. The instructor placed one of herself on Blackboard first as a model. This exercise had its desired effect in that students were able to read something about each other and have a visual image with which to connect. Some students already knew each other and others did not. Students reported enjoying reading about their classmates.The instructor also assigned the students to a group of six for the discussion assignments and the presentations. In connection with the developmental theories, she also gave them group names like "Piaget's Group" and "Erikson's Group." There were some students who indicated that in previous online classes all students had been required to comment as a class instead of smaller groups. Actually, the smaller groups assigned for discussion and presentation were appreciated by some students. For others, the groupings did not seem important.

Assignments

Meyer (2003) examined face-to-face discussions versus online threaded discussions and found several themes. One was expansion of time, described as time-limited for face-to-face discussions since they were confined to class time and as time-expanded for online discussions since students were not limited by time when they were able to respond on their own schedule. Another relevant theme was the role of thinking, particularly critical thinking. Although several articles have found that online class discussions foster critical thinking, (Curtis & Lawson, 2001; Edelstein & Edwards, 2002; Eklund & Eklund, 1996; Newman, Webb, & Cochrane, 1999; Shapley, 2000; Stern, 2004), Meyer's study displayed mixed results in that critical thinking obviously was present in online discussions but perhaps not to the extent she had expected.

Jorczak (2009) examined how these aspects of the discussion tasks may affect the quality of group discussion for higher-order learning. His results indicated conceptual conflict is related to critical thinking and differences in task context and product did not have significant effects on quantity or quality of online discussion.

Assignments for the hybrid course included participating

in assigned groups for discussions and presentations and individual submission of a literature review and projects. Discussion threads included interviewing a pregnant woman or a new mother and reporting the results, sharing personally favorite finger-plays, nursery rhymes, or children's songs and commenting on the relevance of these items in child development, sharing elementary and junior high school experiences, and interviewing or observing adults in various stages of life. The assignment was to share a personal offering and then comment at least two times on some of the other entries. While the instructor was certain some critical thinking emerged, it is likely that the focus on quantity rather than quality of responses may have hampered critical thinking results; presenting the assignment more clearly and providing a rubric to score quality of participation would have contributed to critical thinking.

A graphic organizer was required for each student to demonstrate the relationship(s) between theories, geographic regions where they were originally developed, the social issues at the time of development, the major concepts, and the public response to the theory. To make it easier to submit and grade, students were required to use 8.5"x11" page formats. When submitted in an on-campus class, posters and other creative renditions had been allowed.

The literature review was submitted to Turnitin.com which is an online program provided by the university library to help manage plagiarism and interfaces with Blackboard. The program scans the submitted paper and gives a colorful printout of how much of the text is similar to other papers in the system. The system is in some ways overly sensitive to common phrases, and it notes the likenesses in the submitted paper to other works. However, it is fair in providing a percentage of how much of the paper could be considered plagiarized. In the case of the hybrid class, there was no significant evidence to suggest plagiarism had been an issue with any student. Turnitin.com and its interface with Blackboard had a few difficulties in that it does not maintain the format style, in this case the American Psychological Association Publication Manual, Fifth Edition. It was also difficult to grade the submitted paper because the format was jumbled.

Additionally, students were required to create two brochures, one highlighting the physical, cognitive, and social aspects of a chosen age, and the other highlighting a developmental theme. A rubric was used for grading and was provided early in the semester so that students would know the criteria used to evaluate the work product. The rubric for the thematic brochure is provided in Table 1.

The multicultural presentation was delivered on campus for three consecutive weeks when the class was actually scheduled on campus, three hours each, so that each group had 90 minutes to display their research. Each student had been provided a rubric regarding how the presentation would be graded. Although it was thought that students would resent having to come to campus for three evenings, this was a misconception in that most students reported being excited to see and interact face-to-face with each other. Meeting together, they could provide activities that would not have been possible over the internet. For example the group presenting the lifespan development of a Hispanic culture provided guacamole and chips as well as taking us outside to enjoy a piñata.

It should be obvious to the reader by now that these graduate students were constantly busy on one project or another in addition to exams and online discussions. The instructor was constantly busy as well in grading, providing

Topic Important to Developmental Psychology	0 Not at all	15 Mildly related to development	20 Moderately related to development	25 Important to Development
Explanation of Developmental Issue	0 Not apparent	15 Inadequate or inappropriate	20 Satisfactory info presented adequately	25 Outstanding presentation of info
Prevention, Intervention, Symptoms, etc.	0 Not apparent	15 Inadequate or inappropriate	20 Satisfactory info presented adequately	25 Outstanding presentation of info
Print Quality	0 Very poor	2 Poor	4 Adequate	6 Outstanding
Clip Art	0 Not apparent	2 Clip art but not well related	4 Appropriately related	6 Outstanding presentation
Use of Space	0 Far too much blank space	2 Too much blank space/too crowded	4 Appropriate use of space	6 Outstanding use of space
Grammar, Spelling	1 More than 6 mistakes	3 4-6 mistakes	5 3 or fewer mistakes	7 No mistakes

Table 1. Thematic Developmental Brochure

constructive feedback and returning graded assignments in a timely manner via Blackboard. The one major conclusion was that there should be far fewer assignments in the next online class.

Lectures

Wang and Newlin (2001) suggested that synchronous communication in online classes had benefits beyond asynchronous communication. In the synchronous style, the online students gather at their computer at one time, the instructor lectures, and then questions and discussions take place in a chat room. However, the authors do not denigrate asynchronous communication. They use a metaphor of backbone and muscle to describe asynchronous communication and the metaphor heart and hustle to describe synchronous communication.

Young (2008) described how experienced instructors have changed their traditional lectures to minilectures. He spoke of one instructor whose 50-minute lectures had earned him rave reviews and high teaching evaluations in the traditional classroom. However, when he went to online teaching and recorded his 50-minute lectures for students, his teaching scores dropped significantly. He, instead, recorded 20-minute lectures and focused on a narrow topic for the online class. Another instructor had found in 40 years of teaching that breaking lectures into shorter sections full of playful demonstrations were best in his traditional classes. Morris (2009) maintained that one-to three-minute presentations focused on assignments and students rather than the irrelevant information sometimes lacing a traditional lecture.

In order to simulate in the online class the kind of lectures that would be available in a traditional class, an auditory lecture was added to the PowerPoint for each week. The lectures, however, were sometimes as long as 70 minutes. Such a lengthy lecture without guided activities throughout would not have been likely in the instructor's traditional class; and they were certainly not productive in the online class. In fact, one student admitted that she downloaded the lecture to a compact disc and listened to the lecture as she commuted.

Additionally, to be flexible and not requiring synchronous activity except during exams, chat rooms were not used. In fact, discussions of lecture topics were not a part of the online discussion format. With the length of the lectures and no discussion of the lecture, some may have believed the lectures were utterly useless.

Conclusion

A summary of lessons learned would include:

- Plan the online class as a unique offering rather than trying to replicate the traditional class online. Limit the number of students if there are papers and other writing assignments.
- Keep the community-building activity and perhaps add one or two more.
- Transform long lectures into shorter focused offerings and tie them to communal activities.
- Reduce the number of assignments so they are manageable for students to complete and for the instructor to grade and return as close to immediately as possible.
- Plan discussions so they require critical thinking and do not lapse into personal chatting.
- Since everyone agrees that online classes are more work for the instructors than the traditional lecture classes, add one online class or hybrid class at a time.

Although research in some areas of online teaching has not been explored to any critical extent, others have stimulated research. For instance, there is little empirical research to guide online instructors regarding lectures. Most of the publications are anecdotal. However, there is a growing body of research regarding the effectiveness of online discussions. It would behoove the novice online instructor to peruse what research is available in various areas of online delivery.

For instance, Yang (2008) found asynchronous online discussion forums instrumental in moving students from lower levels to higher levels of critical thinking. Taba (1966) and King (1990) maintained that a student's level of thinking is influenced by the level of questions. Contemplative questions stimulate students' advanced cognitive processes, including self-reflection, revision,

and social negotiation (Brown & Palincsar, 1989; Wenger, 1998), all of which are fundamental to critical thinking.

Suler (2004) explored the online disinhibition effect, in which people share personal information or express opinions they would otherwise dare not share. Psychological issues of transference may emerge along with emotional postings during online discussions. Deadlines for posting in the online discussion, particularly towards the end of the semester, can sometimes cause students to dispatch items causing interpersonal conflict with other students.

As stated previously, online discussion boards have triggered the most research regarding online classes. Yet there are many additional areas of online teaching and students' psychological responses to online classes to provoke further research.

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