Online Learning: An Assessment of Learner Satisfaction with Collaborative Group Discussions

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Abstract: *Online programs in higher education are rapidly expanding and exerting further influence on both instruction and learning. Among institutions of higher learning, community colleges have the highest number of online students and online degree programs. This has created a new challenge for educators in developing online pedagogy that achieves student satisfaction and persistence. The present study addresses online student learning preferences within the online learning environment at the community college level. In three online courses facilitated by the same instructor, students were surveyed on collaborative group discussions. The survey respondents demonstrated a general preference toward theoretical discussions related to assigned readings, as well as showing a strong preference toward active and substantive faculty engagement within the collaborative group environment. These results suggest an enhanced learner experience, which will likely improve learner satisfaction and student persistence.*

Keywords: *Online Learning, Collaborative Group Discussions, Student Satisfaction and Persistence*

1. INTRODUCTION

Within higher education, online programs are expanding rapidly and continue to exert more influence on instruction and learning. As of 2013, eighty-percent of public universities offered at least one fully online program (Clinefelter&Aslanian, 2014). However, student drops for online courses continue at higher rates than face-to-face courses (Carr 2000; Diaz, 2002; Frankola, 2001). Eventually, the demand for online courses will match student growth rates, and when both stabilize, institutions will compete for the available online student population. Future college selection choices will not only depend on convenience, but also the quality of the product being offered. Although online courses have been around for over 20 years, institutions of higher education are still discovering best practices in online delivery and student retention, such as completely online competency-based educational platforms. Originally offered by private institutions, it is now common for public institutions to offer online certificates and degree programs as well.

The purpose of this research was to examine student preferences and engagement outcomes through collaborative discussion forums and individualized activities in an online instructional environment. This research was limited to students in three online criminal justice courses at El Paso Community College through one facilitator during the Fall 2017 semester. Individual assignments and collaborative group discussion forums were developed with similarity among all three courses and administered to all three courses in the same sequence during the semester.

2. DESCRIPTION OF THE PROBLEM

El Paso Community College is not distinct from other colleges or universities in dealing with the continuous growth and demand for online courses. However, the approach to closing the gap between online student success rates and face-to-face courses at the college is still in the process of discovery. According to Clinefelter&Aslanian (2014), as the competition for online courses intensifies, outcomes such as placement rates, course cost, and credit transfer will be more compelling to online students than convenience. Fields of study such as business, nursing, information technology, and criminal justice have the highest enrollment of online students, but a new range of online programs such as game design, radiology, and veterinary assistance are entering the market. Student trends also show enrollment is increasing further away from where students live (pp. 4-5). Institutional selection will

come down to multiple factors, but the retention, attrition, and persistence of students from initial enrollment to graduation will be placed solely on the efforts of each institution through their independent processes and quality methods of course delivery.

This study is focused on collaborative group discussions and its relation to quality course delivery. Quality course delivery includes achieving high levels of student learning satisfaction while obtaining successful results in student learning outcomes. Quality is possible through proper course design and facilitator involvement. There are some legitimate concerns for many faculty about what constitutes proper delivery methods within a course design and how to achieve all the requirements for administering a quality course. The answer is not simplistic nor systematic. Similar to those in a brick-and-mortar classroom environment, online learners have different learning styles and needs. Some learners enjoy working independently, while others prefer collaboration and group settings. Depending on the institution, the delivery tools available, and the course topic, faculty should design a quality course tailored to student engagement to improve retention and persistence.

3. LITERATURE REVIEW

Student online course enrollment has constantly increased over the past decade, but will ultimately level out to population growth once the gaps between course offerings and course demands have been closed (Clinefelter&Aslanian, 2014). When this is achieved, online education between institutions will become more competitive. Nationally, online education has become a significant portion of curriculum development, and many institutions are taking the lead in faculty training and development, while others continue to struggle with administrative issues and faculty needs.

3.1. Trends and Analysis

According to Clinefelter&Aslanian (2014), of the online college students surveyed [majority undergraduate], almost 90% reported their online experience was either the same or better than on-ground classroom instruction. Only half of the students surveyed would have considered taking a hybrid course if the online course was not available. The largest drive for online student enrollment was for a career pursuit in a new field, and over 70% of online students identified themselves as female (pp. 11-18). Today, community colleges have the highest number of online students and online degree programs (Lokken, 2016).

According to Lokken (2016), one of the greatest challenges college administrators face in improving student engagement in online learning is training their faculty in online pedagogy. Training faculty how to teach online is one of the critical components of every successful online learning program. Although about 80% of college faculty receive some instruction on how to teach online, less than half receive over eight hours of online training, and full-time faculty represent about 79% of online instructors. The lack of robust training in online pedagogy for faculty is usually due to faculty time limitations and workload issues. In dealing with this issue, most colleges have at least one instructional designer on staff or have identified other available resources to expand faculty training and course assessment practices. However, a continuing challenge involves some faculty demonstrating resistance or apprehension to redesign courses to meet improved institutional standards because of concerns over limitations to academic freedom (pp. 21-28).

Although trends are improving, about 47% of students surveyed indicated that their retention is lower for online classes than for face-to-face instruction at their college (Lokken, 2016). Concerns to college administrators is the realization that prospective student awareness over institutional choice is expanding. In response, colleges are beginning to focus more on online course quality that promotes student engagement and faculty responsiveness that result in student retention and success (Lokken, 2016).

3.2. Active Learning through Collaborative Learning

Active learning is commonly defined as any instructional method that engages students in the learning process (Prince, 2004). The need for active learning still applies to the online learning environment. Simply introducing an assessment or activity for online students to complete does not capture all the benefits of active learning. For active learning to benefit the learning process, the activity must influence retention of material and add value to the learning process. Students who engage in active learning have improved self-esteem resulting in greater academic achievement (Prince, 2004).

In an online instructional environment, most student interaction occurs in asynchronous online threaded discussions. In a published online student survey, Roper (2007) concluded that instructors who establish clear expectations in their online asynchronous discussions and who ask specific questions in response to student posts encourage richer online dialogue. In Roper's (2017) student survey, 52% benefited most from interaction with other students in threaded discussions. Weekly discussions were best received by students when instructors actively engaged in Socratic questioning within the discussion forums, and the questions posed were theoretical concepts left open to student interpretation and academic argument. Students who regularly communicated with their online classmates during the course also achieved greater success (pp. 62-65). This author generally requires online students to engage in online collaborative group discussions by posting substantively to the original question; respond substantively to at least two others within the forum as well; and post these responses at least twice per week.

According to Roper (2007), students who find a way to apply concepts in class retain information better. These concepts are interpreted and restated in the student's own words in an active dialogue with others. Applying new material to what a student already knows is also a helpful way to retain the material, and instructor shared knowledge is an integral part of the learning process. Asking thoughtful questions is a valuable resource in support of students' online learning experience. Roper further states that when instructors use Socratic methods to engage students within collaborative discussions, it pushes the student to engage further in critical thought, which ultimately makes the subject matter more understandable. Additionally, students prefer instructors who actively engaged in such discussions. This helps the student understand the subject better and provides more opportunities for class participation (pp. 62-65).

Achieving continuous improvements in student retention, attrition, and persistence is an important goal for any institution to pursue. According to the "Achieving the Dream" program and studies related to first and second-year college students, student-faculty interaction relates directly to positive academic and persistence outcomes (McClenney, Marti & Adkins, 2009). Within the online instructional environment, when instructors actively engage the student in the process of collaborative learning, student persistence improves (Angelo, et al., 2007). When online students are more actively engaged with other students and faculty in challenging rigor, such as evaluation and synthesis, the more likely they are going to continue with their education and attain their academic goals (McClenney, Marti & Adkins, 2009).

3.3. Online Collaborative Discussions

Communication between online students and their instructor, and among other students themselves, is significant to the process of online learning (Pallof& Pratt, 1999; Du, et al., 2007). Using such technology universally can result in students becoming inattentive, frustrated, or even bored with the experience (Berge, 1999; Du, et al., 2007). Discussions need to be delivered in a way that fosters critical thinking, and online discussion tools allow the instructor to facilitate insight and understanding rather than just knowledge (Du, et al., 2007).

According to Du, et al. (2007), online learner social isolation can be addressed through collaborative group assignments as a social component of an online class. Collaborative group work provides online students with opportunities for deeper analysis and reflection on topics being discussed. This research further states students believe that online discussions were best when they could use the knowledge and expertise of the entire group to achieve the course goals through collaborative online discussions. Online students also believe that the level of learning is better when they have the opportunity to discuss detailed technical curriculum, theoretical frameworks, and other research topics with an online group of students (pp. 94-100).

Using collaborative online discussions enhances the quality of learning within an online course (TeachOnline.CA, 2013). In the 2013 Contact North/Nord report, the following goals were recommended for online learning discussions:

- Provide the opportunity for improved student comprehension of key concepts in the course;

- Analyze the logic or power of argument;

- Encourage a deeper understanding and the relationships of the concepts posed;

- Enable students to learn from each other, support each other, and share their knowledge and experiences with each other;

- Encourage students to engage constructively in critical analysis of ideas, concepts, philosophies, and defend and reflect on their own positions with issues raised;

- Develop a sense of belonging to a group with similar interests to foster student engagement and improve student retention; and

- Enable active instructor facilitation to monitor the learning environment and provide new opportunities for additional teaching and support for the students as a group (TeachOnline.CA, 2013, p.3).

When considering such goals in collaborative discussion design, many online faculty find synchronous discussions less satisfying because students have to log in at a specific time and students have to take turns to speak. Many times, synchronous discussions often feel less spontaneous in open group collaborative learning and should be considered more for delivering lectures and handling questions and answers (TeachOnline.CA, 2013). In an asynchronous environment, discussions forums allow for threaded responses, and student posts are linked to comments and sub-topics. Threading comments in an asynchronous environment encourages deeper and longer discussions that can be easily tracked by the instructor (TeachOnline.CA, 2013).

When designing online discussions, the instructor should set clear academic goals for discussion forums, provide practical guidance to the student on participation expectations, and identify a code of conduct (TeachOnline.CA, 2013). According to Berry (2008), online instructors should not dominate asynchronous discussions. Instructors must focus on stimulating student-to-student learning collaboration through Socratic questioning. Also, timely placement of questions by the instructor is essential for Socratic dialogue to work effectively. Best practices for discussion assessment include requiring a minimum number of substantive postings and subsequent activity. Weight of course grade given to online discussions varies from 10 to 70 percent. Regardless of the chosen weight, an assessment grade must be given. Use caution not to overuse discussions in a course, as quality discussions could become cumbersome and tiresome (pp.1-3). Best practices recommended in asynchronous discussions include: limiting the number of collaborative discussions that meet the goals of the course, grading discussion postings, and using rubrics to establish clear guidelines for grading. Faculty need to be properly trained and guided on how to effectively use asynchronous collaborative group discussions in class.

4. METHODS

Quantitative results of this study included a student survey containing nine questions related to four issues: student preference between individual and group discussions, quality of collaborative group discussion, quality of discussion topics, and quality of discussions related to active instructor engagement. This survey was administered to students in El Paso Community College online criminal justice courses at the end of the Fall 2017 semester. Quantitative data were collected and analyzed to identify patterns of student perspectives in relation to online collaborative learning in the context of higher education at the community college level.

4.1. Data Analysis, Design and Procedure

Cronbach's alpha test was used to assess the reliability and internal consistency of the survey's scaled items. The resulting "α" coefficient of reliability ranges from 0 to 1 in providing an overall assessment of a measure's reliability. The closer the results to 1, the more likely the items in the survey have a shared covariance and probably measure the same underlying concept. If the results are less than .05, underlying concepts formed by the grouped questions and answers cannot be logically concluded on a broader scale. Through the written consent of Dr. Del Siegle at the *University of Connecticut* (2017), Cronbach's alpha results from groupings in this survey were calculated with the use of his published reliability calculator.

4.2. Survey Design

This study focused on three online criminal justice courses taught by this author during the Fall 2017 semester at El Paso [Texas] Community College. Among the three online courses (*CRIJ 2313, CRIJ*

1313and CRIJ 1301), a total of 28 students provided voluntary informed consent to engage in the end-of-course survey, and a total of 23 of those students completed the survey. Access to the survey was denied to students who chose not to participate. Participating students were instructed on confidentiality and the purpose of the survey. The survey questions were posed to students with Likert scaled level responses: (1) strongly disagree, (2) disagree, (3) not sure, (4) agree, (5) strongly agree, and (6) not applicable.

In order to ensure a reliable and valid survey instrument, the survey was examined by three independent sources familiar with both survey instruments and online instruction. The survey instrument was also evaluated by the El Paso Community College Institutional Review Board for face validity and content. Finally, the survey was administered to a dozen college faculty familiar with online education for constructive feedback. Cronbach's alpha reliability calculator demonstrated reliability in cumulative responses given by the faculty test group.

5. RESULTS

The following are results of the analysis of the Student Survey related to online student discussion experience and satisfaction. Nine survey questions were grouped into four categories. Cronbach's alpha test was used to provide an overall assessment of all four reliabilities. In group 1, the omnibus research question was: *Do students prefer to work independently or within a collaborative group environment?* This was posed in two questions. In group 1, reverse coding was used, whereas in question 1 = (1) strongly agree, and question 2 = (5) strongly agree. The quantitative analysis was done by taking the total number of student responses to each question (N = 23) and calculating the numerical mean of student responses. The following tables also include each of the questions taken from the Student Survey. The mean score for each question indicates a numerical value on the Likert scale from 1 to 5 (strongly disagree =1, disagree = 2, not sure = 3, agree = 4, and strongly agree = 5, and not applicable = 6). The observed N represents the number of responses to the question.

5.1. Student Preference between Individual and Group Discussions

The first category of grouped items Q1and Q2 from the Student Survey examined student preference between independent and collaborative group work.

Table1. *Cronbach's Alpha Mean Responses to Student Preferences (N= 23).*

Variable	M	SD	∝= .601
Q1: I prefer to work independently.	4.13	.75	
Q2: I prefer to work in a collaborative group environment.	3.30	.82	

In Q1 and Q2, online students demonstrated a stronger preference of working independently, as compared to participating in collaborative group discussions. Based on ∝= *.601,* it is likely other first and second year online students in college would provide similar responses.

5.2. Quality of Collaborative Group Discussion

The second category of grouped items Q3and Q4 from the Student Survey examined student assessments of collaborative group discussions.

Table2. *Cronbach's Alpha Reliability Measurement to Collaborative Discussions(N= 23).*

Variable	M	SD	∝= .602
Q3: My critical thinking skills are enhanced in an online collaborative group discussion.	3.82	.71	
Q4: I prefer to work in a collaborative group environment with ample student postings.	3.69	.70	

In Q3 and Q4, online students generally agreed their critical thinking skills were enhanced while engaging in collaborative group discussions with ample peer involvement. Based on ∝= *.602,* it is likely other online students would provide similar responses.

5.3. Quality of Discussion Concepts

The third category of grouped items Q5 and Q6 from the Student Survey examined student assessments of discussion concepts.

Table3. *Cronbach's Alpha Reliability Measurement to Discussion Concepts (N= 23).*

Variable	M	SD	∝= .480
Q5: My online learning is enhanced by working on topics with other students related to the assigned readings in a group discussion forum.	3.95	.76	
Q6: I prefer to discuss theoretical concepts in a collaborative group environment.	3.91	.73	

In Q5 and Q6, online students in this survey generally preferred theoretical concepts related to the assigned readings within the collaborative group discussions during the course. Based on ∝= *.480,* it is unlikely to predict if other online students elsewhere would provide similar responses.

5.4. Quality of Discussions Related to Active Instructor Engagement

The fourth category of grouped items Q7 through Q9 from the Student Survey examined student assessments of active instructor engagement.

Table4. *Cronbach's Alpha Reliability Measurement to Active Instructor Engagement (N= 23).*

Variable	M	SD	∝= 769
Q7: I am more satisfied with my learning when my professor participates frequently in the collaborative discussions.	4.43	.50	
Q8: My learning is enhanced when my professor responds to student posts with more follow-up questions.	4.34	.71	
Q9: My learning is enhanced when my professor provides his/her views and opinions within the group discussion.	4.73	.44	

In Q7 through Q9, a majority of online students strongly agreed their learning is enhanced when the course instructor frequently and substantively engages with the students in group discussions. Based on ∝= .769, it is highly likely other online students would provide similar responses.

6. CONCLUSION

Students surveyed in this study, who were generally new to the college experience, reported that they would feel more comfortable working independently than in an online group setting. This finding is likely similar across the multiple disciplines providing online courses to first and second-year college students. However, when engaging in learning through a collaborative group environment, these online students believed their learning was enhanced. Interestingly, students provided a strong response to learner satisfaction when the facilitator frequently and substantively engaged within collaborative group discussions. As noted by an online student from the *CRIJ 2313* course:

> *"As this being my first online course, I should say I really enjoyed doing the group discussions because it helps me learn people's different point of views, compared to mine. I also liked how you [the instructor] responded to our discussions and you [the instructor] answered all of my questions when I emailed you. I really enjoyed this class. Thank you!"*

It is highly likely faculty teaching online courses across multiple disciplines will enhance the learner experience through direct and frequent substantive interaction with their online students within collaborative group discussion environments.

According to Prince (2004), active learning involves any instructional method that engages students in the learning process. Simply introducing an assignment or activity may not completely capture active learning. The activity must influence the retention of material and its value to the learning process. Online collaborative discussions may be a great tool to increase student retention. Bolliger& Martindale (2004) state the instructor is not just the facilitator, but also serves as the motivator for the student. Instructor feedback is the most important factor in student satisfaction with the course (p. 62). Using questions in collaborative group discussions which influence critical thinking, supported by an engaging instructor whom influences the furtherance of the discussion through Socratic questioning will enhance the learning process. Ultimately, enhanced learner experiences will likely improve learner satisfaction and student persistence rates as well.

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