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A Comparative Examination of Two Online Programs

Abstract

With increased enrollment of non-traditional students and concerns about student retention and degree progression, the Seven Principles for Good Practice in Undergraduate Education could serve as a tool for improving course design and delivery within the online learning environment. The participants in this concurrent mixed methods study included 40 education and 68 nursing students. The results of the web-based survey data indicated group differences with the Cooperation among Students and Prompt Feedback subscales. Given professional development, the Seven Principles could be implemented into online courses at little to no cost for an institution to improve student satisfaction, which could lead to increased retention, progression, and graduation.

Keywords

online education; pedagogy

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Higher education preparation should be considered in relation to increasing competition within the global marketplace, which requires reorganization of the current environment into models that operate more efficiently and position themselves on the global stage (Habley et al., 2012). Creating the conditions that foster student success and a timely graduation have never been more important in academia. Online learning has increased, yet limited research exists regarding preferred instructional strategies at the graduate level (Watson et al., 2017). With finite resources and mounting student debt, institutions should examine factors that can lead to greater student success by increasing student satisfaction and persistence.

Educators have struggled to overcome the challenge of increasing student satisfaction within the online learning environment, and they seek strategies for engaging and educating students effectively (Crew & Butterfield, 2014; Jarvis et al., 2014). Online instruction has been found to be just as effective as the traditional face-to-face courses (Driscoll et al., 2012; Kauffman, 2015). The challenge remains for institutions to design courses to meet students' needs and expectations in order to facilitate deeper learning and enhance the skills that are required within the work force (Kauffman, 2015; Morris & Finnegan, 2008-2009). The purpose of this mixed methods concurrent research study was to examine student satisfaction within two different online programs using the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987) as the theoretical framework. The findings could be utilized to improve the online learning environment for students based on best practices. The specific research questions for this study included:

1. Quantitative: What is the difference in student satisfaction levels between education and nursing students using the Seven Principles for Good Practice in Undergraduate Education?
2. Qualitative: How do the perceptions of student satisfaction using the Seven Principles for Good Practice in Undergraduate Education compare for education and nursing students?

Online Learning

Advances in technology have led to a growing number of online courses, and research has shown that online courses can be just as effective as face-to-face courses (Driscoll et al., 2012; Kauffman, 2015). According to Cochran et al. (2014), even though online courses tend to be offered more often, attrition rates for online courses can be 10 to 15% higher than the attrition rates for face-to-face classes. The majority of online students tend to be non-traditional learners who are juggling work, school, and family commitments (Prensky, 2001). The advantages of online

learning for these students are the accessibility and flexibility (Driscoll et al., 2012; Price et al., 2016; Sowen & Jenkins, 2013). Faculty and instructional designers should evaluate the best ways to make their courses more learner-centered and utilize teaching strategies to deliver information effectively (Hathaway, 2014).

Seven Principles

A solution for improving the online learning environment could be the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987). The Seven Principles are (1) Encourages contact between students and faculty, (2) Develops reciprocity and cooperation among students, (3) Encourages active learning, (4) Gives prompt feedback, (5) Emphasizes time on task, (6) Communicates high expectations, and (7) Respects diverse talents and ways of learning. These good practices are universal for all types of institutions and for all types of students who attend those institutions (Chickering & Gamson, 1987). The Seven Principles are broad enough to be applicable across disciplines, teaching methods, learning styles, and institutional context, and they are grounded in research and practice (Sorcinelli, 1991). The Seven Principles can be implemented within a variety of course delivery methods, including face-to-face, online, and hybrid models (e.g., blended courses and flipped classrooms), at little to no cost for an institution (Chickering & Ehrmann, 1996; Crews & Butterfield, 2014; Sorcinelli, 1991). The implementation of these Seven Principles affects classroom pedagogy, and effective implementation depends on the students and their circumstances at a given institution (Chickering & Gamson, 1987).

Initially, the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987) were developed for undergraduate students. With increased enrollment in graduate online courses and limited research regarding graduate student instructional preferences, practitioners have turned to the Seven Principles to increase student engagement, satisfaction, and performance at the graduate level (Hathaway, 2014; Watson et al., 2017). Chickering and Ehrmann (l996) initially modified the Seven Principles to align with online instruction.

Crews et al. (2015) recommended designing online courses that aligned with the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987) and Quality Matters (QM) higher education rubric standards (Maryland Online, Inc., 2014) to meet these growing needs. More recently, Crews and Wilkinson (2015) and Watson et al. (2017) aligned the QM higher education rubric standards (Maryland Online, Inc., 2014) to the Seven Principles. QM has become the primary resource for quality assurance with online

course design (Maryland Online, Inc., 2014). The QM higher education rubric contains eight general standards and 43 specific standards. The general standards include (1) Course Overview and Introduction, (2) Learning Objectives, (3) Assessment and Measurement, (4) Instructional Materials, (5) Course Activities and Learner Interaction, (6) Course Technology, (7) Learner Support, and (8) Accessibility and Usability (Maryland Online, Inc., 2014).

Student-Faculty Contact

Students with instructors who encourage in-class and out-of-class contact tend to have increased student motivation and institutional commitment (Chickering & Gamson, 1987). Online student-faculty contact can provide opportunities for timely communication that are not possible when commuting students and adult learners have to leave soon after class for work or family obligations (Chickering & Ehrmann, 1996; Karoğlu et al., 2014). Watson et al. (2017) found that graduate students wanted instructors to be available and responsive, engage actively within the course, and communicate regularly with students. Some students find online communication more convenient and less intimidating than face-to-face communication with instructors (Grant & Thornton, 2007). Encouraging contact between students and the instructor leads to student success because students tend to feel supported and less isolated in the online learning environment. Morris and Finnegan (2008-2009) found that student participation in the online learning environment increased when the instructor's participation increased. There are various methods for increasing student-faculty contact, including virtual office hours, prompt response to emails, and active participation with students (e.g., discussion board and chat rooms), which shows a consistent instructor presence in the course (Clark- Ibáñez & Scott, 2008; Crews et al., 2015; Hathaway, 2014).

Cooperation Among Students

Interacting with other students tends to increase thinking and depth of understanding of course content. Involvement in collaborative learning can increase productivity, develop relationship among the students, and improve self-esteem (Chickering & Gamson, 1987). Collaborative student learning can take place in the form of peer evaluation, discussion groups, and/or small group work (Chickering & Ehrmann, 1996; Hathaway, 2014). This collaborative learning can involve students from across the globe, which would not be possible without the utilization of online courses (Chickering & Ehrmann, 1996). Crews and Butterfield (2014) found that a beneficial aspect of face-to-face classes was the student interactions. Thus, those types of interactions can be translated to the online learning

environment. For example, Crews and Wilkinson (2015) found that having the students introduce themselves to the class was a strategy for increasing cooperation among students.

Active Learning

With active learning, the students can move beyond rote memorization of general knowledge and passive listening during class. Instead, the students talk about the content, write about it, relate it to prior knowledge, and apply it to their daily lives (Chickering & Gamson, 1987). Hathaway (2014) indicated that adult learners were more reflective and had more positive outcomes when they were given critical thinking assignments and real-world problems to solve, which were relevant to their own experiences. Watson et al. (2017) found that graduate students wanted meaningful coursework. In online courses, the learner-centered format lends itself to active learning. Opportunities for active learning include independent performance tasks, asynchronous exchanges, and synchronous interactions (Chickering & Ehrmann, 1996). When examining active learning opportunities within an online learning environment, Sowen and Jenkins (2013) found that nursing students were able to learn with greater autonomy from other students' discussion board posts.

Prompt Feedback

When given appropriate feedback in a timely manner, students can benefit from assessing their level of knowledge of the course content and improving upon future learning efforts (Hathaway, 2014). Immediate, corrective, and supportive feedback is central to the learning process (Sorcinelli, 1991). This principle can be delivered in the form of revising rough drafts, grading rubrics, in-class questioning, videotape analysis, and email communication (Chickering & Ehrmann, 1996). For example, Chan and Pallapu (2012) found that VoiceThread allowed instructors and students to provide prompt feedback about business policy course content, which led to student satisfaction. In online courses, policies in the syllabus assist students with understanding how and when feedback will be given (Chickering & Gamson, 1987). One advantage of online courses is the quick response time for students' questions instead of them having to wait a week until the next class meeting (Hathaway, 2014; Watson et al., 2017). Crews et al. (2015) found that students preferred quick feedback within 24 hours.

Time on Task

Time allocation for online coursework, management of this time, and the amount of engaged time (i.e., time that was spent on interacting with material or activities) affect student learning, particularly with non-traditional students. Online coursework tends to have increased time commitments compared to traditional face-to-face coursework (Grant & Thornton, 2007; Sowen & Jenkins, 2013); however, online courses allow time to be dedicated to studying more efficient by reducing commuting time to and from campus (Chickering & Ehrmann, 1996). When students are engaged, they tend to learn more course content (Hathaway, 2014; Sorcinelli, 1991). Instructors should establish set days and times for assignment due dates and state them within the course syllabus, then they should stress to students that learning is a process that requires a time commitment on their parts. These strategies can be helpful for busy students with many time commitments (Hathaway, 2014). Crews and Wilkinson (2015) found time on task to align with logical and consistent course design, which improved navigation throughout the course. Similarly, Watson et al. (2017) found that graduate students preferred an organized course along with learning guidance. This guidance could be provided by dividing a cumulative project into small components, which could be submitted throughout the course for instructor feedback.

High Expectations

Within online courses, the course syllabus and other introductory documents present the course objectives and instructor expectations (Hathaway, 2014). In addition, rubric criteria and examples of student work define the expectations for a given assignment (Chickering & Ehrmann, 1996). When the instructor sets high, yet achievable, performance goals, the academic achievement among the students tends to increase (Sorcinelli, 1991). Crews and Butterfield (2014) found that the structure of online courses supported flexibility, organization, and clear expectations, which tended to be received positively by non-traditional students. Watson et al. (2017) found that graduate students wanted the online instructor to set expectations. These expectations tend to be established with the course syllabus and student examples (Karoğlu et al., 2014). Within the course, Crews and Wilkinson (2015) found that the inclusion of course and institutional policies aligned with high expectations.

Diverse Talents

For each student sitting in the classroom, there are equal numbers of diverse talents and preferred learning styles. Some students enjoy hands-on activities while

other students prefer a lecture. Instructors who recognize these diverse talents tend to facilitate student growth and development inside the classroom and outside of the classroom. The online learning environment, particularly asynchronous, allows students to work at their own pace (Chickering & Ehrmann, 1996). Price et al. (2016) found that RN-BSN students preferred video and audio summaries at the end of module lessons. Respecting diverse talents and ways of learning with a variety of learning styles can enhance collaborative learning and bring a richness to the course (Hathaway, 2014). Watson et al. (2017) found that providing synchronous sessions and utilizing various instructional strategies aligned with diverse talents. Similarly, Karoğlu et al. (2014) suggested that course content should be presented in various formats other than the written format.

Methods

The mixed methods concurrent study (Creswell, 2014) was designed to analyze and compare student satisfaction between two different online programs using the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987). These two online programs (i.e., master's degree in education and baccalaureate of science in nursing) were chosen because both programs involved students who worked in their respective fields (i.e., P-12 teachers within the classroom setting and registered nurses within the clinical setting). Both degree programs utilized a practitioner approach, which required real-world experience. A self-reported survey, which included 53 closed-response items, using the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987) as the theoretical framework, was administered. At the end of the survey, the participants had the opportunity to provide open-ended feedback about each of the seven subscales as it related to their course experiences. Quantitative data were measured using seven one-way between subjects ANOVAs (Creswell, 2014). Qualitative data (i.e., open-ended items) were analyzed using thematic analysis (Grbich, 2013) to check the alignment of the research question and obtain deeper understanding of education and nursing students' satisfaction in online learning environment.

Participants

The participants for this study included two groups (i.e., education and nursing students). For the education group, 235 graduate students who enrolled in one of eight sections of a multicultural course were invited to participate. Each section utilized a master course shell and master course syllabus. This course was one of nine required courses within a collaborative program, which was taught 100% online. The M.Ed. program began in the fall of 2008 and was taught across

three sister universities within a southeastern U.S. university system. All students in the program were in-service teachers who worked in the P-12 setting. Of the 235 students, 46 responded, which yielded a 19.6% response rate, and 40 cases were deemed valid. For the nursing group, 187 nursing students who enrolled in one of the five nursing courses. Each course was taught by the same two instructors using master course shells, and all courses were taught 100% online. In the RN-BSN program, which began in the fall of 2010, all students had earned an Associate Degree in Nursing and worked in the nursing field. These students had a broader view of the profession and relevant work experience similar to M.Ed. students, which allowed them to apply the course concepts. Of the 187 students, 74 responded, which yielded a 39.6% response rate, and 68 cases were deemed valid.

Data Collection

Data collection occurred in two phases for this mixed methods concurrent study, education participants during the spring semester and nursing students during the summer semester. The timeframe for data collection was determined by course offerings within each program. Both groups followed the same data collection protocol. The course instructors were asked to send a recruitment email to all students who enrolled in their courses. A second email was sent one week after the initial email as a reminder, and a third and final email was sent one week after the second email. Within the recruitment email, there was an anonymous survey link that the participants selected or copied and pasted into an internet browser.

A self-reported survey using the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987) was constructed for this research project using Qualtrics, a web-based survey software application available through the university's technology department. Items were selected and/or adapted from the published studies with online courses using the Seven Principles for Good Practice in Undergraduate Education (i.e., Crews et al., 2015; Zhang & Walls, 2006). The measure from Crews et al. (2015) was created based on behavioral, cognitive, and social learning frameworks. The 36 items were categorized into the Seven Principles. Zhang and Walls (2006) found that their 35-item measure had a scale interrater agreement of .94 and a scale content validity index of .92 using 107 online instructors.

There were 53 closed-response items with 15 of those items reworded using negative terms. The order of the items was randomized to prevent bias in the responses (Braxton et al., 1998). For each item, the response scale progressed from a rating of 1, which represented *Strongly Disagree*, to a rating of 4, which

represented *Strongly Agree*. At the end of the survey, the participants had the opportunity to offer open-ended feedback about each of the seven subscales as it related to their course experiences.

Data Analysis

Quantitative

The measure was validated using SmartPLS 3 (Ringle et al., 2015), which utilized partial least squares structural equation modeling (PLS-SEM). The criterion for internal consistency reliability was Cronbach's alpha coefficient of .70 or greater (Hair et al., 2017). The alpha coefficients for the seven subscales ranged from .73 to .90. Composite reliability is another measure of internal consistency with PLS that does not assume equal outer loadings. The criterion was .70 or greater (Hair et al., 2017). The composite reliability coefficients for the seven subscales ranged from .83 to .92. Table 1 displays the coefficients for Cronbach's alpha and composite reliability. Based on the Cronbach's alpha and composite coefficients, the items within the measure were found to be internally consistent.

Table 1

Reliability Coefficients for the Restricted Model by Subscale

Subscale	Cronbach's alpha	Composite
Student-Faculty Contact	.90	.92
Cooperation among Students	.73	.83
Active Learning	.82	.87
Prompt Feedback	.81	.87
Time on Task	.73	.83
High Expectations	.89	.92
Diverse Talents	.89	.91

Utilizing PLS-SEM, Hair et al. (2017) suggested comparing the square root of the factor's average variance extracted (AVE) to its correlation with the other factors in the model (i.e., the Fornell-Larcker Criterion) to establish discriminant

validity. The factor's AVE should be higher than any of the correlations, and all factors met this criterion. Thus, discriminant validity was established. Table 2 presents the Fornell-Larcker Criterion for the restricted model.

Table 2

Fornell-Larcker Criterion for the Restricted Model

Factor	1	2	3	4	5	6	7
1. Student-Faculty Contact	.79						
2. Cooperation among Students	.36	.74					
3. Active Learning	.42	.72	.76				
4. Prompt Feedback	.64	.52	.67	.80			
5. Time on Task	.64	.52	.60	.58	.74		
6. High Expectations	.57	.67	.71	.78	.58	.84	
7. Diverse Talents	.62	.75	.75	.77	.71	.77	.80

Qualitative

The open-ended items for each subscale were analyzed collectively utilizing thematic analysis to determine a set of codes that were generated from the study's theoretical framework. The strong point of utilizing this method was "this process is conducted when a data set is complete" (Grbich, 2013, p. 61). The data were coded manually by the researchers. The participants' names were coded as Teacher A, B, C, etc. The transcripts of the responses were read and reread until a sense of the data was attained. Researchers applied the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987) as the theoretical framework to the open-ended items to define, compare, and discuss the coding schemes independently to ensure consistency. Subsequently, researchers triangulated their interpretations (i.e., peer debriefing) to discover the major themes emerging from the open-ended answers and to recheck alignment of the research question (Strauss & Corbin, 1990).

Results

Quantitative

Seven one-way between subjects ANOVAs were conducted to compare whether education and nursing participants differed in whether online course instructors encouraged student-faculty contact, offered opportunities for cooperation between students, used active learning approaches, gave feedback in a timely manner, placed emphasis on time on task for assignments, communicated high academic and learning expectation, and respected diversity in learning and ability. To control for Type I error due to multiple tests, the Bonferroni procedure was used to adjust the test-wise alpha to .007.

There was a statistically significant difference for cooperation [$F(1,101) = 8.326$, $p = .005$, $\eta_p^2 = .076$) and prompt feedback [$F(1, 102) = 8.324$, $p = .005$, $\eta_p^2 = .075$). Reviewing the means, education participants were more likely to agree that online instructors encouraged more cooperation between participants ($M = 3.23$, $SD = 0.51$) than nursing participants ($M = 2.88$, $SD = 0.67$). Nursing participants were more likely to agree that online instructors offered prompt feedback ($M = 3.19$, $SD = 0.65$) than education participants ($M = 2.77$, $SD = 0.81$). Nursing and education participants similarly agreed that online instructors encouraged contact between the instructor and the student, respected learner diversity, and communicated high expectations. They disagreed that online instructors utilized active learning practices in their courses. Table 3 displays the mean, standard deviations, and *F* values for each subscale by group.

Table 3

Means, Standard Deviations, and F values for each Subscale by Group

	Education		Nursing			
Subscale	*M*	*SD*	*M*	*SD*	*F*	*p*
Student-Faculty Contact	2.97	0.80	3.19	0.62	2.490	.118
Cooperation among Students	3.23	0.51	2.88	0.67	8.326	.005*
Active Learning	2.77	0.58	2.87	0.70	0.466	.497
Prompt Feedback	2.77	0.81	3.19	0.65	8.324	.005*

	Education		Nursing			
Subscale	*M*	*SD*	*M*	*SD*	*F*	*p*
Time on Task	3.01	0.73	3.09	0.64	0.295	.588
High Expectations	3.16	0.57	3.33	0.60	2.015	.159
Respect Diverse Talents	3.13	0.70	3.13	0.65	0.000	.992

Note. * indicates statistical significance.

Qualitative

The findings from open-ended items are presented in seven sections based on the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987), which served as the theoretical framework for this study. The quotes are provided to highlight the critical points in each section.

Student-Faculty Contact

Effective written and oral communication emerged as a category for improving student satisfaction with the online learning experience. In education, the mutual positive comment was instructors' communication — timely and personable, as teacher M expressed, "… through email, communications are frequent and warranted for online learning environment." However, the data illustrated that communication can often be misinterpreted and perceived in a negative manner. Some participants felt belittled when asking instructors questions. They perceived that instructors wanted them to figure it out on their own instead of contacting them, as Teacher T claimed, "… my takeaway was that it was better to try and figure out things for myself than to risk annoying the instructor by asking. Maybe, I was wrong in my assumption, but it was certainly my feeling." Likewise, Teacher L stated,

> Communication can often be misunderstood or not clear when working from e-mails and digital announcements. This has happened both ways in communication. The instructor has misunderstood questions asked or not answered it clearly; also, multiple students have not understood the requirements of an assignment after asking multiple questions.

In nursing education, some participants described the instructors as friendly, helpful, and timely. "All instructors have been responsive in a timely manner.", as Teacher X stated. Although communication was described as timely by some

participants, others perceived that instructors did not answer emails or discussion questions fast enough to get various tasks completed or did not answer at all. Additionally, some participants perceived that more instructor presence was needed in the online learning environment, specifically course discussions and email contact. Nurse S commented, "Having the teacher involved in discussions helps to know if thoughts are accurate." Regarding emails, Nurse I stated, "Emails maybe could be answered quicker than 24 [hours]." Similarly, Nurse L stated, "We need to hear back as soon as we can from instructors."

The common positive point among education and nursing participants was that instructors were easily accessible and readily available by email and/or phone. Both education and nursing participants suggested synchronous communication in addition to the ongoing asynchronous communication among instructors and students. Teacher M responded, "I recommend having live feed discussions through Blackboard on chosen topics for group works. Though time consuming and technical difficulties might come into play, having the face-to-face interaction sometimes might enhance the online learning environment." Likewise, Nurse E stated that the online course needed "chat rooms and online lecture…. I feel like my learning is independent, and I am assigned work with little instruction and left to decipher course materials on my own."

Cooperation Among Students

Sense of community emerged as a category for improving student satisfaction in the online learning environment. In education, the majority of the interaction addressed by the education participants evolved around group assignments. The assignments allowed the participants to get to know each other, share ideas, and obtain new perspectives on various topics. Several participants enjoyed the small group format for the discussion board. "This has allowed us to get to know each other and understand each other's views as it pertains to their field," commented Teacher S. Similarly, Teacher U stated, "The best class that I have taken placed students into groups, which allowed for a more intimate conversation in discussions." Teacher Q responded, "Sharing my thoughts and learning about the beliefs of four other people throughout the semester aided in my learning and provided me with a more thorough understanding of different viewpoints." Teacher J stated, "Cooperating with other students at first seems like a daunting task, but, once you have opened a line of communication, it is a very easy task."

Conversely, some participants preferred to see other viewpoints outside of their small groups. Teacher T responded, "I think I might would have expanded my

learning a little bit by seeing a larger variety of students' posts." Several education participants disagreed with group work. Group work was described by the participants as not feasible and impractical because of the time commitment and the inability to coordinate time with peers. Teacher U stated, "Student-group projects have always been a disaster in my opinion. There is just not enough contact and communication to achieve the goals. One or two students end up doing all the work."

In nursing, the participants agreed that the interaction among peers in the discussion forums was effective and meaningful. It allowed them to hear the opinions of others and obtain another's perspective on a topic. When interacting with peers in discussion forums, the participants were able to receive positive feedback from peers about postings, and peers were willing to help each other. The feedback received from peers was appreciated. Nurse A stated, "All students are supportive and encouraging each other. Some have offered challenging questions for further thought." Likewise, Nurse D responded, "Students seem willing to help one another when questions are posted on discussion boards, though I have also seen that the instructor replies as well to verify the correct answer."

Both education and nursing participants had concerns about the effect of cooperating learning on their grades. Teacher K stated, "I do enjoy working with my peers, but I don't enjoy group work because of the chance that my grade might suffer due to the actions (or lack of action) of another student." Similarly, Nurse Z responded, "Working as a team was virtually impossible because of employment and scheduling commitments …. many students were 'uninvited on projects' by other students because they did not like or agree with the contribution submitted."

Active Learning

Various instructional strategies emerged as a category for improving student satisfaction in the online learning environment. Both education and nursing participants perceived that various instructional materials increased active learning in the online environment. Most of the participants gained a clearer understanding of various concepts through discussion board posts, which added relevance to the course, offered new ideas, and promoted meaningful conversation. The common suggestion was including creative ways to engage with the materials and make real-world connections. For instance, in education, Teacher O claimed,

> The best classes that I have been in varied the type of assignments were required… I was constantly engaging with the material in new ways (creating a brochure, Prezi, graphic organizer, etc.). Weekly posts and quizzes are not as effective or engaging.

The nursing participants offered more active learning activities (e.g., teacher-led lectures presented through multimedia, real-life scenarios, and readings related to current events). "I would like to see more life scenarios added to the discussion topics [and] how it applies to real life examples," as Nurse K stated.

Prompt Feedback

In general, the education participants perceived that instructors did not provide prompt feedback on a consistent basis. Teacher K stated, "I think an assignment needs grades or feedback within a week of turning it in. I am still waiting on the feedback/grades for two very large assignments…" According to Teacher Z, "Most professors average about 2 weeks." Teacher N suggested, "Instructors should not assign more assignments than they are able to offer meaningful feedback on." In nursing, feedback was given within one week, which was stated explicitly in the course syllabus. Education and nursing participants agreed that prompt feedback was needed in order to improve future assignments. Teacher J commented, "It is so important that assignments are returned in a timely manner, especially if those assignments build on one another." Likewise, "It makes it difficult to learn from mistakes and grow within the class when you receive little feedback," stated Teacher S. Nurse W responded, "It is especially hard at the beginning of a course when submitting assignments when I am not sure if the first assignment met the standards because it hasn't been graded yet."

Time On Task

Education participants liked to work at their own pace (i.e., asynchronous), and they preferred to divide the final course project/assignment over the 15-week course. As Teacher N argued, "When there is a huge project, set many small due dates along the way. This has been very helpful in classes where instructors do this." In the nursing program, courses were implemented over seven weeks instead of the traditional 15 weeks. The nursing participants agreed that the assignments were time sensitive because of the short time frame to complete assignments. "Time is the important element. I work three 12-hour night shifts a week so I have to manage my time," commented Nurse M. Some nursing participants suggested that more extensions should be given other than extenuating circumstances.

High Expectations

There was a consensus from both groups regarding high expectations. For the education and nursing participants, high expectations were referred to as being clear in the course syllabus, which outlined the course schedules, assignments, and

rubrics. Teacher L commented, "I often refer back [to] the syllabus during the semester for clarity prior to communicating with my professor or peers." Nurse C stated, "The syllabus and calendar are effective in understanding when assignments are due." Several education participants perceived that rubrics were helpful to see the instructors' expectations, but they preferred to see student examples in addition to the grading rubrics. Teacher U responded, "I find the examples to be much more helpful in courses than the rubrics."

Diverse Talents

Understanding everyone's differences emerged as a category for improving student satisfaction for both participant groups. Respecting diverse talents was acknowledged in a variety of ways by the education participants. One strategy was the variation in assignments. Teacher Y stated, "To respect diverse talents, offer multiple ways to present an understanding of the material." Nursing participants mentioned that various instructors provided different ways to understand and learn new concepts. As Nurse S stated,

> Offering many different ways to learn materials is especially important. If we just have to read, that would be extremely boring. The teacher for the class that I'm in now provides different ways to see, learn, and understand.

Discussion

The purpose of this concurrent study was to examine student satisfaction with two different online programs using the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987) as the theoretical framework. After establishing best practices within each online program, student satisfaction could be improved within the online learning environment. The quantitative data indicated a statistically significant difference between the education and nursing groups for cooperation among students and prompt feedback.

While the education group was given more opportunities to collaborate with their peers (e.g., group project and peer review), the majority of the participants were not satisfied with the experience. Some education participants implied that the course did not facilitate effective cooperative learning due to the inability to coordinate time with peers when they live approximately 350 miles apart, which caused ineffective communication and unequal participation. This finding was similar to the findings of Sowen and Jenkins (2013) who found that students reported difficulties with completing cooperative projects and preferred individual assignments. Most education participants perceived that the small group discussion

boards were beneficial for learning content and building collegial relationships, but the participants also suggested that group work should be optional. Karoğlu et al. (2014) found that the focus of the conversation tended to get lost within larger discussion groups. Future research could explore other strategies for collaborating within the online learning environment to provide for equal participation and accountability among group members.

Based on the quantitative analyses, the participants in the education group did not receive prompt feedback compared to the nursing participants. Chan and Pallapu (2012), Watson et al. (2017), and Crews et al. (2015) found that both undergraduate and graduate students wanted timely feedback, which led to increased student satisfaction. Future research could explore strategies for deceasing the time between submission and receipt of feedback and for providing specific constructive feedback that could be utilized to improve performance on future assignments. For example, Karoğlu et al. (2014) suggested utilizing different formative assessment strategies (i.e., one-minute papers) to provide student feedback.

Similar responses were given for the five remaining principles. For example, both groups indicated that the course syllabus established high expectations similar to the findings of Karoğlu et al. (2014). Active learning was rated as low for both groups (i.e., 2.77 for education and 2.87 for nursing). Watson et al. (2017) recommended more meaningful coursework, and Crews and Wilkinson (2015) recommended the incorporation of various course tools as an example of active learning. Future research could examine the effectiveness of specific real-world assignments (i.e., case studies), which were suggested by Karoğlu et al. (2014). Similar to the findings of Watson et al. (2017), participants in both groups would have liked to see more synchronous communication in the online learning environment. Future research could examine the effectiveness of synchronous communication for improving student satisfaction.

Higher education has increased pressure to be innovative and to provide a quality and affordable education while improving student learning, student satisfaction, and persistence to degree completion. The results of this study suggested best practices that could be incorporated by instructors to implement effective online instruction using the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987) framework along with QM higher education rubric (Maryland Online, Inc., 2014) with minimum cost to an institution. The implementation of these tools could lead to increased student satisfaction and persistence among online students, particularly non-traditional students.

There were some limitations to this study. For the education group, the eight sections were taught by two full-time faculty members and four part-time faculty members within the university system's online platform. For the nursing group, all seven sections across five courses were taught by two full-time faculty members within one university's online platform; however, academic coaches were utilized to assist in grading course assignments, which could have affected the promptness of feedback. In addition, the education group completed the survey during a 15-week spring semester, and the nursing group completed the survey during a seven-week summer semester. Lastly, the instructors with both programs were aware of the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987), but they were not required to incorporate them into their course designs. Both programs utilized the QM higher education rubric standards (Maryland Online, Inc., 2014) as guidelines for their course design.

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