

UC San Diego

UC San Diego Electronic Theses and Dissertations

Title

The Struggle is Real: Student Perceptions of Quality in Online Courses using the Community of Inquiry (Col) Framework

Permalink

<https://escholarship.org/uc/item/3qz4c14n>

Author

Taylor, Barbara Louise

Publication Date

2016

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA, SAN DIEGO
CALIFORNIA STATE UNIVERSITY, SAN MARCOS

The Struggle is Real:
Student Perceptions of Quality in Online Courses using the Community of Inquiry (CoI)
Framework

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Education

in

Educational Leadership

by

Barbara Taylor

Committee in charge:

University of California, San Diego
Carolyn Huie Hofstetter, Chair
Frances Contreras

California State University San Marcos
Patricia Prado-Olmos

2016

Copyright ©

Barbara Louise Taylor, 2016

All rights reserved.

The Dissertation of Barbara Louise Taylor is approved, and is acceptable in quality and form for publication on microfilm and electronically:

Chair

University of California, San Diego
California State University, San Marcos

2016

DEDICATION

I dedicate this work to my family. To my parents, Gerald and Roberta Talley, for an incredible drive to always be the best I can be and to never give up in the face of adversity. To my children, Megan (Matthew) Taylor Noel, Lavella (Ralph) Delgado, Courteney, David, and Kelsi. Don't ever let anyone convince you that you can't achieve what you put your mind to and never stop following your dreams. To my grandchildren, Spencer and Olivia. I hope that you will continue to enjoy life, love learning, and show kindness to everyone (especially each other). Thank you all for always encouraging me through this crazy journey.. Everything I do, I do for you.

Finally, to my best friend and husband, David Taylor. Your ongoing support, reassurance, intellect, encouragement, strength and love are what keeps me going. Thank you for instilling the desire for lifelong learning.

EPIGRAPH

Sí, se puede (Yes, we can!)

- Cesar Chavez, 1972

Getting an education isn't about being "smart"... it's about being "committed".

David and Barbara Taylor, 2016

TABLE OF CONTENTS

SIGNATURE PAGE	iii
DEDICATION	iv
EPIGRAPH	v
LIST OF FIGURES	ix
LIST OF TABLES	x
ACKNOWLEDGEMENTS	xii
VITAE	xiv
ABSTRACT OF THE DISSERTATION	xv
CHAPTER ONE: INTRODUCTION	1
Statement of the Problem	4
Theoretical/Conceptual Framework	6
Purpose of the Study	10
Research Questions	12
Research Methodology	12
Significance of the Study	13
CHAPTER TWO: LITERATURE REVIEW	15
Demographics of Online Students	16
Online Student Retention	17
Factors Affecting Student Retention in Online Education	18
Factors Affecting Student Satisfaction in Online Education	19
Student Perceptions of Quality in Online Education	20
Faculty Perceptions of Online Education	21
What Does a Quality Online Course Look Like?	23
Regional Accrediting Agencies	24
Quality Standards	25
Chickering's Seven Principles of Good Practice	25
Online Learning Consortium Five Pillars of Quality Online Education	26
Quality Matters Program	27
Chapter Summary	28
CHAPTER THREE: METHODOLOGY	29
Introduction	29
Research Questions	29

Research Design.....	30
Pilot Study.....	30
Research Site	31
Methodology	32
Research Design	32
Phase 1 Students	33
Phase 2 Instructors.....	38
Chapter Summary.....	40
CHAPTER FOUR: FINDINGS	42
Research Question 1.....	43
Perceptions of Students	43
Social Presence	44
Teaching Presence	47
Cognitive Presence	53
Research Question 2.....	56
Gender	57
Race/Ethnicity	58
Age.....	59
Socioeconomic Status (SES)	60
Previous Online Experience	61
GPA	64
Recommend the Course.....	65
Research Question 3.....	67
Perceptions of Instructor.....	67
Instructor Background	67
Data Analysis.....	68
Social Presence	68
Teaching Presence	71
Cognitive Presence	73
Chapter Summary.....	75
CHAPTER FIVE: CONCLUSION.....	77
Introduction	77
Discussion	79
Social Presence	79
Teaching Presence	81
Cognitive Presence	82
Research Question 1	83

Research Question 2	84
Research Question 3	85
Limitations of the Study	87
Implications of the Study	89
Implications for Practice	90
Implications for Policy	92
Recommendations for Future Research	93
Conclusion.....	95
Appendix A.....	98
Appendix B.....	100
Appendix C	110
Appendix D.....	123
Appendix E	125
Appendix F.....	126
REFERENCES	127

LIST OF FIGURES

Figure 1. Community of Inquiry (CoI) Framework.....	9
---	---

LIST OF TABLES

Table 1. Intersection of the Research Questions, Community of Inquiry Framework, and Data Collection Phases and Methods.....	32
Table 2. Descriptive Statistics of the Student Participants and Campus Demographics ..	36
Table 3. Calculated Means and Standard Deviation for Social Presence aligned with Quality Online Learning and Teaching (QOLT) Objectives	45
Table 4. Calculated Means and Standard Deviation for Teaching Presence aligned with Quality Online Learning and Teaching (QOLT) Objectives	48
Table 5. Descriptive Statistics for Cognitive Presence aligned with Quality Online Learning and Teaching (QOLT) Objectives	54
Table 6. Quality Online Learning and Teaching (QOLT) Variables with Means Below 4.0 Based on Gender	58
Table 7. Quality Online Learning and Teaching (QOLT) Variables with Means Below 4.0 Based on Race/Ethnicity Combined Categorical Variables Non-URM and URM	59
Table 8. Independent Samples T-test for difference between students <23 and 23+	60
Table 9. Independent Samples T-test for Socioeconomic Status based on Pell Eligibility and Social Presence and Quality Online Learning and Teaching (QOLT) 7 Variables	61
Table 10. Independent Samples T-tests for Previous Online Experience at this Institution and Quality Online Learning and Teaching (QOLT) and Cognitive Presence with Means less than 4.0	62

Table 11. Independent Samples T-tests for Previous Online Experience at another Institution and Quality Online Learning and Teaching (QOLT) Variables with Means less than 4.0	64
Table 12. Independent Samples T-tests by GPA < 3.0 and > 3.0 and Quality Online Learning and Teaching (QOLT) Variables with Means less than 4.0	65
Table 13. Independent Samples T-tests by Recommending Course to a Friend and Quality Online Learning and Teaching (QOLT) Variables and Presence with Means less than 4.0	66
Table 14. Examples of Visual, Auditory, Reading/Writing, and Kinesthetic Learning Styles	72

ACKNOWLEDGEMENTS

It takes more than a village to get through a doctoral program. I am thankful to all of my friends at CSU San Marcos that have asked me about my research, gave me words of encouragement, shared stories of their own journey, and let me vent and kick around ideas. If I tried to thank you all by name, I know that I would leave someone out and I would feel awful. You know who you are and I am forever thankful for your friendship.

Thank you to all of the students in Spring 2015 that participated in my data collection. You have a strong voice that provides many insights and we have a lot to learn about online students.

To all of the JDP faculty at CSUSM and UCSD that have shared your knowledge, expertise, and passion during that past three years, I am eternally grateful for the opportunity to learn from each of you. Thank you to my classmates: Susan, thank you for always being there via text or email, meeting with me at UCSD, helping me get back on track, and keeping me on track. Nancy, you are so strong, constantly supportive, and listened to me whine. Thank you for being a sounding board. Rebecca and Irma, “thank you” is not enough for helping me get my final edits polished. Brie, thank you for regularly checking up on me and always having encouraging words. Julie, thank you for your grace, kindness, and advice on how to wrap this up helped me beyond words. Darrell, your kindness will never be forgotten. Thank you for supporting me from the beginning of this journey until the end. Kaleo, my classmate by extension, your kindness is beyond words.

Drs. Frances Contreras and Patricia Prado-Olmos, your feedback and guidance have been appreciated. I am thankful that you gave me the room to collect a lot of data and for being motivating through this journey.

Dr. Carolyn Huie Hofstetter, my Chair and mentor. Thank you for putting up with all of my craziness, for stretching me beyond what I thought I could do, for never giving up on me, for giving me space when I needed it and for getting me pulled back together so I could refocus and keep going, and for your never-ending faith that I could do this.

VITAE

EDUCATION

- 1998 Bachelor of Arts in Liberal Studies, concentration in Business and Communication
Western Illinois University, Macomb
- 2001 Master of Science in Instructional Design and Technology
Western Illinois University, Macomb
- 2005 Master of Arts in Communication and Broadcasting
Western Illinois University, Macomb
- 2016 Doctor of Education in Educational Leadership
University of California, San Diego
California State University San Marcos

PUBLICATIONS

- 2001 Communication Graduate Program website (unpublished M.S. Creative Project)
- 2005 From Face-to-Face to the Internet: Effectively Teaching Public Speaking Online
(unpublished M.A. Creative Project)
- 2016 The Struggle is Real: Student Perceptions of Quality in Online Courses using the Community of Inquiry (CoI) Framework

ABSTRACT OF THE DISSERTATION

The Struggle is Real: Student Perceptions of Quality in Online Courses using the
Community of Inquiry (CoI) Framework

by

Barbara Taylor

Doctor of Education in Educational Leadership

University of California, San Diego, 2016

California State University, San Marcos, 2016

Carolyn Huie Hofstetter, Chair

California is in an educational drought and is facing a “college deficit” of college graduates. By 2030, it is anticipated that California will have a 1.1 million shortage of college-educated workers (Diaz, 2015). The struggle is real for people who want to get into college and for those who are in college trying to complete their higher education degree. As learners progress through the higher education system, various obstacles may happen in their lives to derail and divert their path to degree completion. To fulfill that desire, an increasing number of students are taking online courses and/or participating in online degree programs. The number of students taking online courses has increased for the 13th consecutive year (Allen & Seamans, 2016). This puts tremendous pressure on higher education faculty and administrators to demonstrate that online courses are equal

to or better than face-to-face courses in terms of quality and student success due to the scrutiny about the quality of online courses by faculty, students, administrators, accrediting bodies, and legislatures.

One of the ways to examine the quality of instruction is to evaluate levels of social, teaching, and cognitive presence in online courses. Using the Community of Inquiry (CoI) framework, this study looked at the perceptions of quality from the student viewpoint. The literature review revealed there is little research that looks at quality through the lens of a student. This is the first study to investigate all three elements of the Community of Inquiry (CoI) framework operationalized through the California State University (CSU) Quality Online Learning and Teaching (QOLT) instrument. The survey instrument measures undergraduate student perceptions of social, teaching, and cognitive presence in addition to accessibility, technology, and user support elements. The data from the 113 participants matriculating at a mid-sized, four-year university indicate that undergraduate students perceived the courses with all three elements of social, teaching, and cognitive presence to be high quality courses. The data from a single undergraduate instructor illustrates the importance of developing student-focused courses with social, teaching, and cognitive presence. Limitations, implications, and areas for future research are presented.

Keywords: cognitive presence, community of inquiry, quality assurance, quality online learning and teaching, social presence, student perceptions, teaching presence

CHAPTER ONE: INTRODUCTION

“... I set a goal for America: by 2020, this nation will once again have the highest proportion of college graduates in the world...”

President Barack Obama (whitehouse.gov, 2009)

The struggle to graduate is real for people who want to complete their higher education degree. As learners progress through the higher education system, various events may happen in their lives to derail and divert their path to degree completion. Unfortunately, not everyone who starts on the path to a college degree actually graduates. For example, of first-time, full-time freshmen who started college in fall 2006, only 59% of them graduated within six years (National Center for Education Statistics, 2014). In other words, 41% of first-time, full-time freshman who started in fall 2006 did not graduate. The statistics are equally grim for four-year institutions with open admissions policies where the rate of graduation within six-years falls to 33% (NCES, 2014). Researchers, university administrators, practitioners and others have tried for decades to find solutions to retain students and increase graduation rates. Ultimately, students and faculty are both responsible for the solution to improve undergraduate education (Chickering & Gamson, 1987).

Many universities and community colleges have turned to online courses and programs to narrow the gap and increase graduation rates. The increased availability of online courses is making it easier for students to progress and ultimately complete their degree. The results of the 2012 Survey of Online Learning found that there were 6.7 million

students taking online courses in fall 2011, representing an increase of over 570,000 students and an overall enrollment growth of 9.3% nationally (Allen & Seaman, 2013). This significantly changes the face of higher education with an all-time high of 32% of students taking at least one online course (Allen & Seaman, 2013). While the growth rate of online students from 2012-13 slowed, the overall growth rate of students taking online courses is much higher than the growth rate of students who take face-to-face courses. The annual compound growth rate of students taking at least one online course increased to 16.1% from fall 2002 to fall 2012 which is significant when compared to the overall higher education growth rate of 2.5% during the same period (Allen & Seaman, 2014). There was a 3.9% increase in 2014 of students taking online courses and the total number of students taking online courses has increased for the 13th continuous year (Allen & Seaman, 2016).

There is no doubt that the number of students taking online courses will continue to increase. Just as traditional brick-and-mortar universities breed competition for students, online courses and programs will also compete for students. Students have a variety of options available to them and perceived quality in the courses and programs will be one item that will guide their decision on which university to select. As a result, it is imperative that universities have a set of standards that guide online course development and can prove the rigor to various constituent groups.

It is widely known and accepted that teaching online is different than teaching face-to-face (Keengwe & Kidd, 2010; Lloyd, Byrne, & McCoy, 2012; McQuiggan, 2012; Vaill & Testorri, 2012). Faculty are now expected to not only be highly qualified in subject matter, but to also be a facilitator, technologist, course developer, and

collaborator (Reily, Vanderhouten, & Galleagher-Lepak, 2012). While much of the research has focused on faculty needs, such as the professional development of faculty (Roman, Kelsey, & Lin, 2010; Pagliari, Batts, & McFadden, 2009; McQuiggan, 2007), the role of faculty in the online environment (Morris, Xu, & Finnegan, 2005), major pedagogical shifts from the face-to-face setting to a fully online setting (Major, 2010; McQuiggan, 2012), and faculty attitudes about distance learning (Betts, 2014; Lloyd, Byrne, & McCoy, 2012), little research has focused on the perceptions of online learners themselves. What students perceive as being a quality online course is a gap in the literature that needs to be addressed (Ralston-Berg, 2009; Unal, Unal, & Bodur, 2013; Young & Norgard, 2006; Boling, Hough, Krinsky, Saleem, & Stevens, 2012; Chaney, Eddy, Dorman, Glessner, Green, & Lara-Alecio, 2007).

Being an online learner is different than being a traditional face-to-face learner. As the number of students taking online courses continues to rise, the reported attrition rate for online courses is 10-15% higher than for face-to-face courses (Carr, 2000). It is important for both faculty and administrators to understand the needs and attitudes of online learners to increase the retention of students in online courses and reduce the rates of attrition.

Attrition takes place when the student drops from a course and/or leaves the university prior to completing a degree (Martinez, 2003; Johnson, 2012). There are no national studies to support the attrition rates in online education (Angelino, Williams, & Natvig, 2007). Individual studies have found that online courses have higher dropout rates than face-to-face courses (Boston, Ice, & Gibson, 2011; Patterson & McFadden, 2009; Willging & Johnson, 2009).

Statement of the Problem

As the number of online courses and programs continues to increase, it is essential to develop online courses that are equal to the same quality of face-to-face courses. Universities throughout the United States are under pressure from faculty and accrediting bodies to demonstrate that quality assurance practices are in place that demonstrate that online courses meet the same rigor and expectations of face-to-face courses. It is imperative to demonstrate the level of quality to students and legislators, not just in the state where the university is housed but also in states where other students may choose to take courses. In many institutions there are a variety of resources in place to assure face-to-face courses meet quality standards set out by the institutions and accrediting bodies. Universities are currently struggling with how to demonstrate quality standards are being met for online courses and programs since there is no accepted format for quality assurance with online courses. Universities are utilizing a variety of guides and best practices of instructional design and research to develop standards and checklists that are used to develop a level of quality.

There are many factors that affect the quality of any course and especially an online course. Many instructors are not prepared to teach in an online environment. The training they receive to teach face-to-face courses often comes from their masters and/or doctoral programs as they are learning their subject matter. Although many instructors do not want to see mandatory training for learning how to teach online, many will agree that teaching online is different than teaching face-to-face. Faculty attitudes toward teaching online are vast. Lloyd, Byrne, & McCoy (2012) found that faculty had issues with a lack of compensation for the time it took for online course preparation and

professional development, online class sizes, a lack of visual connection to students, inadequate training and technology resources, lack of support from administration, increased workload, and a lack of standards in online education

The students' voice is often silent when it comes to providing feedback to instructors about what they view as important in the courses they have completed. The only time students provide feedback is when they complete end-of-term course evaluations. Previous research indicates that the student response rate is low and can be biased. Those evaluations often do not consist of questions that would provide relevant feedback to instructors that would provide them insights geared at continuous improvement of the course leading to the successful achievement of student learning outcomes for the next group of students. These evaluation tools often ask questions about the effectiveness of the instructor. Examples of statements that students rate on this type of evaluation include "The instructor is well organized and prepared," "The instructor uses effective teaching methods that enhance my learning," and "My instructor created an environment in which students felt comfortable asking questions and expressing their views."

Evaluation instruments that ask meaningful and open-ended questions offer students the opportunity to give specific feedback about what helped or hindered them, and would enable faculty to make adjustments to their courses leading to student success. These adjustments could include different instructional strategies, new methods of engagement, being more active in the course, and various support services.

Theoretical/Conceptual Framework

There are many key factors that determine student satisfaction and whether a student will continue in an online course or drop the course. Some of these factors include instructional strategies (Tirrell & Quick, 2012), engagement (Sutton & Nora, 2008; Schaeffer & Konetes, 2010), timely instructor feedback (Gallien & Oomen-Early, 2008), presence, support (Beyrer, 2010; Lee, Srinivasan, Trail, Lewis & Lopez, 2011), and persistence (Stanford-Bowers, 2008; Holder, 2007). Balancing instructional strategies, engagement, presence, and support can be challenging. However, these relationships need to be examined to determine which elements lead to student persistence and success. There are instruments that have been developed to provide this type of feedback for instructors that give detailed information about the level of engagement, feedback, support, and presence leading to student satisfaction.

One conceptual, research-based framework that has been used to guide research in online teaching and learning in higher education is the Community of Inquiry (CoI) framework. The seminal piece “Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education” published in 1999 has been cited over 2,800 times (Google, 2016). The student-centered framework suggested that courses with optimal levels of social, teaching, and cognitive presence would lead to a community of inquiry that provided students with the ability to construct knowledge through the online learning environment (Garrison, Anderson, & Archer, 2000). Students in an online environment have the desire, even a need, to recreate the social aspects and knowledge building that occurs in the face-to-face environment in this new mode of learning. This social aspect exists in face-to-face courses through informal conversations

among peers before the instructor begins to lecture, interaction during the class lecture, and after the class period ends. The Community of Inquiry (CoI) framework has identified three important and overlapping elements as social (student-to-student), teaching (student-to-instructor), and cognitive (student-to-content) presence.

Social presence is critical to a successful online experience. Student-to-student engagement and student-to-instructor exchanges increase student satisfaction in online courses. This interaction builds a sense of community and provides opportunities for students to share knowledge and share ideas. Learner centered discussions and group projects build community that leads to a high level of social presence. Oftentimes students in online courses feel that they are on an isolated island, going through the process alone, and checking off boxes to complete tasks in the course. The students describe feeling disconnected from the course, which leads to dissatisfaction.

Teaching presence involves multiple actions by the instructor. Quality courses need a student-to-instructor connection. Students need to know, and they want to know, that the instructor is present and available to guide them in the journey. In a face-to-face course, it is easier to interact and get immediate feedback from the instructor. Students can stay after class to talk to the instructor, go to the instructor's office for office hours, and/or arrange a time to meet with the instructor. However, in the online course, the interaction between student and instructor needs to be purposeful and without a long delay. Students need to know that their instructor is present virtually in the course. It is one thing that separates the fully engaged online course with a correspondence or self-paced course.

Instructors build teaching presence through the design and organization of the course, facilitating discourse, timely feedback and direct instruction. It is not just a matter of putting course materials into the learning management system (LMS).

Teaching presence is purposeful and includes facilitating social and cognitive presence (Garrison, Cleveland-Innes, & Fung, 2010; Lear, Isernhagen, LaCost, & King, 2009).

Cognitive presence is the ability of students to “construct and confirm meaning through sustained reflection and discourse” (Garrison, Anderson, & Archer, 2001, 2004). Through these experiences, students intermingle practical inquiry, critical thinking and community building to expand on their knowledge of information. In other words, this is a process of collaboration to construct meaning (Garrison, 2006). This implies there is a community of learners and there are opportunities for the learners to engage in meaningful dialogue and discourse. For this to be purposeful, there needs to be a shift from traditional lecture to interaction through questions, application, open inquiry, and reflection. Cognitive presence is a complex process that requires time for faculty to effectively prepare so it flows throughout the entire course.

There is a strong relationship between teaching presence and its effect on social presence and cognitive presence (Joo, Lim, & Kim, 2011; Garrison et al., 2010; Shea & Bidjerano, 2009). Social presence has been given the most attention in the literature and it has shown to impact student satisfaction in online courses. Students in courses with high social presence build community with their peers and are able to form study groups, increase knowledge through discussions and group projects, and have a greater sense of connection. Students who feel a lack of social presence often feel disconnected and

dissatisfied with their online experience. This leads to low completion rates and low motivation.

Research examining all of the components of the Community of Inquiry framework at the same time is extremely limited (Arbaugh et al, 2008). Previous research using the CoI framework has examined social, teaching, and cognitive presences individually or with one other dimension. To expand the impact of the COI framework on online learning theory, a 34-item instrument was developed to operationalize the Community of Inquiry (CoI) framework. The results validated the instrument as reliable and an efficient measure of the dimensions of social, teaching, and cognitive presence (Arbaugh et al, 2008). The results validate using the CoI framework by instructional developers and instructors in developing effective online learning environments.

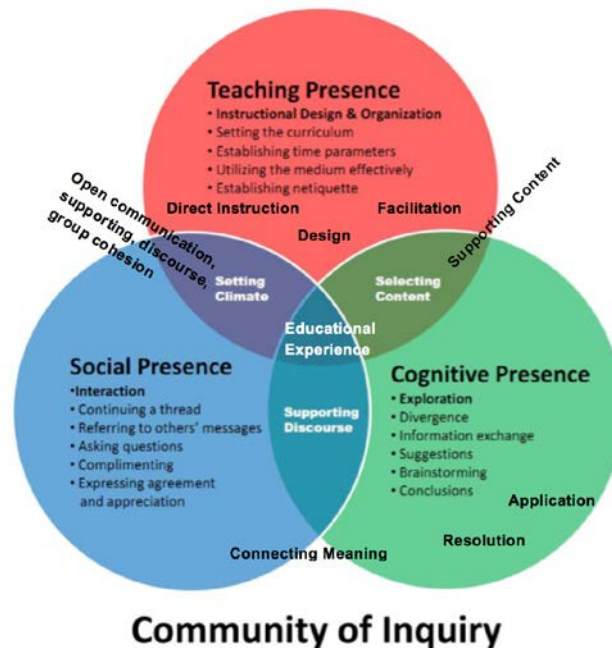


FIGURE 1. COMMUNITY OF INQUIRY FRAMEWORK

The design of the online course affects the way the course is delivered as well as the overall experience of the course. There are many tools available for faculty to guide the development of their online course. Many institutions have developed their own criteria for developing online courses with key elements that must be included. These roadmaps are not all inclusive but they do offer a framework that provides guidance to faculty who are developing their first online course and for experienced faculty who want to evaluate a course they have taught online. Some of these tools include Chickering's Seven Principles of Good Practice, Western Cooperative for Educational Telecommunications (WCET), Online Learning Consortium Quality Scorecard, and the CSU Quality Online Learning and Teaching (QOLT) instrument. The QOLT instrument, developed by the California State University (CSU) system, is examined more deeply in this study. More in-depth information about these instruments is discussed in Chapter 2.

Purpose of the Study

This study focused on the student voice as it pertains to developing and sustaining social, teaching, and cognitive presence in online courses in a higher education setting, how these elements relate to the quality of instruction, and student satisfaction with the course. It examined undergraduate student perceptions of quality and satisfaction in online courses through the Community of Inquiry (CoI) framework. In addition, it examined and documented the process of one instructor's journey in transitioning to teaching online utilizing the Quality Online Learning and Teaching (QOLT) faculty instrument as a guide and purposefully integrating social, teaching, and cognitive presence for the benefit of students. This study is the first to utilize all three elements of social, teaching, and cognitive presence together and is operationalized through and

aligned with all nine sections of the Quality Online Learning and Teaching (QOLT) instrument.

As pressure mounts from students, businesses, and legislators to graduate more students, it is important to keep the same quality in the online environment as there is in the face-to-face environment. The method of delivery is different, but the rigor and achievement of student learning outcomes should be the same as traditional courses. This is important not to just students, but faculty, administrators, accrediting bodies, and legislatures.

The information from students provides faculty with feedback they can use in the continuous quality improvement model of revising their courses from term to term with the goal of increasing student satisfaction and success. By understanding student perceptions of quality, higher education institutions can improve student learning experiences and serve them better through course redesign and integrating more social, teaching, and cognitive presence that leads to higher satisfaction, retention, and success.

Students understand the benefits of online learning. These benefits include flexibility of time, work at their own pace, not having to drive to campus, and the ability to take more courses (Astani, Ready, & Duplaga, 2010). Unfortunately, although research suggests there are factors that increase students' perception of quality in an online course and their satisfaction with online education, the amount of studies is limited (Astani, Ready, & Duplaga, 2010). There are very few studies that investigate the student perception of quality in online courses. This study was important because it adds to the body of literature about online courses and suggests that the Quality Online

Learning and Teaching (QOLT) instrument and the Community of Inquiry framework are useful in course design and review.

Research Questions

The overarching research question for this study was: What do students perceive as quality in online courses? Three sub-questions guided this inquiry:

1. How do social presence, teaching presence, and cognitive presence relate to students' perceptions of the quality of instruction in an online course?
2. How do students' demographic characteristics (e.g., gender, race/ethnicity, age, and socioeconomic status) and educational experience (e.g., prior online course experience, GPA) shape their perception of quality in online courses?
3. How can the Community of Inquiry framework inform the development of a quality online course?

Research Methodology

This study examined the quality of online instruction in a mid-sized university in Southern California. It focused on how students' perceptions of social, teaching and cognitive presence led to student satisfaction and academic success. More specifically, it addressed the research questions by analyzing: 1) student responses to the Quality of Online Teaching (QOLT) student feedback survey data, based on the Community of Inquiry (CoI) framework, designed to measure student perceptions of social, teaching and cognitive presence from an in-depth 52 question survey. It was completed by undergraduate students (n=113) enrolled in select online classes at the university taught during Spring 2015. In addition, the survey measures elements of accessibility and universal design; and 2) one instructor's responses to the Quality of Online Learning and

Teaching (QOLT) faculty feedback survey that measures self-reported instructor perspectives of social, teaching and cognitive presence in her online class, as well as an interview with the instructor to draw out examples that supported how students perceived social, teaching, and cognitive presence. The instructor interview elicited examples of how this instructor demonstrates social, teaching, and cognitive presence in her online course.

Significance of the Study

The demand for online courses is growing and, with that increase, is a demand from students, faculty, administrators, and legislators to ensure that online courses have the same quality and rigor as face-to-face courses. Students expect and want more than static information. They expect the online course to be as close as possible to the face-to-face course and the same level of interactivity. The credibility of the university is correlated with the perceived quality of their online courses and the satisfaction of the students. Current research has provided guidelines and best practices for online courses that are effective and lead to student success.

This research study analyzed the quality of online courses from a student perspective and contributes new knowledge and informs both practice and policy. Traditional feedback from students about perceptions of courses usually comes at the end of the term using a traditional course evaluation tool that does not ask questions relating to the unique nature of online courses. There has been little research conducted on student perceptions of quality in online courses that leads to changes in the course design. This type of feedback would provide detailed information to faculty that would allow them to reflect on their teaching and fully engage in the process of continual course

improvement that assures quality that leads to student success. It is through continuous improvement that the course is revised, becomes more tailored to the needs of students, new methods of assessment are implemented, and ultimately can lead to better student achievement.

Knowing how students perceive the level of social, teaching, and cognitive presence in online courses can lead to changes in course redesign, faculty professional development, and increased student success demonstrated through higher rates of retention and lower rates of attrition. Given that students are using online courses to fulfill their desire to complete a degree, institutions, faculty, and instructional designers need to make sure that the students are successful so graduation rates increase and not decrease because of preventable issues in the online course. Educators should be concerned about student perceptions of quality and how technology affects their learning. At the same time, faculty and administrators need to recognize that students seeking higher education are looking for choice. Some students want a traditional education experience, some students want a fully online experience, and some students want a blend of traditional and online learning.

CHAPTER TWO: LITERATURE REVIEW

Higher education institutions are increasingly embracing online courses and programs as a method to increase student graduation rates. The growth of students taking at least one online course in the past 10 years has increased significantly and is predicted to continue to grow as more non-traditional students are going back to college. As the need to sustain and support this demand increases, so does the question about quality. The quality of online courses continues to be discussed among various constituent groups.

In order to get a better understanding of the quality of online instruction phenomenon, this literature review focused on the student point of view and resources available to faculty who are developing and teaching online. The demographics of online students is important to understand as they can change the design, structure, facilitation, activities, and satisfaction of an online course. The demographics can have an effect on student retention and perceptions of quality. The instructor perception of online courses can have an effect on the number of courses that will be developed and taught online, professional development that needs to be offered, and the social, teaching, and cognitive presence in the course. The instructor perception can have a direct impact on the student experience and satisfaction. This literature review also examined rubrics used to guide instructors in the development of online courses that impact quality assurance and accrediting bodies that have standards of quality.

Demographics of Online Students

Many researchers have attempted to characterize the demographics of students in online courses for years with no consistent profile, although the profile is becoming clearer. Several studies characterized online learners as female, Caucasian, and non-traditional which is defined as over 25 (Noel-Levitz, 2007; Aslanian & Clinefelter, 2012). In a 2014 study, the Educause Center for Analysis and Research (ECAR) found that older students (ages 25 plus, 19%) say they learn best when a course is taught completely online. In addition, part-time students (16%) are more likely to say they learn better online than full-time students (9%) (Dahlstrom & Bichsel, 2014).

Although no two students are alike, research has found that some types of students are more successful than others. Seniors, students with GPA's of 3.0 or higher, and females are less likely to withdraw while freshmen, students who have previously withdrawn from an online course, and males are more likely to withdraw (Cochran, Campbell, Baker, & Leeds, 2014). Many students have difficulty adapting to the online environment. However, African-American students, males, younger students, and students with lower academic preparedness have more difficulty adapting. Older students are more adaptable than their younger counterparts (Xu & Jaggars, 2013).

Understanding demographics of online students can lead to the development of courses that create pathways to student success. It is important to understand the types of students that take online courses and what is needed to help them progress through the courses to reduce the attrition rates and increase retention rates. Every university has a different demographic for online students. It is important for faculty to take this into consideration and to ask students about their needs and goals when the course starts.

Online Student Retention

Student retention rates have been researched for decades. Much of the research on retention and attrition of students references Vincent Tinto's 1975 model that presents a series of causal factors (Tinto, 1975) and focuses on students who meet face-to-face. Current research shows that first-time, full-time students enrolled at 4-year institutions in 2011 had a 79% retention rate the following fall in 2012. For institutions that have open admissions, that rate falls to 61% (NCES, 2014). Overall, retention rates do not reflect graduation rates. For first-time freshmen entering 4-year institutions in fall 2006, the public institution graduation rate was 57%. For institutions that have open admissions, that rate falls to 57% (NCES, 2014). Retention and attrition are not the same.

There are no national studies to support the attrition rates in online education (Angelino, Williams, & Natvig, 2007). Anecdotal evidence has reported attrition rates for online courses as 10-15% higher than face-to-face courses (Carr, 2000). Individual studies have found that online courses have higher dropout rates than face-to-face courses (Boston, Ice, & Gibson, 2011; Patterson & McFadden, 2009; Willging & Johnson, 2009).

When a student drops or fails an online course it does not just affect that student, it also has an effect on students on waitlists, the instructor, and the university. Students compete to get access to many high demand general education and major courses. This often results in students not being able to get a seat in the course. When a student drops the course it is often too late for a student on a waitlist to get enrolled and get caught up on course material. When a student drops the course it puts him/her further at-risk of completing a degree due to the availability of the course the next time it is offered. It also effects the instructor who has spent time and effort to facilitate the course and

provide feedback to the student. The cost of attrition on higher institutions was released in the report “The Cost of College Attrition at Four-Year Colleges & Universities” (Raisman, 2013) which found that collectively, the 1,669 colleges and universities studied in the 2010-2011 academic years, lost revenue close to \$16.5 billion.

Factors Affecting Student Retention in Online Education

There has been a great deal of research conducted to identify factors that contribute to student retention in online courses. The themes that have emerged in the literature include: instructional strategies (Tirrell & Quick, 2012), engagement (Sutton & Nora, 2008; Schaeffer & Konetes, 2010), instructor feedback (Gallien & Oomen-Early, 2008), presence, support (Beyrer, 2010; Lee, Srinivasan, Trail, Lewis & Lopez, 2011), and persistence (Stanford-Bowers, 2008; Holder, 2007). These factors have been identified as keys to student expectations and can be used to evaluate whether a student will become an engaged learner and persist to complete the course or will disengage and drop the course.

A present gap in the literature is not asking unsuccessful students, those with D, F, and W grades, what would help them be successful in an online course. A lot could be learned from these students and their opinions. Research has found that the most common reason students were unsuccessful in online learning is that they “got behind and couldn’t catch up” (Fetzner, 2013). This same reasoning could hold true for all types of students and not just online learners. Many online learners do not know where to go to get help, how to get started, what to expect with online coursework, or have the organizational skills needed to be successful online learners. Some of these issues could be mitigated by having online course orientations (Ali & Leeds, 2009; Nash, 2005),

providing student readiness surveys, giving clearer information from counselors and advisors, and designing online courses based on student feedback regarding their perceptions of quality online instruction.

Factors Affecting Student Satisfaction in Online Education

As the number of students taking online courses increases throughout the United States higher education system, research specific to online learners has evolved at a slower pace. Of the 54 articles that looked specifically at “student satisfaction in online education,” the most common themes that emerged were: predictors of student satisfaction (Kuo, Walker, Schroder, & Belland, 2014), online support services (Lee, 2010; Fetzner, 2013), feedback from faculty (Gallien & Oomen-Early, 2008), student engagement (Shea & Bidjerano, 2009; Collins, Weber & Zambrano, 2013; Dietz-Uhler & Hurn, 2013; Swanson, Davis, Parks, Atkinson, Forde & Choi, 2015), motivation (Stewart, Bachman, & Johnson, 2010; Kranzow, 2013), and persistence (Hart, 2012; Boston, Diaz, Gibson, Ice, Richardson, & Swan, 2010). Narrowing the search for research based on “student satisfaction in online courses” yielded 351 results between 2000 and 2015. Some of the studies were themed around comparing face-to-face and online courses, future of online education, instructional strategies (e.g., lecture, discussion, group work, projects), and presence (social, teaching, and cognitive).

Students who are more experienced in online courses are more satisfied than students who are new to this mode of instruction (Astani, Ready, & Duplaga, 2010). Instructor actions within the course have a positive correlation to student satisfaction (Jackson, Jones, & Rodriguez, 2010). Orientations before the courses commence have proven to be successful in helping students adjust to the online format (Ali & Leeds,

2009; Nash, 2005). Technology through web conferencing allows faculty and students to have a synchronous orientation without forcing students to come to campus. The orientation could be recorded and placed into the learning management system (LMS) for students to view later. Emerging research has revealed that social, teaching, and cognitive presence are important factors propelling student success and their opinions about course quality (Gallien & Oomen-Early, 2008).

Student Perceptions of Quality in Online Education

Students understand the benefits of online learning. These benefits include: flexibility of their time, work at their own pace, not having to drive to campus, and the ability to take more courses (Astani, Ready, & Duplaga, 2010). They think they know what they expect in an online course. Students expect that the online course will contain the same content and rigor as a face-to-face course, authentic assessments and activities, meaningful feedback from instructors, opportunities to engage with peers, and consistent and clear navigation. For the most part, students believe that online courses are as rigorous as face-to-face courses, offer the same material, and is challenging (Astani, Ready, & Duplaga, 2010). However, students often underestimate what this means and the amount of time involved in taking an online course. When they perceive a lack of instructor attention or rigor it leads to them believe learning experience was diminished (Norton & Hathaway, 2008). Previous online experience has an effect on student perceptions of online learning. Students who have previous online experience are more satisfied than students with limited or no previous experience (Astani, Ready, & Duplaga, 2010). Course quality is a predictor of student satisfaction. Effective course design using

a student-centered model has an effect on the success of an online course (Mortagy & Boghikian-Whitby, 2010).

There is a shortage of research studies that reveal how students perceive the quality of learning online, collaborative opportunities, technology usage and issues, and skills developed through teamwork. Further research needs to be conducted to understand these areas as well as student viewpoints about the amount of learning, the interaction with peers, and their overall experiences and expectations in the online environment.

Faculty Perceptions of Online Education

Although many studies have found that there is no significant difference in the learning outcomes of online and face-to-face students, many instructors still have doubts. They just cannot fathom how they can teach their content in a different medium than the traditional face-to-face method. Many have the mantra “If I can’t see them, I can’t teach them.” The frustration with teaching online comes when faculty new to teaching online try to translate their traditional face-to-face content into the online environment. It is like trying to put a square peg in a round hole.

To reduce the frustration, instructors need professional development to learn how to develop their course and reduce their anxiety. Many universities have support available through Faculty Centers. Some do not, and faculty often feel dissatisfied or struggle with the ability to convey the course material and lectures in an online environment in the same manner they do in a traditional course (McLawhon & Cutright, 2012). It is often difficult to transition from the comfort and experience of an objectivist model to a constructivist model. The objectivist model consists of instructors teaching

through lecture and the use of textbooks (Schell & Janicki, 2013). The constructivist model is a pedagogical shift that has led to successful student learning through experiential and active learning. The Community of Inquiry model is a social constructivist method of course development that blends social, teaching, and cognitive presence. Social presence is the degree to which students feel socially and emotionally connected with others in the course. Teaching presence pulls together social and cognitive presence through the course design, facilitation of online discourse, and direct instruction. Cognitive presence provides opportunities for students to construct meaning through communication, reflection, brainstorming, exploration, and application of course content (Garrison, Anderson and Archer, 2000).

It is recommended that professional development training focus on student learning techniques instead of just focusing on using the technology. These techniques include group collaborations, learning communities, various assessment methods, and helping students make connections with previous knowledge (Tirrell & Quick, 2012). In addition to teaching online having a significant impact on their pedagogy, faculty identify academic freedom, intellectual property rights, faculty workload, professional development, compensation, and end of semester course evaluations as issues that need to be addressed (Meyer, 2002).

Student feedback to instructors needs to move beyond the traditional format of end of semester course evaluations to more detailed feedback about their course experiences. The traditional end of semester course evaluation provides little information to the instructor that would actually lead to changes in the course. They are traditionally used to measure the instructor's performance based on a set of approved criteria by the

institution and play a significant role in the reappointment and promotion of instructors. Using the continuous improvement model, faculty need explicit feedback from students on what has worked for them and what needs to be improved to make the course more successful for future students.

What Does a Quality Online Course Look Like?

A quality online course should be equivalent to a face-to-face course and have the same student learning outcomes. Richard Clark (1983), author of the “No Significant Difference” article, argued that the quality of education is dependent upon the pedagogy and design of the course and not the mode of instruction. While faculty have academic freedom over content, the structure and delivery of the online course can greatly enhance or hinder the experience for the students.

There is a plethora of advice on best practices for the development and structure of online courses. Courses that are interactive, student-centered and emphasize the importance of student-student, student-instructor, and student-content engagement have shown to lead to student satisfaction and success. When design issues interfere with the students’ ability complete course requirements, students become anxious and frustrated.

“Quality” has been defined in many different ways. According to Meyer (2002), “the lack of consistent, agreed-on definitions for what quality is” can be very problematic (p. 22). Students, faculty, administrators, and accrediting bodies have different definitions and expectations for quality. Therefore, when discussing quality of online education, it is important to ask from whose perspective the quality being considered (Twigg, 2001). Each group will provide a different viewpoint and different examples. Although accepting a common definition is not easy, there are indicators and rubrics that

faculty and administrators use to guide the development and measure the quality of online courses. In addition, regional accrediting agencies create standards and recommendations to ensure quality courses and programs. The instruments discussed in this literature review include the Chickering's Seven Principles of Good Practice, Online Learning Consortium (formerly Sloan-C) Five-Pillars of Quality, the Quality Matters (QM) Program, and the Quality Online Learning and Teaching (QOLT) instructor and student feedback instrument developed by the California State University system. These tools have been developed from the perspective of the instructor, administration, and accrediting bodies and not the perspective of the students. In 2013, the California State University system modified the Quality Online Learning and Teaching (QOLT) instrument to measure student feedback for hybrid and online courses.

Regional Accrediting Agencies

The six regional accrediting commissions and two national accrediting organizations write distance education policies and standards (Keil & Brown, 2014). The eight accrediting agencies are:

1. Middle States Commission on Higher Education (MSCHE)
2. New England Association of Schools and Colleges - Commission on Institutions of Higher Education (NEASC-CIHE)
3. North Central Association of Colleges and Schools - The Higher Learning Commission (NCA-HLC)
4. Northwest Commission on Colleges and Universities (NWCCU)
5. Southern Association of Colleges and Schools-Commission on Colleges (SACS-COC)

6. Western Association of Schools and Colleges Accrediting Commission for Community and Junior Colleges (ACCJC-WASC)

7. Accrediting Council for Independent Colleges and Schools (ACICS)

8. Accrediting Commission of Career Schools and Colleges (ACCSC)

In addition, there are various agencies and institutions that have developed instruments to provide guidance in the development of quality online courses. In the next section, the highlights of some of them will be discussed. These guidelines were developed to assist higher education institutions with the development of online courses and programs and provide an assessment framework for them.

In 2011, the Council of Regional Accrediting Commissions (C-RAC) published the “Nine Hallmarks of Quality”. This report replaces the “Statement of Best Practices for Electronically Offered Degree and Certificate Programs” report published in 2002. These nine elements were developed to be used by higher education institutions to plan distance education and provide an assessment framework (MSCHE, 2011).

Quality Standards

Chickering’s Seven Principles of Good Practice

The “Seven Principles for Good Practice in Undergraduate Education” were developed in response to the criticism of higher education (Chickering & Gamson, 1987). They include:

1. Encourages contacts between students and faculty.
2. Develops reciprocity and cooperation among students.
3. Uses active learning techniques.
4. Gives prompt feedback.

5. Emphasizes time on task.
6. Communicates high expectations.
7. Respects diverse talents and ways of learning.

Since their inception in 1987, they have been cited in research more than 5,400 times according to a Google search on March 30, 2016. These principles have been modified over the years and applied to online education. A 35-item questionnaire was developed using a 7-point Likert scale to assess student perceptions in the context of an online statistics course (Bangert, 2004). The Inventories of Good Practice in Undergraduate Education was modified and reduced the original survey from 64 to 35 questions, used a 5-point Likert scale, and described a specific teaching activity (Zhang & Walls, 2006; Tirrell & Quick, 2012). The seven principles reflect constructivist-learning theory and have been accepted as effective tools for evaluating online instruction and have been used in over 10 studies supporting these sound instructional practices (Tirrell & Quick, 2012).

Online Learning Consortium Five Pillars of Quality Online Education

The Online Learning Consortium (formerly the Sloan-C) Five Pillars of Quality Online Education are based on continuous quality improvement (CQI) and help establish benchmarks and standards for quality. This model emphasizes faculty-to-student and student-to-student engagement and interaction through asynchronous learning networks (ALN) where the focus is more on the interaction and less on the expensive course materials (Moore, 2005). The 5-Pillars are:

1. Learning effectiveness
2. Cost effectiveness and institutional commitment (scale)

3. Access
4. Faculty satisfaction
5. Student satisfaction

Through the use of this framework, practitioners are able to learn how to encourage higher order learning, adapting technology as it has evolved and changed, and continuously improving interaction. A synthesis of institutions using the Sloan-C pillars was produced to demonstrate where and how the instrument has been used and the benefits of using the instrument (Moore, 2012). The results provide practitioners a wealth of resources that have proven to be successful and can be adapted to fit the needs of various constituents.

Quality Matters Program

The Quality Matters (QM) Program was developed in 2003 as part of a Fund for the Improvement of Postsecondary Education (FIPSE) grant. It is a faculty-centered peer review program developed to certify quality online and blended courses (Quality Matters, 2014). The focus of the program is course design through the use of a rubric based on current research, practitioners, and feedback from faculty and QM course reviewers. There are currently over 900 subscribers to the Quality Matters program in K-12, 2-year institutions, 4-year institutions, technical colleges, and other academic organizations. The QM rubric, now in its fifth year, consists of eight standards and 43 elements. These standards have been shown to measure quality and improve student learning (Quality Matters, 2014). Distance education researchers have used the QM rubric to advance knowledge about online teaching and learning.

Chapter Summary

There are advantages and disadvantages to both faculty and students in online courses. Many of these advantages and disadvantages have been researched closely. Further research needs to be conducted on course interaction (student-to-student, student-to-instructor, and/or student-to content) to understand student perceptions of how these types of interactions impact the quality of the course.

There is a shortage of research studies that reveal how students perceive the quality of learning online, collaborative opportunities, technology usage and issues, and skills developed through teamwork. Further research should be conducted to understand these areas, as well as student viewpoints about the amount of learning, the interaction with peers, and their overall experiences and expectations in the online environment.

CHAPTER THREE: METHODOLOGY

Introduction

The present study was designed to get in-depth feedback from undergraduate students and an instructor about course elements in online courses that contribute to student-student, student-content, and student-instructor interaction. These elements are referred to in the Community of Inquiry framework as social, teaching, and cognitive presence. These elements have been shown to contribute to students' perceptions that the course is a quality course that leads to student success. This chapter presents the research questions, as well as key elements of the research design and methodology, findings from a pilot study, and limitations of the study.

Research Questions

The study explained and defined the student perceptions of quality online courses that led to them being successful. The overarching research question for this study was: What do students perceive as quality in online courses? Three sub-questions guided this inquiry:

1. How do social presence, teaching presence, and cognitive presence relate to students' perceptions of the quality of instruction in an online course?
2. How do students' demographic characteristics (e.g., gender, race/ethnicity, age, and socioeconomic status) and educational experience (e.g., prior online course experience, GPA) shape their perception of quality in online courses?
3. How can the Community of Inquiry framework inform the development of a quality online course?

Research Design

This study examined student perceptions of social, teaching, and cognitive presence relying on student and faculty surveys and faculty interviews in two phases of data collection. It was aimed at exploring student perceptions of quality in online courses using the Quality Online Learning and Teaching (QOLT) student feedback ratings instrument in addition to ratings and comments from end of semester course evaluations. It also explored one instructor's journey of transitioning to teaching online and her perceptions of teaching online as well as her process for designing, developing, and teaching her course with a focus on integrating social, teaching, and cognitive presence that led to student success and satisfaction using the QOLT faculty self-rating instrument and a personal interview.

Pilot Study

A pilot study was conducted to examine the effectiveness of the QOLT student feedback instrument on student perceptions of quality in relation to social, teaching, and cognitive presence during the Summer 2014 semester. Students in 7 of 13 courses taught the second half of the summer session and two that were taught during the entire summer session were surveyed. The students had two weeks to complete the survey and were not given any incentives to complete it. The response rate was low with 43 surveys completed.

The results found that the majority of students (79%, n=34) had previously taken an online course at this institution. Over 58% of the students (n=25) had taken an online course at another institution. More females (72%, n=31) than males (28%, n=12) completed the survey. The campus where the surveys were conducted in the Southern

California region is majority female. The average age of the participants was 25.3 years of age. The students would recommend the course to a friend (98%, n=42) and 93% (n=40) want more online courses to be offered at this institution.

Student results indicated that student perceptions of quality in online courses are high. Students indicated they Strongly Agree/Agree with the majority of objectives in the nine categories of the QOLT student rating feedback instrument. Objectives from several categories indicate that further research needed to be conducted to increase the satisfaction with objectives relating to social, teaching, and cognitive presence in addition to student and technical support. The results of the pilot informed changes to the research design for this study. In addition to surveying students, the research design integrated an interview with one instructor.

Research Site

The data for this inquiry were collected from a mid-sized, four-year Masters granting institution in Southern California. This campus has over 11,300 undergraduate and graduate students. The majority of students are traditional students between 17-22 years of age (67%) and female (61.9%). The campus is recognized as a Hispanic Serving Institution and 50% of the students are first generation students (Campus Fast Facts, 2013). The Masters of Education, Literacy and the Bachelors of Science Nursing (RN-BSN) are currently the only fully online programs at this institution. In addition, there is an average of 50 individual courses per semester offered fully online. The majority of courses taught online are from the College of Humanities, Arts, Behavioral, and Social Sciences. Through a Quality Assurance program, this campus is leading the CSU system

in implementing the Quality Online Learning and Teaching (QOLT) instrument when developing and reviewing online courses.

Methodology

Research Design

The present study featured two phases of data collection and analysis. Phase 1 involved collecting survey data from students and end of course evaluations. Phase 2 involved survey data from an instructor, an interview, and course observation. The results of the data were triangulated to portray a holistic picture of quality online courses. Each of these phases is described below.

Table 1. Intersection of the Research Questions, Community of Inquiry Framework, and Data Collection Phases and Methods

Phase	Research Question	Method and types of data	QOLT instrument objective
Phase 1: Students (n=113)	1. How do social presence, teaching presence, and cognitive presence relate to students' perceptions of the quality of instruction in an online course?	• QOLT student feedback instrument • End of course evaluations • Course evaluations	All of the QOLT objectives from the student instrument
Phase 1: Students (n=113)	2. How do students' demographic (e.g., gender, race/ethnicity, age, and socioeconomic status) and educational experience (e.g., prior online course experience, major, GPA) shape students' perception of quality in online courses?	• QOLT student instrument • Course evaluations	All objectives from the student instrument
Phase 2: Instructor (n=1)	3. How can the Community of Inquiry framework inform the development of a quality online course?	• Faculty interview • Faculty QOLT self-rating • Student QOLT ratings instrument • Course observation	All objectives from the faculty and student QOLT instrument

The QOLT student ratings feedback instrument, QOLT faculty self-rating instrument and the QOLT non-award peer review instrument were used to measure social, teaching, and cognitive presence. Student comments from the QOLT survey, end of semester course evaluations, and feedback from the instructor interview brought deeper meaning to the results of the QOLT student ratings instrument survey. The data were reviewed for themes to explain and enhance how students and the instructor perceive social, teaching, and cognitive presence through examples and to understand their overall online experience that led to student satisfaction.

Phase 1 Students

Participant selection. Students were selected from a convenience sample of courses that were taught during the Spring 2015 semester after the instructors gave permission for their courses to be reviewed using the QOLT student ratings feedback instrument. Students in 19 courses were encouraged by the course instructors to complete the survey. Instructors were selected from a list of faculty who were teaching at least one online course during the Spring 2015 term. The courses were taught from different departments in the College of Humanities, Arts, and Behavioral and Social Sciences, the College of Science and Math, and the College of Education, Health and Human Services. The courses were a mix of lower division and upper division general education courses.

Quantitative data collection. Data were collected from students near the end of the Spring 2015 semester during the first two weeks of May (May 1 through May 15) in 19 online courses. The students were emailed a link to complete the survey using Survey Gizmo. Given that the survey collected data about the student evaluation of an online

course, and their satisfaction with that course, it was vital that they had completed the majority of the course in order to provide an informed evaluation. By limiting the time to complete the survey to two weeks, beginning the 14th week of the term, it gave the students the necessary time to complete it and also allowed time to send reminders to the students who had not completed it after the first week it was available had passed.

The instructors were identified and agreed to ask their students to participate in the survey. Several instructors said they were offering extra credit to the students who completed it to help increase survey completion rates. The students did not receive any incentives from the researcher to complete the survey. A reminder to complete the survey was sent one week after the original email was sent. Students were able to start the survey, save it, and come back to finish the survey at a later date/time.

The survey was distributed to students via email with a cover letter (see Appendix A) explaining what the survey was about and asking them to participate in the survey (see Appendix B). The confidential survey was not anonymous. Students were asked to include their student ID number so institutional data could be collected and instructors could be notified of who had completed it so the students could receive extra credit for participating. The students had the option of opting out of the survey at any time. The students provided consent before starting the survey.

Student Characteristics. A total of 113 students in 19 courses taught by 15 instructors participated in this study, for a response rate of 13%. Students were asked to provide their gender, race/ethnicity, age, and student identification (ID) number to obtain GPA, major, and socioeconomic status. Socioeconomic status was determined based on

Pell grant eligibility. Student self-reported demographic data were validated through the student ID number.

Over 70% of the students received financial aid from scholarships, grants, and student loans. It was not surprising that more females (n=88) completed the survey than males (n=25). This university is 60% female and 40% male. The male students (n=17) were Pell-eligible while females were almost split in half (n=45) being Pell-eligible. The combined percentage of Pell-eligible students was 6% of the sample. The students' age ranged from 18 to 54 with the mean being 25 years. The minimum GPA was 2.04 and the maximum GPA was 4.00 on a 4-point scale. The mean GPA was 3.20. The students were in majors from each of the colleges. The students had experience with online courses, which could have influenced their ratings. Of the 113 participants, 70% had taken an online course at this institution and 72% had taken a course at another institution. The majority of students (85%) were juniors and seniors.

Many of the participants fell into the category of Hispanic/Latino (35%) or White for (49%). Frequencies and percentages for nominal variables are presented in Table 2.

Table 2. Descriptive Statistics of the Student Participants and Campus Demographics

Variable	Attribute	Online Students Spring 2015 %	All Online Students Spring 2015 %	All Students Spring 2015 %
Gender	Male	25	27	39
	Female	75	73	61
Pell-eligible	Yes	55	47	46
	No	45	54	54
Race/ethnicity	Asian	7	11	10
	Black/African American	4	5	3
	White/Caucasian	49	39	33
	Hispanic/Latino	34	32	39
	Native Hawaiian/Other Pacific Islander	1	1	0.4
	Other Latino, Hispanic	.9	0.2	--
	Two or More Ethnicities/Races	5	8	5
Age	< 23	48	45	56
	23+	65	55	44
GPA	< 2.00	--	4	--
	2.00 to 3.00	34	43	
	> 3.00	66	53	

Instrumentation. The California State University system has identified 24 core or essential elements of the QOLT instrument that should be included in quality courses with an overall score of 85%. The instructor is integral to both the design and delivery of the course. Course design is the planning and forethought that the instructor puts into the course. Course delivery is the actual teaching and implementation of the course design.

The QOLT instrument for course development was created in 2011. The QOLT student feedback survey instrument was established in 2013 to provide additional feedback to faculty who are teaching online to gather the student perspective of their

online experience. It is based on the QOLT instrument developed as a tool to guide faculty in the development and self-evaluation of online and hybrid courses.

The student and faculty QOLT instrument consists of the following categories.

The appendices contain copies of both instruments.

1. Course Overview and Introduction (8 items)
2. Assessment of Student Learning (6 items)
3. Instructional Materials and Resources Utilized (6 items)
4. Student Interactions and Community (8 items)
5. Facilitation and Instruction (8 items)
6. Technology for Teaching and Learning (6 items)
7. Learner Support and Resources (3 items)
8. Accessibility and Universal Design (4 items)
9. Course Summary and Wrap-up (3 items)

There are 52 items in the survey that are grouped into nine sections using Likert ratings of Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, Not Applicable/No Opinion. The instrument measures social, teaching, and cognitive presence in addition to accessibility and learner support. The focus of the instrument is to provide detailed feedback to instructors about the student course experience and suggestions for change.

The QOLT instrument was originally developed by representatives of the California State University system from various groups including: the Learning Management System Services, Moodle Common Interest Group, Blackboard Common

Interest Group, QOLT Advisory and Review Board, Directors of Academic Technology, and the Faculty Development Council. In addition, there was a review of related research and literature as well as careful consideration of existing models of assessing effective online teaching and learning. These models include the CSU Chico Rubric for Online Instruction, Quality Matters, and the Illinois Online Network Quality Online Course Initiative. It integrates the Community of Inquiry (CoI) framework and student satisfaction indicators from the annual National Survey for Student Engagement (QOLT Program, 2014).

The QOLT evaluation instrument was piloted from August through December 2011. It was revised in September 2012 based on feedback from the faculty participants from the 2011-2012 program cycle as well as input from representatives from the original constituent groups and QOLT initiative Campus Coordinators.

Quantitative data analysis. Survey Gizmo has built-in analysis tools that provided an initial graphical overview of the completed survey. Further analysis was conducted using SPSS, a statistical software program used for statistical analysis and Intelluctus Statistics, an online statistical software program was used for statistical analysis and narration.

Phase 2 Instructors

Participant selection. There were over 50 online courses taught during the Spring 2015 semester. Instructors were asked to participate in this study and 10 agreed. Some of the instructors taught more than one online course and some taught more than one section of the same course.

Instructor characteristics. One instructor was interviewed and has a Ph.D. in science and has been teaching for ten years. She originally attended a professional development workshop series on “How to Teach Online” to learn “what this online thing was” and was not planning on developing an online course. She was apprehensive about teaching fully online and thought she would learn some new tools to use to enhance her face-to-face course. She was concerned about course quality online and wanted to make sure students did not drop the course because it was online. Ensuring the course was as rigorous and as engaging as her face-to-face course were other important aspects. Although she was initially reluctant to develop an online course, her mind was changed when she saw the many advantages for both her and the students, the support she would receive while developing and teaching the course, the opportunities and flexibility that would be opened for her students, and the chance to add another method of teaching to her repertoire.

Data collection. The second phase of the study involved an instructor completing a survey using the QOLT faculty self-rating instrument (see Appendix C), an interview with the instructor, and a course evaluation by the researcher. The results of the self-rating gauged the perceptions of social, teaching, and cognitive presence and areas of improvement the instructor wanted to implement in a future revision.

The instructor interview focused on how she transitioned from teaching face-to-face to online, what strategies she used to promote student success, and her overall experience teaching online. Questions that related specific to social, teaching, and cognitive presence were explored without using those terms.

To ensure confidentiality, all transcripts and recordings were stored online using Google Drive and only the researcher has access. Pseudonyms were used to protect the identity of all participants.

Instrumentation. The QOLT instructor self-rating survey is based on the QOLT instrument (see Appendix C) used as a roadmap to develop online courses. It contains the nine categories and 54 objectives described for Phase 1. The instructor was asked via email to participate (see Appendix D) and provide examples of how she demonstrates social, teaching, and cognitive presence in her course. The instructor interview (see Appendix E) questionnaire was developed by the researcher based on experience as an instructional developer and contains questions that are designed to provide a deeper understanding and divulge explicit examples of what the instructor did that led to student success as they relate to social, teaching, and cognitive presence.

Data analysis. The researcher analyzed the instructor QOLT self-ratings survey and compared it to the QOLT student ratings feedback instrument and the results of the researcher's course evaluation. In order to effectively and accurately analyze the interview data, the interview was recorded and transcribed. The researcher hand-coded the transcripts and analyzed the data for each individual question. The end-of-course student evaluations were also explored for comments that aligned with social, teaching, and cognitive presence.

Chapter Summary

This two-phase research design effectively answered the research questions for this study. It was designed to gain an in-depth understanding of student and instructor perceptions of quality through the utilization of the QOLT student and instructor

instruments that is operationalized through the Community of Inquiry (CoI) framework. The QOLT instrument aligns with the Community of Inquiry (CoI) framework on the elements of social, teaching, and cognitive presence to measure students' perceptions of quality and overall experience in an online course. By implementing both qualitative and quantitative data collection, a deeper understanding of these perceptions provides a richness that will be valuable to instructors, instructional developers, administrators, and future students.

CHAPTER FOUR: FINDINGS

The purpose of this study was to examine how students perceived quality in online courses. It utilized the Community of Inquiry framework (COI) and conceptualized it for the first time through the Quality Online Learning and Teaching (QOLT) instruments administered to both students and to an instructor. The study specifically investigated how the concept of quality pertains to the COI framework incorporating all three elements of social, teaching, and cognitive presence in online courses in a 4-year higher education setting, how each of these presences relate to the quality of instruction, and student satisfaction with the course. The overarching research question for this study was: What do students perceive as quality in online courses?

Three sub-questions guided this inquiry:

1. How do social presence, teaching presence, and cognitive presence relate to students' perceptions of the quality of instruction in an online course?
2. How do students' demographic characteristics (e.g., gender, race/ethnicity, age, and socioeconomic status) and educational experience (e.g., prior online course experience, GPA) shape their perception of quality in online courses?
3. How can the Community of Inquiry framework inform the development of a quality online course?

Research Question 1

Perceptions of Students

The first research question asked: “How do social presence, teaching presence, and cognitive presence relate to students' perceptions of the quality of instruction in an online course?”

To answer this question, students were asked to rate their level of agreement with each of the 52 objectives in nine categories of the Quality Online Learning and Teaching (QOLT) student-rating instrument by answering with Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. They also had the option of choosing N/A or no opinion. Independent-sample t-test analysis was conducted to determine if there was a statistically significant difference for each of the individual QOLT objectives, the combined objectives in the nine sections of the QOLT instrument, the QOLT objectives that align with social, teaching, and cognitive presences, the social, teaching, and cognitive presences aligned with the core 24 QOLT objectives that have been identified as being in a quality course, and the original 22 core objectives (later becoming core 24) of the QOLT instrument. These dependent variables were analyzed using the following independent variables: gender, ethnicity, age, socioeconomic status, and GPA. The quantitative data were analyzed using SPSS and Intelluctus Statistics. Means for each objective that were 4.0 and higher were deemed to be high quality, means that were 3.0-3.9 were deemed quality, and means that were below 3.0 were deemed to need further review and recommendations. Courses that met all original 22 of the revised 24 core QOLT objectives with a 4.0 or higher mean were considered to be a high quality course.

Social Presence

Social presence is the extent to which students feel socially and emotionally connected with others in the course. Through the design of the course, the students should have many opportunities to engage with their peers. Social presence had a mean and standard deviation of 4.20 (.79). There are six objectives in the Quality Online Learning and Teaching (QOLT) instrument that align with social presence. Table 3 shows the means and standard deviation for each of the QOLT objectives that align with social presence. Students largely felt that the social presence in these online courses was high quality. The two QOLT objectives that had means lower than 4.0 were objectives 4.1 and 4.4. Both of these objectives are part of the 24 core objectives and should be clearly incorporated into an online course. Objective 4.1 is about giving students a sense of belonging through getting to know other participants. The mean of 3.83 (SD=1.13) indicates that students felt it reflected quality in the course. Objective 4.4 is about learning activities and encouraging students to interact with people frequently. The mean of 3.99 (SD=1.18) indicates that students felt it reflected quality in the course.

Table 3. Calculated Means and Standard Deviation for Social Presence aligned with Quality Online Learning and Teaching (QOLT) Objectives

Community of Inquiry Framework	QOLT objectives	Mean	SD
Social Presence The extent to which students feel socially and emotionally connected with others in the course.	1.4 The rules regarding emails, how to conduct online discussions, and other communication strategies were clear to me.	4.56	.74
	*4.1 At the beginning of the course, getting to know other course participants gave me a sense of belonging in the class.	3.83	1.13
	*4.4 The learning activities (e.g., discussions) encouraged me to log on and interact with people frequently.	3.99	1.18
	4.7: The instructor's role in class participation was clear to me.	4.61	.75
	5.3 The instructor encouraged me to participate in meaningful dialogues.	4.186	1.28
	*6.2 The course tools and media engaged me and encouraged me to interact with others in the course.	4.11	1.28

Note: Objectives marked with a * are part of the 24 core objectives that should be included in a quality course.

There are many techniques that can be used to build social presence in an online course. In the first week of class, the students usually have a forum or activity to introduce themselves by stating their major, what they hope to do with their degree and perhaps something interesting about themselves, or something that makes them happy. They respond to two peers and their responses often lead to deeper connections, just as they would in the classroom. Most courses have the students participate in several discussion forums in groups of 8-10 so they can learn from each other through their shared experiences and viewpoints. One instructor requires the students to cite their

sources in their responses and respond to their peers citing resources in their response. Almost all of the courses have a “course questions” forum where they are encouraged to post questions and respond to their peers if they know the answer. An “interesting stuff” forum is where students can post videos, news stories, or other resources that connect with what they are learning that week.

Student comments were mixed on how they felt about the discussion forums in the course. A few students felt that they were not very helpful. Student 20 expressed that “Because this is a general ed class, I really wouldn't have cared if I didn't interact with other students. Our backgrounds would be too different.” and Student 67 felt that “It's difficult to get to know someone through the discussion board. It doesn't help that when people respond to someone it only says Re:(general topic) so you really can't follow a conversation. I always made sure to address the person that I was making a comment to.”

Other students felt that the forums were beneficial to their learning. Student 80 summed up how others felt by saying, “Online courses can sometimes provide a level of comfort for students who would otherwise not say anything if they were in a classroom setting. The discussions that we have to participate in foster an environment that gives every student that security that they will not be ridiculed for their response, and they are free to state their opinion. A lot of students who attend classes face to face can be shy or timid and no (sic) willing to share their experiences because they don't like to talk in front of other people.”

Teaching Presence

Teaching presence is the design of the course before students get access and the instructor's involvement in facilitating the course throughout the semester. During the course, students are guided through course materials, explore key concepts, and are encouraged to engage with their peers by instructors who facilitate discussions and the learning process. Teaching presence begins during the instructional design process and concludes when the course has completed. Teaching presence had the highest mean and standard deviation of 4.42 (SD=.59) of any of the presences. The Quality Online Learning and Teaching (QOLT) instrument has 33 objectives that align with teaching presence. Students commonly felt that the teaching presence in these online courses was evident and rated them as being high quality.

The four QOLT objectives that had means lower than 4.0 were 1.7, 5.1, 7.3, and 9.2. Objective 1.7 is about providing examples of student work and asking questions with a mean of 3.85 (SD=1.37). There was little evidence in the courses that instructors provided examples of prior student work. In the absence of rubrics, examples of prior student submissions helps students understand expectations. Objective 5.1 is about instructors identifying areas of agreement and disagreement among students on course topics that help them learn. Student feedback rated this objective with a mean of 3.83 (SD=1.40) that indicates that students felt it reflected quality in the course. Objective 7.3 is about how to get student support information such as career center, financial aid, and student health services with a mean of 3.70 (SD=1.52). This information is not usually found in an online course and instead is found on the university website. Objective 9.2 is about students getting feedback on their overall course experience with a mean of 3.84

(SD=1.47). Students' feedback on their overall experience is usually the final letter grade they receive for the course. The students rated these four QOLT objectives with means over 3.5 that indicate students found them to be quality components of the course.

Table 4. Calculated Means and Standard Deviation for Teaching Presence aligned with Quality Online Learning and Teaching (QOLT) Objectives

Community of Inquiry Framework	QOLT objectives	Mean	SD
Teaching Presence The design of the course and the instructor's involvement in facilitating the course.	*1.1 How to get started in the course and find the course schedule, calendar, and syllabus were clear to me.	4.66	.65
	*1.2 The purpose and format of the course and the prerequisite knowledge and skills were clear to me.	4.64	.61
	1.3 After viewing the course website, I knew who the instructor was, when he or she was available, and how to contact him or her.	4.74	.57
	1.7 I had the opportunity to see samples of student work/assignments and to ask questions.	3.85	1.37
	1.8 I had the opportunity to share my own learning goals and why I took the course.	4.27	1.17
	*2.1 What I was supposed to accomplish each week and by the end of the course was clear to me.	4.66	.62
	*2.2 How assignments were graded and points were distributed was clear to me.	4.50	.79
	*2.3 How the learning activities (including the assignments and ungraded activities) helped me achieve the learning goals each week made sense to me.	4.48	.81

Table 4. Calculated Means and Standard Deviation for Teaching Presence aligned with Quality Online Learning and Teaching (QOLT) Objectives (continued)

Community of Inquiry Framework	QOLT objectives	Mean	SD
	2.4 The different types of assignments (papers, exams, projects) were related to each other and helped me learn the topics.	4.59	.78
	*2.5 I had multiple opportunities to receive feedback from the instructor and self-check my progress in the course.	4.46	.97
	*3.1 The instructor gave me adequate time and notice to acquire course materials.	4.62	.77
	3.2 It was clear to me which textbooks and materials were required and which were recommended.	4.67	.73
	3.3 I understood how all the materials were related to helping me achieve the learning goals.	4.61	.69
	3.4 The instructor gave me options to use free course materials such as websites and other Open Educational Resources.	4.08	1.43
	*3.5 The instructor provided materials that included more than text and that came from multiple authors/scholars.	4.60	.87
	3.6 The sources of all resources and materials used in the course were clear to me.	4.61	.66
	4.2 The information about how to be successful in the course was helpful.	4.43	.99
	*4.3 It was easy to navigate the online components of the course.	4.60	.63

Table 4. Calculated Means and Standard Deviation for Teaching Presence aligned with Quality Online Learning and Teaching (QOLT) Objectives (continued)

Community of Inquiry Framework	QOLT objectives	Mean	SD
	4.5 The online and other resources encouraged me to interact with the course materials frequently.	4.29	.92
	4.6 I understood how to participate in various learning activities such as reading and completing assignments, and the requirements were clear to me.	4.50	.92
	5.1 The instructor helped identify areas of agreement and disagreement among students on course topics that helped me learn.	3.83	1.39
	5.2 The instructor helped guide the class toward understanding course topics in a way that helped me think more clearly and carefully.	4.45	.90
	5.5 The instructor helped me focus discussions on relevant issues.	4.41	1.05
	*5.6 The instructor provided me with feedback in a timely fashion.	4.38	1.11
	5.7 I received frequent communications, such as announcements and emails, from the instructor.	4.45	.95
	*5.8 The instructor's communications about things like due dates and assignment instructions helped keep me on task.	4.49	1.02
	6.1 The tools (e.g., chat, Live Classroom, and discussion forums) and media (e.g., videos) used in the course helped me learn.	4.39	1.00
	*6.4 Information about access to the technologies required in the course was clear to me.	4.54	.77

Table 4. Calculated Means and Standard Deviation for Teaching Presence aligned with Quality Online Learning and Teaching (QOLT) Objectives (continued)

Community of Inquiry Framework	QOLT objectives	Mean	SD
	6.5 I clearly understood the acceptable formats for assignments and how to submit them.	4.56	.69
	*7.1 The instructions and/or information for how to get TECHNICAL support (e.g., from the IT helpdesk, Moodle, Blackboard, or Desire2Learn) were clear to me.	4.05	1.30
	*7.2 The instructions and/or information for how to get ACADEMIC support (services and resources such as the library, writing center, and tutoring services) were clear to me.	4.30	1.03
	7.3 The instructions and/or information for how to get STUDENT support (services and resources such as registration, career center, financial aid, and student health center) were clear to me.	3.69	1.52
	9.2 During the last week or on the last day of class, I was given an opportunity to GET FEEDBACK about my overall course experience	3.84	1.47

Note: Objectives marked with a * are part of the 24 core objectives that should be included in a quality course.

The instructors of the courses reviewed in this study developed the courses with a student-centered focus. The material is organized into weekly modules with clear labels on what topics they will learn each week. Each module starts with an introduction of the material students will read and the question prompt for the discussion so the students clearly understand the expectations for the week. One instructor includes information about why she selected the readings for that week so they know that it has not been assigned for the sake of having them read something. Most instructors know that some

students do not like posting to discussion forums because they think they are a time waster. Another instructor encourages them by letting them know that she reads each and every word they write and that it helps her to stay focused on their needs and where their understanding of the material lies.

Important information that is consistent throughout the course is located at the top of the course so students can easily refer to it throughout the semester. In this section is a News Forum where the instructor sends out timely information, the course syllabus, a “course questions” forum where students post questions and answer their peers (or share something they found relating to the topic that week), and any extra credit opportunities.

Several students commented about the teaching presence of the instructor. Student 76 shared, “I really enjoyed this online course, I felt that the instructor was very involved and helpful throughout the entire semester. I would definitely recommend this course to others because I felt I learned a lot from the instructor as well as the readings assigned.” Student 56 commented, “I feel that I was lucky with the professor that I had because she was very available and excellent at explaining assignments, but if the teacher is not accessible and flexible with the students, online courses would be difficult.” Finally, Student 80 appreciated all of the feedback from the instructor. She wrote, “She has provided feedback for all of my assignments, which tells me that she actually takes the time to grade all the hard work that I have put into my assignments. They aren't just one line responses that say “nice job,” but are actually paragraphs or two of what she actually thought. She also always used my name in her responses, and it didn't just seem like a blanket response.”

Cognitive Presence

Cognitive presence is the student's ability to develop a good understanding of course content and build knowledge through interaction and reflection. The Quality Online Learning and Teaching (QOLT) instrument has six objectives that align with cognitive presence. The mean for cognitive presence is 4.16 (SD=.89). Table 5 shows the means and standard deviation for each of the individual QOLT objectives that align with cognitive presence. Students generally felt that the cognitive presence in these online courses reflected high quality.

The two QOLT objectives that had means lower than 4.0 were objectives 9.1 and 9.3. Objective 9.1 is about the opportunity to ask questions at the end of the course as a way to gain closure and insight into the student's course accomplishments with a mean of 3.62 (SD=1.66). Objective 9.3 is about students being given the opportunity to reflect on their overall learning experience and has a mean 3.97 (SD=1.49). The students rated these two QOLT objectives with means over 3.5 that indicate students found them to be quality components of the course.

Table 5. Descriptive Statistics for Cognitive Presence aligned with Quality Online Learning and Teaching (QOLT) Objectives

Community of Inquiry Framework	QOLT objectives	Mean	SD
Cognitive Presence The student's ability to develop a good understanding of course content through reflection.	2.6 I had multiple opportunities to provide feedback to the instructor about my learning progress.	4.13	1.26
	*4.8 The learning activities helped me understand fundamental concepts and apply skills that are useful outside of the classroom.	4.55	.76
	5.4 The instructor encouraged me to explore new concepts in the course.	4.47	.90
	6.3 The course tools and media encouraged me to become an active learner and to interact with the course content.	4.43	.90
	9.1 During the last week or on the last day of class, I was given an opportunity to ASK QUESTIONS as a way to gain closure and insight into my course accomplishments.	3.62	1.66
	9.3 I was given an opportunity to REFLECT on my overall learning experience in the course.	3.97	1.49

Note: Objectives marked with a * are part of the 24 core objectives that should be included in a quality course.

The instructors provide a myriad of resources including instructor created microlectures (sometimes written and sometimes spoken), journal articles, National Public Radio (NPR), YouTube videos, news articles, and various online resources. These resources aim to spark the curiosity in students and encourage them to want to explore the topics and concepts through dialogue and reflection. The students participated in weekly discussions incorporating and citing their sources from the course content provided when answering the prompt and when replying to their peers. They were encouraged to write “substantive but succinct” for their initial prompts and then “come

back in several times during the week to post again with additional insights and reflections upon other posts and the material.” This direction encouraged them to “try to think of ways to contribute that are connected to the material, but that are also broad enough that many people can engage with you.” One instructor utilizes this process so the students can get a deeper understanding of the course content and how it applies in different situations.

Student comments on the content of the course and connections made were mixed. When providing feedback about QOLT Section 9: Course Summary and Wrap-up, Student 9 commented, “I have experienced all these things [feedback opportunities] with other online courses. It is this class in particular that I didn't experience these things.” and Student 95 said, “The course didn't really use much of the newer technology which was both good and bad.” Many other students felt that the instructors did a good job with providing resources and helping making connections through various assignments. Student 74 said, “I loved all of the supplemental reading and videos, rather than using a bulky textbook. The readings offered real life examples.” and student 98 responded, “Professor Ray made the online class experience one that I'll never forget. It was enjoyable and allowed me to learn a great deal of information all while tending to long work hours.” Finally, Student 63 related, “This professor was really consistent, she had weekly replies/news/updates. I was able to reflect on my overall experience as well get quick feedback from her.”

Research Question 2

The second research question asked, “How do students’ demographic characteristics (e.g., gender, race/ethnicity, age, and socioeconomic status) and educational experience (e.g., prior online course experience and GPA) shape their perception of quality in online courses?”

Independent-sample t-test analysis was conducted to determine if there was a statistically significant difference for each of the individual QOLT objectives, the combined objectives in the 9 sections of the QOLT instrument, the QOLT objectives that align with social, teaching, and cognitive presences, the social, teaching, and cognitive presences aligned with the original core 22 of the core 24 QOLT objectives that have been identified as being in a quality course, and the original 22 core objectives (later becoming core 24) of the QOLT instrument and the demographic variables. The demographic variables of gender, race/ethnicity, age, socioeconomic status, previous online experience, and GPA were confounding variables that could be factors that influence the student rating on each of the 52 QOLT objectives.

Prior to the analysis, the assumption of normality was assessed. A Shapiro-Wilk test was conducted to determine whether the values of the computed variables: QOLT Sections 1-9, the QOLT objectives that align with social presence, teaching presence, and cognitive presence, the social, teaching, and cognitive presences aligned with the original 22 core objectives of the core 24 QOLT objectives that have been identified as being in a quality course, and the original 22 core objectives (later becoming core 24) of the QOLT instrument could have been produced by a normal distribution. With the exception of a few variables, the results of the Shapiro-Wilk test were significant for these variables.

This suggests that the values are unlikely to have been produced by a normal distribution, thus normality cannot be assumed. However, the mean of any random variable will be approximately normally distributed as sample size increases according to the Central Limit Theorem (CLT). Therefore, with a sufficiently large sample size ($n > 100$), deviations from normality will have little effect on the results. The results of the independent samples *t*-test that were significant are discussed below. The significance has been measured at .05. All other results found the independent samples *t*-test were not significantly different.

Gender

The results of the independent samples *t*-test were not significant, suggesting that the means for QOLT Sections 1-9, the QOLT objectives that align with social presence, teaching presence, and cognitive presence, the social, teaching, and cognitive presences aligned with the original 22 core objectives of the core 24 QOLT objectives that have been identified as being in a quality course, and the original 22 core objectives (later becoming core 24) of the QOLT instrument were not statistically significantly different between males and females. All of the means were above 4.0 with the exception of Section 7: Learner Support and Resources, Section 8: Accessibility and Universal Design, and Section 9: Course Summary and Wrap-up (see Appendix B).

Table 6. Quality Online Learning and Teaching (QOLT) Variables with Means Below 4.0
Based on Gender

Variable	Female		Male		Significance
QOLT section	Mean	SD	Mean	SD	p
Section 7	3.96	1.12	4.20	0.94	.29
Section 8	3.60	0.78	3.76	1.06	.48
Section 9	3.84	1.31	3.68	1.39	.60

Race/Ethnicity

Underrepresented minority (URM) students were defined as Hispanic/Latino, Black/African-American, Two or More Ethnicities/Races, and Native Hawaiian/Other Pacific Islander. Non-URM students were defined as white or Asian. The results of the independent samples *t*-test were not significant, suggesting that the means for QOLT Sections 1-9, the QOLT objectives that align with social presence, teaching presence, and cognitive presence, the social, teaching, and cognitive presences aligned with the original 22 core objectives of the core 24 QOLT objectives that have been identified as being in a quality course, and the original 22 core objectives (later becoming core 24) of the QOLT instrument were not statistically significantly different between URM and non-URM students. All of the means were above 4.0 with the exception of Section 7: Learner Support and Resources, Section 8: Accessibility and Universal Design, and Section 9: Course Summary and Wrap-up (see Appendix B).

Table 7. Quality Online Learning and Teaching (QOLT) Variables with Means Below 4.0
Based on Race/Ethnicity Combined Categorical Variables Non-URM and URM

QOLT Section	Race/Ethnicity	Mean	SD	p
Section 7	Non-URM	4.04	1.11	0.81
	URM	3.99	1.05	0.81
Section 8	Non-URM	3.77	0.89	0.06
	URM	3.48	0.79	0.06
Section 9	Non-URM	3.83	1.33	0.88
	URM	3.79	1.33	0.88

Age

The results of the independent samples *t*-test were statistically significant, $t(86.14) = -1.99$, $p = .050$, suggesting that the mean of QOLT Section 2: Assessment of Student Learning was significantly different between the < 23 and 23+ categories of Age. The mean of Section 2 in the Age category of Age < 23 was significantly lower than the mean of Section 2 in the 23+ category.

The results of the independent samples *t*-test were statistically significant, $t(85.14) = -2.11$, $p = .038$, suggesting that the mean of QOLT Section 3: Instructional Materials and Resources Utilized were significantly different between the < 23 and 23+ categories of Age. The mean of Section 3 in the < 23 category of Age was significantly lower than the mean of Section 3 in the 23+ category.

Table 8. Independent Samples T-test for difference between students <23 and 23+

variable	<23		23+		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
QOLT Section 2	4.32	.73	4.58	.57	.050*
QOLT Section 3	4.39	.68	4.64	.53	.038*

Socioeconomic Status (SES)

Socioeconomic status (SES) in this study is defined as being Pell-grant eligible or not. This purposeful designation was selected to differentiate students that are eligible for Pell-grants versus students who are able to qualify for student loans. There was no significant difference for most of the variables with the exception of QOLT Section 7: Learner Support and Resources and the six QOLT objectives that align with social presence.

The results of the independent samples *t*-test were significant, $t(80.81) = -2.00$, $p = .049$, suggesting that the mean of QOLT Section 7 was significantly different between the No, not eligible and Yes, eligible categories of Pell-eligible. The mean of QOLT Section 7 in the No category was significantly lower than the mean of QOLT Section 7 in the Yes category.

The results of the independent samples *t*-test were significant, $t(75.88) = -2.04$, $p = .045$, suggesting that the mean of Social Presence was significantly different between the No, not eligible and Yes, eligible categories of Pell-eligible. The mean of Social Presence in the No was significantly lower than the mean of Social Presence in the Yes category.

Table 9. Independent Samples T-test for Socioeconomic Status based on Pell Eligibility and Social Presence and Quality Online Learning and Teaching (QOLT) 7 Variables

Variable	<i>Pell-eligible</i>		<i>Not Pell-eligible</i>		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social presence	4.34	.58	4.02	.98	.045*
QOLT Section 7	4.20	.85	3.78	1.29	.049*

Previous Online Experience

Research site institution experience. Students were asked if they had previously taken an online course at this institution. Nearly 70% (n=79) of the students had taken an online course at this institution. The only variables with significant differences were QOLT Section 8: Accessibility and Universal Design, QOLT Section 9: Course Summary and Wrap-up, and the six QOLT objectives that align with cognitive presence. Students who had taken an online course at this institution ranked these variables higher than students who had not taken an online course at this institution. These sections all have means over 3.0 that indicate that students rate these sections as quality.

The results of the independent samples *t*-test were significant, $t(74.57) = -2.11$, $p = .038$, suggesting that the mean of QOLT Section 8 was significantly different between the Yes and No categories of “Is this your first online course at CSU San Marcos?” The mean of QOLT Section 8 in the Yes was significantly lower than the mean of Section 8 in the No category.

The results of the independent samples *t*-test were significant, $t(63.27) = -2.24$, $p = .029$, suggesting that the mean of QOLT Section 9 was significantly different between

the Yes and No categories of “Is this your first online course at CSU San Marcos?” The mean of QOLT Section 9 in the Yes category was significantly lower than the mean of Section 9 in the No category.

The results of the independent samples *t*-test were significant, $t(59.77) = -2.39$, $p = .020$, suggesting that the mean of Cognitive Presence was significantly different between the Yes and No categories of “Is this your first online course at CSU San Marcos?” The mean of Cognitive Presence in the Yes category was significantly lower than the mean of Cognitive Presence in the No category.

Table 10. Independent Samples T-tests for Previous Online Experience at this Institution and Quality Online Learning and Teaching (QOLT) and Cognitive Presence with Means less than 4.0

QOLT objective	First Online at this institution	Mean	SD	p
Section 8	Yes	3.40	0.74	0.05
	No	3.74	0.88	0.04*
Section 9	Yes	3.39	1.29	0.03
	No	3.98	1.31	0.03*
Cognitive presence	Yes	3.85	0.91	0.02
	No	4.29	0.86	0.02*

Other institution experience. Students were asked if they had previously taken an online course at another institution. They were not asked if it was a community college or 4-year institution. About 72% (n=81) of the students had taken an online course at another institution. The results of the independent samples *t*-test were not

significant, suggesting that the means for QOLT Sections 1-9, the QOLT objectives that align with social presence, teaching presence, and cognitive presence, the social, teaching, and cognitive presences aligned with the original 22 core objectives of the core 24 QOLT objectives that have been identified as being in a quality course, and the original 22 core objectives (later becoming core 24) of the QOLT instrument were not significantly different between the students that had previously taken an online course at another institution and students that have not taken an online course at another institution.

The means for all variables were over 4.0 with the exception of QOLT Section 7: Learner Support and Resources, QOLT Section 8: Accessibility and Universal Design, and QOLT Section 9: Course Summary and Wrap-up. Students who did not take an online course at another institution ranked these variables higher than students who had. These sections all have means over 3.5, which indicate that students rate these sections as quality.

Table 11. Independent Samples T-tests for Previous Online Experience at another Institution and Quality Online Learning and Teaching (QOLT) Variables with Means less than 4.0

Variable	Online Other Institute	Mean	SD	p
Section 7	Yes	3.98	1.17	0.63
	No	4.09	0.83	0.57
Section 8	Yes	3.61	0.88	0.59
	No	3.71	0.80	0.58
Section 9	Yes	3.75	1.43	0.48
	No	3.95	1.00	0.42

GPA

To conduct t-tests, the GPA of each student was computed into GPA < 3 and GPA >3. There was one student that did not provide a student ID number so her GPA was not provided. There were 112 students that provided information so their GPA information could be provided. Of the 112 students, 33% (n=37) had a GPA less than 3.0 while 66% (N=75) had a GPA greater than 3.0. The results of the independent samples t-test were not significant, suggesting that the means for QOLT Sections 1-9, the QOLT objectives that align with social presence, teaching presence, and cognitive presence, the social, teaching, and cognitive presences aligned with the original 22 core objectives of the core 24 QOLT objectives that have been identified as being in a quality course, and the original 22 core objectives (later becoming core 24) of the QOLT instrument were not significantly different between the students that had a GPA < 3.0 and students that have a GPA > 3.0.

The means for all variables were over 4 with the exception of QOLT Section 8: Accessibility and Universal Design, and QOLT Section 9: Course Summary and Wrap-up. These sections all have means over 3.5, which indicate that students rate these sections as quality.

Table 12. Independent Samples T-tests by GPA < 3.0 and > 3.0 and Quality Online Learning and Teaching (QOLT) Variables with Means less than 4.0

QOLT objective	GPA	Mean	SD	p
Section 8	< 3.0	3.71	0.86	0.55
	> 3.0	3.61	0.86	0.55
Section 9	< 3.0	3.93	1.21	0.62
	> 3.0	3.80	1.32	0.61

Recommend the Course

The results of the independent samples *t*-test were not significant, suggesting that the means for QOLT Sections 1-9, the QOLT objectives that align with social presence, teaching presence, and cognitive presence, the social, teaching, and cognitive presences aligned with the original 22 core objectives of the core 24 QOLT objectives that have been identified as being in a quality course, and the original 22 core objectives (later becoming core 24) of the QOLT instrument were not significantly different between the Yes and No categories of “Would you recommend this course to a friend?” Overall, 95% of the students would recommend the course to a friend. This is important given that many online courses have high rates of attrition.

The means for all variables were over 4 with the exception of QOLT Section 5: Facilitation and Instruction, QOLT Section 7: Learner Support and Resources, QOLT Section 8: Accessibility and Universal Design, QOLT Section 9: Course Summary and Wrap-up, social presence, and cognitive presence.

Table 13. Independent Samples T-tests by Recommending Course to a Friend and Quality Online Learning and Teaching (QOLT) Variables and Presence with Means less than 4.0

Variable	Recommend	Mean	SD	p
QOLT Section 5	Yes	4.37	0.80	0.02
	No	3.48	1.35	0.21
QOLT Section 7	Yes	4.05	1.03	0.15
	No	3.33	1.99	0.47
QOLT Section 8	Yes	3.64	0.82	0.98
	No	3.65	1.59	0.99
QOLT Section 9	Yes	3.85	1.28	0.10
	No	2.87	1.95	0.32
Social presence	Yes	4.22	0.79	0.18
	No	3.73	0.78	0.24
Cognitive presence	Yes	4.20	0.85	0.01
	No	3.20	1.33	0.17

Research Question 3

Perceptions of Instructor

The third research question asked: “How can the Community of Inquiry framework inform the development of a quality online course?”

Instructor Background

When Megan attended a workshop on how to teach online she did not set out to learn “what this online thing was” and was not planning on developing an online course. She was apprehensive about teaching fully online and thought she would learn some new tools to use to enhance her face-to-face course. She was concerned about course quality online and wanted to make sure students did not drop the course because it was online. Ensuring the course was as rigorous and as engaging as her face-to-face course were other important aspects. Although she was initially reluctant to develop an online course, her mind was changed when she saw the many advantages for both her and the students, the support she would receive while developing and teaching the course, the opportunities and flexibility that would be opened for her students, and the chance to add another method of teaching to her repertoire.

She was reassured that the course would be developed to be as close to the face-to-face course as possible by using the QOLT instrument as a roadmap and putting an emphasis on a student-centered course that incorporated all of the elements of the Community of Inquiry framework. Each decision on her journey was guided by reflecting on the aspects of social, teaching, and cognitive presence that would bring about deep and meaningful student engagement and learning. The CoI student-centered framework suggested that courses with optimal levels of social, teaching, and cognitive

presence would lead to a community of inquiry that provided students with the ability to construct knowledge through the online learning environment (Garrison, Anderson, & Archer, 2000). The course was designed to incorporate all three presences.

Data Analysis

An interview with an instructor, her completed QOLT instructor self-ratings instrument, the end of semester course evaluations, and a review of the course by the researcher provided the data that was analyzed to assess the extent of which the course included each of the Community of Inquiry framework elements of social, teaching, and cognitive presence as operationalized through and aligned with the 9 sections of the QOLT instrument. The results of the data are woven throughout the discussion of social, teaching, and cognitive presence.

Social Presence

Megan wanted the students to feel comfortable online and have the same experience as they would in a face-to-face course. When students enter a classroom there is usually some type of chitchat happening. Students will often use that time to ask questions about the course material or assignments. To mimic this interaction, the course has a “Course Questions? Begin here...” forum where students post questions and respond to their peers when they know the answer.

Research has shown that social presence is a critical component of student learning on an online course. Without interactions with other students, similar to interactions in a face-to-face course, students feel isolated. In a face-to-face course, student interaction happens naturally as students participate in discussion and build rapport throughout the semester. In the online course, Megan wanted to create this same

opportunity for interaction and purposefully selected different activities that would give the students the opportunity to interact with their peers. The instructor built a sense of community in the course from the beginning with the getting to know you activity. She has a “meet your colleagues” activity using the glossary tool of the learning management system. The students upload a photo of themselves or something they like, describe themselves in 6 words, give a URL that illustrates their favorite hobby, and then respond to one classmate with whom they have something in common and tell them what they have in common. The fun, and unexpected, element of this activity for Megan is how students will edit their post throughout the semester.

Other activities to collaborate and engage with each other to expand their knowledge and understanding include discussion forums and wiki assignments. One observation made by the instructor was that the forums often “allow students to be more open about sensitive topics than they were in the face-to-face environment”. Topics covered in this course include sexually transmitted diseases, female mutilation, teen sexting, using technology to reach teens about sexual health, prenatal care and poverty, and contraception.

The instructor pointed out that in course discussions, students “evolve with those, and they come up with very insightful comments about a very controversial topic.” When asked about highlights of the course, one student commented, “A highlight would be to be able to learn about topics that one does not discuss normally. The fact that this discussion can be done online eases the tension and awkwardness that such discussion might produce.”

Students had a lot to say about the different activities and assessments in the course. They felt the instructor used the appropriate tools and were able to demonstrate learning through several different assessment types. One student commented, “The interactive activities are perfect for keeping the class interesting and I cant (sic) think of anything I would change about this class.” Another student found the glossary assignment helpful and reflected that “One aspect of the course I did like was the glossary assignment of different related terms because it gave me insight on what terms meant because there was no textbook required for this course.” Many students do not like group activities but one student mentioned, “The group projects that forced us to work with multiple people was an excellent assignment.”

The students had a mix of feedback about the wiki assignment. Some students struggled to understand how to use the new technology, while others provided feedback on working in groups with the wiki. One student commented “the Wiki's weren't the easiest thing to complete, the professor did an OUTSTANDING job making sure we were all on the same page” and another provided feedback about the size of the groups saying “The WIKI projects with 10 people were more difficult. It was hard to interact and hear back from everyone who was apart of my group. Maybe making a bit smaller groups would be more effective.”

Teaching Presence

Teaching presence pulls together social and cognitive presence through the course design, facilitation of online discourse, and direct instruction (Garrison, Anderson and Archer, 2000). How well the instructor designs and facilitates the course has an effect on student learning and engagement. Megan developed the course using a course map to outline weekly student learning outcomes (SLOs), took an inventory of what she had and what she needed, and aligned assignments with the student learning outcomes (SLOs).

The course overview and introduction to the course addresses how well she described the course and introduced students to the course protocol and expectations. If students do not know where to begin the course, they spend wasted time trying to figure it out. Best practices suggest that the course have a “start here” or “course introduction” section that clearly tells the student how to get started.

Megan included a welcome video message, course syllabus, a “questions about the course” forum, a week 1 course overview, a netiquette video and ground rules, tips for online students, example forum posts, and a course navigation video. The students have consistent navigation and each weekly module is segmented into what students should “Watch,” “Read,” and “Do”. This clarifies to students what they need to do in order to be successful without overwhelming them with a list of resources and activities.

One student commented that the course had a “very organized instructor.” During an interview with the instructor, she noted that even though she taught two simultaneous sections of the course with 100 students in each section, she was able to “facilitate the course in part because of the structure and completeness of the course when it starts”. The weekly overviews set the tone for the week and helped reduce questions from

students. As one student said, “The way that the professor introduced topics was very organized and helped me organize my thoughts and the way I studied.”

Everyone has different preferred methods of learning referred to as learning styles. These are “the different ways learners use to perceive, process and conceptualise information” (Zacharis, 2011). As a result, material presented in a variety of formats is a benefit for all students. There are many methods available to measure learning styles which can be affected by age, culture, education, and gender. One popular method is the VARK questionnaire developed by Flemming and Mills (1992) that described four sensory modes: Visual (V), Auditory (A), Reading/Writing (R), and Kinesthetic (K).

Table 14. Examples of Visual, Auditory, Reading/Writing, and Kinesthetic Learning Styles

Learning Style	Definition	Example
Visual	understand when it is seen	different formats, space, graphs, charts, diagrams, maps and plans
Auditory	understand when it is heard	discussion, stories, recordings, guest speakers, lecture
Reading/Writing	understand when it is written	lists, notes, text, typed written notes, reading, definitions
Kinesthetic	understand when felt or hands-on	senses, practical exercises, examples, cases, trial and error, role play

The instructor knew that students needed material in a variety of formats.

Material provided includes written overviews, micro-lectures with audio/video, websites with text/images, TED talks, 3D interactive simulations, and online crossword puzzles.

The instructor used a “myriad of resources” to help students understand what they were learning. She did not require a textbook, so students acquired a wide variety of information in different formats.

The different types of materials encouraged students to engage and interact with the material. Students applied that information in different assessments. In the course review, they commented on how they felt about the instructional materials utilized in the course. One student responded, “The readings are not overwhelming they get right to the point and hold your interest!” while another student said “I loved the weekly readings. All were up-to-date, relevant, and concise. And the supplementary websites/videos were interactive and interesting. Much better than a textbook.” Another student commented about all of the modes of materials writing, “Multiple sources for learning such as videos, lecture, and readings to get a better sense of the information.”

The instructor made it a point to provide timely feedback to the students. She let them know that they “would get feedback every Sunday on their assignments”. In addition, she was very present in the course through her microlectures. One student commented, “All lectures and materials were interesting, you were very engaged with us students and cared they (sic) we were enjoying your course.” Another commented, “Dr. S is a tough cookie, but I really appreciate her expectations and respect the feed back (sic) she always provided when I would reach out to her. Unlike many teachers, she held me accountable for the quality of my work”.

Cognitive Presence

Cognitive presence is the ability of students to “construct and confirm meaning through sustained reflection and discourse” (Garrison, Anderson, & Archer, 2001, 2004).

Megan provided this opportunity through discussion forums, wiki projects, and the final exam. She provided an opportunity for students to engage in dialogue through formal and informal discussion forums where they made connections with the course material and applied the information through their lived experiences and shared it with their peers. They incorporated and cited the course material in their conversation and replied to at least one peer. Student feedback about the forums varied. One student commented, “Having the forum posts and group discussions basically each week was very effective for my learning. I liked reading how other people perceived the information we were given.” Another student commented about the importance of online discussions by stating, “The forums we were required to participate in were helpful to learn the material and get interaction with others who were in the class. Having interaction with others helps an online class feel less intimidating, because I know I am not alone when I have an issue.”

The wiki projects required students to participate in groups. They collaborated in the gathering of resources and the creation of the wiki. Through this process they developed critical thinking and information literacy skills. The students became not only consumers of information but also producers of knowledge. They were able to make connections between what they knew and what they learned and then applied that knowledge to explain it to others.

For the final exam, students connected prior knowledge with research on a topic they selected that they want to know more about. The instructor “gets feedback and is provided something new” from the students. She gets to see them “take ownership of

their learning” and “identify something they are passionate about” which is “why we are here.”

Chapter Summary

Chapter 4 provided findings from two sets of data: 1) student responses to the Quality Online Learning and Teaching (QOLT) student ratings survey and end-of-course evaluations and 2) an instructor QOLT self-rating, an instructor interview, and course review by the researcher were collected to answer three research questions for this study.

The first data set consisted of demographic data about the students and data from the QOLT student ratings feedback instrument survey. Additional data was collected from end-of-course student evaluations. This combined data was used to answer research questions 1 and 2. Analysis of this data revealed there was not a statistically significant difference for the majority of the QOLT objectives. Students largely rated the courses as high quality. Statistically significant differences were found for QOLT Section 2: Assessment and Evaluation of Student Learning and QOLT Section 3: Instructional Materials and Resources Utilized of the QOLT student ratings instrument based on student age. Students over the age of 23 had higher means than students under the age of 23. Statistically significant differences were found for Social Presence and QOLT Section 7: Learner Support and Resources of the QOLT student ratings instrument. Students that are Pell-eligible had higher means than students that are not Pell-eligible. Statistically significant differences were found for QOLT Section 8: Accessibility and Universal Design and QOLT Section 9: Course Summary and Wrap-up of the QOLT student ratings instrument and cognitive presence based on prior online course experience

at this institution. Students that had taken an online course at this institution had higher means than students that have not taken online courses at this institution.

The second data set consisted of feedback provided by the instructor through the QOLT self-rating instrument, answers to seventeen interview questions and the review of the course by the researcher. This collective data was used to answer research question 3 and provided details about the course illustrating the instructor's integration and focus of social, teaching, and cognitive presence.

For the majority of the factors, there was not a statistically significant difference between demographic and educational experience and the influence of these variables on the perception of quality in online courses. Student socioeconomic status shaped the perception of quality in online courses related to social presence. Student experience with online courses at this institution shaped the perception of quality in online courses. Students that had taken online courses at this institution had a statistically significant relationship with quality in the online course relating to cognitive presence than students that had not taken an online course at this institution.

In the present study, students perceived that social, teaching, and cognitive presence were present in their online course. The student comments reflected the importance of these combined elements in their online course experience. The results indicate that students perceived these courses as quality courses.

CHAPTER FIVE: CONCLUSION

Introduction

The purpose of the present study was to examine perceptions of quality through the eyes of students and an instructor using the Community of Inquiry (CoI) framework utilizing all three elements of social presence, teaching presence, and cognitive presence and operationalized through the Quality Online Learning and Teaching (QOLT) instrument.

This chapter discusses findings of the study as they relate to the larger body of research regarding student and instructor perceptions of quality in online courses. The current study adds to the body of knowledge by describing how the three elements of presence: social presence, teaching presence, and cognitive presence together can be incorporated into an online course that is perceived as a quality course by students. There have been very few studies conducted that investigate the relationship between social, teaching, and cognitive presence in the same study. This study expands on the research using the Community of Inquiry framework and all three elements of presence. This ground breaking study also contributes to the body of knowledge on online course development by recommending the QOLT instrument as both a tool to develop online courses and as a course evaluation tool to review the delivery of an online course and revise it as needed as part of a continuous improvement plan by instructors.

Findings suggest that integrating all three elements of the Community of Inquiry (COI) framework: social presence, teaching presence, and cognitive presence have a positive effect on the perceptions of quality in online courses. The findings of this study

also suggest the QOLT instrument is a promising tool to be used in the development and review of online courses by instructors and students.

Effective course design using a student-centered model has an effect on the success of an online course (Mortagy & Boghikian-Whitby, 2010). Most of the instructors of the courses that were surveyed in Spring 2015 discussed how their courses have evolved into courses with a student-centered focus. There were a few instructors who did not know that professional development opportunities or instructional design support was available at the time they developed their online course. All of them agreed that it was important that faculty have the support they need to transition from teaching face-to-face to teaching online. Some of the instructors reflected that they felt frustrated with the pedagogical shift in teaching when they did not have the support they needed during the transition. It is important for faculty to know about current research practices in instructional design and know how to implement these best practices in course design and delivery so students are successful (McLawhon & Cutright, 2012). For many instructors, the valuable component of professional development is missing.

During professional development, faculty are provided advice and guidance on steps to develop an online course. There are many rubrics available to help them with this process. Chapter 2 discussed Chickering's Seven Principles of Good Practice, Sloan-C Five-Pillars of Quality, the Quality Matters (QM) Program, and the Quality Online Learning and Teaching (QOLT) instructor and student feedback instrument developed by the California State University System.

Discussion

The Community of Inquiry (CoI) framework recognizes the importance of social, teaching, and cognitive presence in an online course and the combined ability of these elements to “enhance or inhibit the quality of the educational experience and learning outcomes” (Garrison, D. R., Anderson, T., & Archer, W. (2000). The results of this study support the need to integrate all three elements in an online course. Courses that engage students through social interactions with their peers, have carefully selected course materials and meaningful connections with instructors and peers, and have opportunities for reflection and open dialogue with peers are courses that students perceive as quality courses.

For organizational purposes, the discussion is organized first by the elements of the Community of Inquiry (CoI) framework: social, teaching, and cognitive presence, followed by a discussion of the three research questions with conclusions.

Social Presence

Social presence is the extent to which students feel socially and emotionally connected with others in the course. The results of the student survey found students felt connected to their peers in the online courses at this institution and gave them a high quality rating. When students feel connected to their peers in a course they are more likely to stay enrolled in the course. There are a variety of methods that can be implemented to increase social presence. Examples from the instructors in this study include discussion forums, collaborative wiki projects, a question and answer forum, getting to know you activities, and contributing to a class glossary.

Common activities for interaction include discussion forums and group projects. Students in this study had mixed feelings about discussion forums with some feeling they were beneficial and others felt they were a waste of time. A key to successful discussion forums is having discussion prompts that encourage dialogue and conversation. Discussion forums provide all students an opportunity to participate in class discussions and expand knowledge through personal sharing and elaboration on topics (Hew & Cheung, 2013).

Group projects can be successful in online courses. Students found them to be challenging because of previous negative experiences and unproductive team members. Students have different work and life schedules that often cause difficulty in arranging time to get together to work on group projects. There are tools in the learning management system that can help students work projects asynchronously in addition to synchronous tools that would provide students opportunities to get together virtually. To help students be successful, instructors should set up group projects with clear roles and expectations. By allowing students to choose their roles within the group, they have a personal connection with the assignment and overall process of working in a group that leads to an increase of their engagement with, and responsibility for, completing the group project (Brindley, Walti, & Blaschke, 2009). When students do not have good group experiences they become frustrated and may disengage. The students in this study found group projects to be both challenging and enjoyable. Group projects can enable students to be critical thinkers, creative, and be more engaged with the course content and their peers.

Teaching Presence

Teaching presence is the design of the course and the instructor's involvement in facilitating the course. The highest number of objectives (33) of the QOLT instrument aligns with teaching presence. Students felt that the courses had high quality teaching presence and students were actively participating in the course. Several of the instructors provided a forum where students could ask questions about assignments. Most of the courses did not have examples of completed assignments from previous courses. One course reviewed provided an example of a forum and a group wiki. Providing examples helps the students to understand the expectations for the assignment. The examples also give them the opportunity to generate ideas for their assignment.

It is important for instructors to help students navigate areas of agreement and disagreement and have respectful dialogue to learn from each other. It is especially important in an online course where students do not get to see the facial expressions of their peers or hear the tone of their voice when people are speaking. The instructors in the courses that were part of the survey did not provide feedback to the students in the forum. Although the instructors read the discussions, they did not see areas where they needed to participate in the discussion. Many of them have netiquette policies in the syllabus about how to participate in forums. All of the instructors interviewed let students know that the discussion forums are for the students and that the instructors will not engage in the forums unless there is misinformation given in a response. Previous research found that too much participation by instructors in discussion forums can decrease student participation (Dennen, Darabi, & Smith, 2007).

Although career center, financial aid, and student health services information is not directly tied to student success of the course, it is tied to student success overall. The instructional developers at this institution have developed a student help page that includes this information. It is possible that the students rated it as average because they would not think to go to their course or to the learning management system to get this information. Since students often contact instructors for institutional information it is valuable to easily direct students to one location.

End of semester grades are generally the only overall feedback that students receive on their progress for the semester. As the number of students increases in online courses, it becomes more difficult to provide specific, detailed, and meaningful feedback to students about their overall learning experience. Timely and meaningful feedback for assignments would provide them a framework to reflect on their overall progress. Constructive feedback motivates students and encourages them to learn and master course content (Lee, Srinivasan, Trail, Lewis, & Lopez, 2011)

Cognitive Presence

Cognitive presence is the student's ability to develop a good understanding of course content and build knowledge through critical thinking, interaction and reflection. It is a process that takes time throughout the course. As the course comes to an end, students may have questions about what they learned or how they could take the knowledge to a deeper level. A general forum where students could post last minute questions benefits the students and the instructor. It could also be accomplished through an end of course survey asking students about their ah-ha moments and key takeaways from the course. One instructor commented that she had the students complete a final

exam on a topic that they choose that gives them the opportunity to gain deeper understanding of a topic. In the final exam, students often comment about how they like this option so they can explore a topic that really interests them that they can connect to and learn more about.

When students are given the opportunity to reflect on their overall learning experience it brings closure to the course and gives students the opportunity to reflect on how far they have come in their learning. They also have the ability to make connections with their prior experience and what they learned and make application.

The literature review revealed that a demographic profile of online students was becoming clearer. Previous research found that students in online courses were female, over the age of 25, and Caucasian ((Noel-Levitz, 2007; Aslanian & Clinefelter, 2012). The participants in this study are aligned with previous research in that the students were mostly female (75.2%), under 25 (66.4%), and caucasian (48.7%). This institution is majority female (61%), traditional aged students under 23 (68%), and Latino/a (41%).

Research Question 1

Students were satisfied with the online courses and rated them as being quality courses. The students felt connected to their peers through the various activities and interactions and rated social presence with a mean of 4.20. Teaching presence had the highest mean of 4.42. This was not surprising since teaching presence is the element that ties social presence and cognitive presence together for a complete learning experience (Shea & Bidjerano, 2009; Garrison, Cleveland-Innes, & Fung, 2010). There were four QOLT objectives that were rated less than 4 but are still viewed as quality components of teaching presence because they are higher than 3.0. The lowest rate item has a mean of

3.69 (1.518). This objective is about student support services. Most instructors do not provide information in their courses about financial aid, career center, and the student health center. This information is usually found on the university website. The learning management system does provide this information in a student help site as a one-stop-shop. The students appreciated the wide-variety of materials provided for the courses and felt those course materials helped them learn the concepts.

Cognitive presence was rated lowest with a 4.16 mean. Student reflection of the course experience is usually a missing component in both face-to-face and online courses. The lowest objective in this section is 9.1 is about the students ability to ask questions at the end of the semester as a way to gain closure and insight into their accomplishments during the semester. Being given the opportunity to reflect on how far they have come empowers students to take ownership of their learning.

Research Question 2

Independent samples t-tests were analyzed to determine if student demographic data and educational experience had an effect on their perception of quality in online courses. There was no statistically significant difference for gender, race/ethnicity, prior online experience at another institution, and GPA. There was a statistically significant difference for age, socioeconomic status, and prior online learning experience at this institution. Section 2 of the QOLT student feedback instrument is about student assessment of learning outcomes. Section 3 of the QOLT student feedback instrument is about instructional materials used in the course. Students that are over 23 rated these two objectives higher than students under 23.

Social presence and QOLT student feedback instrument section 7: learner support and resources had a significantly statistical difference by students that had a lower socioeconomic status, as determined by Pell eligibility. Pell-eligible students rated these two objectives higher than students that were not Pell-eligible. Students that had prior online learning experience at this institution rated QOLT sections 7 and 8, as well as cognitive presence, statistically higher than students that had not taken online courses at this institution.

Research Question 3

Although several instructors were interviewed for this study, one is the focus of this study. This instructor developed an online course after attending a professional development series on how to teach online. She has a Ph.D., had been teaching science courses face-to-face for ten years, and was looking for new methods of teaching to add to her repertoire. She quickly recognized that she wanted the students online to have the same experience, if not better, than the students in the face-to-face course. From the beginning she implemented social, teaching, and cognitive presence elements into her course.

This instructor wanted the students to have a sense of belonging from the beginning of the course throughout the course. She incorporated this element through a getting to know you activity, discussion forums where they were able to express their opinion and tie prior knowledge/experience with information they were learning, and through a couple of group projects. Being present as an instructor was equally important. She set aside every Sunday to grade student assignments so they could get quick feedback. She recognized that students learn through different senses and selected audio,

video, and text resources to teach students concepts and how to apply what they were learning. She also lets the students know that she is there for them (and present) by inviting them to join her for a cup of coffee for office hours through the chat function. Many students have enjoyed that and thought it was a fun way to engage with the instructor.

The online class instructor learned the importance of cognitive presence and helping students learn better through the application and reflection on course topics throughout the course. She had them discuss topics through discussion forums but also work together on wiki projects to learn how others were understanding and applying the information. In the final assignment, students selected and researched a topic they wanted to know more about. This led to a deeper exploration and critical thinking to explain to her what they had learned. For her, a quality online course is one that has all of the Community of Inquiry (CoI) elements of social, teaching, and cognitive presence. It is where students are able to finish the course and know that they went the extra mile to learn something that really interested them and she benefits by learning something new from the students.

When the instructor was asked, “What do you consider to be a quality online course?” she responded “When students take ownership of their learning, get fully engaged in the content and with their peers, and become passionate about a topic is when you know you have a quality course. There has never been a person who didn’t benefit, whose life was not enriched by the time they spent in college.” Students benefit by completing their degree, and the opportunity to take courses online helps them achieve that goal in an effective and efficient manner.

Limitations of the Study

There is a tremendous need for research to understand student perceptions of quality and satisfaction in online courses. There are certain limitations to this study. One of the limitations is the generalizability to other institutions. Although this study is not generalizable to other institutions, the results can inform instructional developers and instructors about the needs and perceptions of students in the course design and redesign process. The participants in this study were from one mid-sized institution, during one semester, and from 15 courses. The student survey was administered at the end of the semester with just a few weeks remaining in the term. The students selected to participate were a convenience sample from courses taught during the Spring 2015. From the 15 classes, a more in-depth interview was conducted with the instructor of one of the science classes.

The QOLT student ratings feedback instrument was distributed to all students in select online courses. There were no incentives to the students from the researcher to encourage them to complete the survey. However, some of the faculty who participated encouraged their students to complete the survey and provided extra credit to those students that completed the survey. It is unknown how truthful the students were when they completed the evaluation, there could be unreliable data collected, and some students did not complete the survey once they started it resulted in incomplete data collection that needed to be eliminated. The previous online experience of students could change from one semester to another and affect their ratings. Some instructors could have more experience teaching online than other instructors and the courses could be designed using best practices.

Surveys were sent to 869 undergraduate students. There were 113 surveys completed which is a 13% return rate. Students were emailed a link to take the survey. In addition, the instructors allowed the researcher to post a link to the survey in their courses. Email reminders were sent twice to the students over a two-week period.

Although 44 students agreed to participate in interviews, it was difficult to connect with any of the students once the semester ended. It was difficult to hear more of the student voice given that they were not available for interviews. Getting specific and detailed examples from them about what helped them be successful was a goal of the interviews. Since students were not available, an in-depth review of the course was conducted to elicit student feedback and participation in the course through various activities.

There are positionality concerns that may have affected the study. As a researcher practitioner, I must acknowledge my positionality in my current leadership role. I am a lead instructional developer that assists faculty in the design, development, implementation, and evaluation of online courses. I participate in the planning and teaching of a “How to Teach Online” professional development workshop series where faculty learn how to teach online. Not all instructors who teach online have taken our workshop series. However, many of them have contacted our Instructional Development Services team for assistance with the Moodle Learning Management System. I work closely with the instructors who gave permission for their students to participate in this study. The instructor that was interviewed did not have a perception of conflict or bias and felt comfortable with me interviewing her.

Implications of the Study

This study provided an opportunity to examine the perspectives of students and an instructor regarding the perceived quality in online courses. Students completed the nine section, 52 objective QOLT student feedback instrument with open-ended comments. The instructor reflected on her course through the self-rating process using the QOLT instructor self-rating instrument and through an interview with the researcher. Several peers reviewed the course using the QOLT non-award survey instrument, calibrated the results, and provided specific and meaningful feedback for continuous improvement with an emphasis on social, teaching, and cognitive presence.

This research contributes to the body of knowledge about the impact of student perceptions of quality through course design using the QOLT instrument as a guide with an emphasis on incorporating all of the Community of Inquiry framework elements of social presence, teaching presence, and cognitive presence. This study was important because it adds to the body of literature about online courses and suggests that the QOLT instrument and the Community of Inquiry framework are useful in course design and review. There have been over 2800 studies conducted using the Community of Inquiry (CoI) framework since 2000 (CoI, 2016). This is the first study to investigate all three elements of the CoI framework operationalized through the California State University system QOLT instrument. The results of the study have implications for practice and for policy. The findings have implications for students, instructors, instructional developers and administrators at community college and higher education institutions.

Implications for Practice

There are implications for educational leaders on multiple levels. As legislators push to give more access to students and for students to complete college students, the stress upon university administrators is high. Rushing to put a course online just for the sake of making it available to students is not good practice. Successful courses are courses that are well planned and implemented correctly with clear student learning outcomes and sound pedagogy. They also need to be developed by instructors that have strong pedagogical and technological support.

Faculty are concerned about the quality of the courses they teach. When the course is fully online, the level of concern increases. Without institutional support, faculty struggle with the process of developing an online course that is the same rigor and meets the same student learning outcomes as the face-to-face course. They feel dissatisfied with the process and become frustrated with the online modality (McLawhon & Cutright, 2012). It is imperative that faculty have the support from instructional developers to learn best practices for engaging students online, communicating expectations, and including course content in a variety of formats that challenge students to explore topics.

The student dynamics are different online than they are face-to-face. Best practice in an online course requires that the course is fully developed before the students have access to the course and that takes time. Faculty should have at least one semester to outline the course, locate resources, develop content, and have the course reviewed for completion. Once the course starts, the instructor becomes the facilitator of the course and guides the students through the content and assessments.

Universities need to provide training for instructors that are learning to teach in this new mode of instruction. Many of them have never taken an online course and do not know how to begin to transition their face-to-face course materials into this method of instruction. The instructors may use tools in the learning management system that they have not previously used. They may be using technology to engage students with the content differently than they do face-to-face. Group projects may need to be restructured so students in different time zones and work schedules can actively participate. The training should provide instructors with examples of how to incorporate social, teaching, and cognitive presence so students will stay engaged with the course and completes it. Instructors need to know that they have the full support of the university administration when teaching in this new format. Things are not always going to be perfect the first time the course is taught. They also need to know that they have the full support of instructional developers that are current in the latest trends of online teaching and learning. The instructional developers should support the instructors throughout the entire process from the design of the course until final grades have been submitted and feedback is reviewed for future course revisions.

Attrition rates are high in online courses. Although national studies investigating the attrition rates in online education have not been conducted (Angelino, Williams, & Natvig, 2007), individual studies have found higher dropout rates in online courses compared to face-to-face courses (Boston, Ice, & Gibson, 2011; Patterson & McFadden, 2009; Willging & Johnson, 2009). Many students struggle in online courses that do not have consistent structure, absentee instructors, little to any connection with their peers, and has limited types of instructional materials. They become frustrated when they do

not know what they are supposed to be doing, deadlines are not clear, and assignments appear to be busywork. Teaching presence, manifested through the instructor providing rich resources, being available and engaged throughout the semester, and providing timely and meaningful feedback is a catalyst to student success. Student 56 commented, “I feel that I was lucky with the professor that I had because she was very available and excellent at explaining assignments, but if the teacher is not accessible and flexible with the students, online courses would be difficult.”

The present research reinforces that the Community of Inquiry framework is a powerful tool that can be used to assess any mode of teaching and learning. There is an assumption that the face-to-face course is a quality course. The instructor teaching the course defines quality. The Quality Online Learning and Teaching instrument can be used to review face-to-face, hybrid, and online courses and provide feedback to instructors as part of the continuous improvement process. Listening to the voice of students further enhances this process. In addition, learning from the experiences of successful online instructors, new instructors to teaching online can develop online courses that meet high standards of quality. The instructors, the students, and the administrators will all be happy when students are successful in the course.

Implications for Policy

Results of this study have implications for policy. This institution has an online instruction policy where the university must provide training and support. However, faculty are not required to seek training and support. There are no mandatory guidelines for developing and delivering an online course. The courses are not reviewed by anyone before they are taught or after they are taught. Online courses are taught in a variety of

ways, just as face-to-face courses are taught in a variety of ways. Student evaluations are the same evaluations given in face-to-face courses. The feedback given in those evaluations is limited. Courses need more specific and detailed evaluations that give the instructors constructive feedback that would lead to changes in the course (or reaffirm what is good in the course) that would generate increased student success. Strongly encouraging, or even requiring, instructors to use the QOLT instrument to design and develop the online course will enable instructors to see how everything in the course is linked together and presented clearly to students. Going through a peer review process using the QOLT instrument will provide feedback to the instructor that will further enhance the experience for students. Using the QOLT student feedback instrument at the end of the course will provide specific feedback from students on each individual item and overall feedback for each of the nine sections of the QOLT instrument that provides deeper feedback than traditional end-of-course evaluations. This detailed feedback can be used by the instructor to make changes to the course the next time it is taught.

Recommendations for Future Research

As technology changes, and education is disrupted, the quest to understand what constitutes quality in any course, and especially online, will continue to be challenged. Throughout this study more questions than answers were raised. As a result, several recommendations for future research are recommended.

First, interview students to get specific examples of what does and does not lead to student success. We can make many assumptions based on grades on assignments and overall grades in the course but without specific details from them through interviews or opened ended questions, it is difficult to really understand what does and does not lead to

them being successful. This information would provide explicit feedback to instructors that could lead to modifications that would help future students that take the class.

Second, further investigate the faculty and student perceptions of quality in online courses. Where is the overlap and where is the disconnect? The disconnections could lead to course changes that increase student success and satisfaction. Students and instructors often have differing viewpoints and some students are hesitant to ask questions that lead to frustration causing them to give up and not complete the course.

Third, further investigate faculty knowledge about the importance of social, teaching, and cognitive presence and how they lead to student success and satisfaction. Many instructors that teach online do not have any guidance and attempt to replicate what happens in the face-to-face environment. They often do not realize the social, teaching, and cognitive presence in their face-to-face course and how it needs to translate into their online course.

Fourth, we do not know the impact of a quality-designed course and the impact on student learning beyond that course. We know that a quality designed and taught course keeps students engaged and leads to course completion. Research should be conducted on what students get out of the course. Do they achieve their goals? What is the effect on the next course they take? Is there an effect on their overall educational experience?

Finally, there is a shortage of research studies that reveal how students perceive the quality of learning online, collaborative opportunities, technology usage and issues, and skills developed through teamwork.

Conclusion

This study focused on the undergraduate student voice and the voice of one instructor as it pertains to social, teaching, and cognitive presence in online courses in a 4-year higher education setting. It utilized the Community of Inquiry framework (COI) and conceptualized it for the first time through the Quality Online Learning and Teaching (QOLT) instrument. The results provide instructors of online courses a valid tool that they can use to guide the design and continuous improvement of their online courses. The Community of Inquiry (COI) framework has been referenced in over 2800 research papers since its inception in 2000 (CoI, 2016). Understanding how students perceive the level of social, teaching, and cognitive presence in online courses can lead to changes in course redesign, faculty professional development, and increased student success demonstrated through higher rates of retention and lower rates of attrition.

Overall, the students rated these courses as high quality courses. The students that completed this study were satisfied with the course they reviewed. Overall, 95% of the students would recommend the course to a friend. This is important given that many online courses have high rates of attrition (Boston, Ice, & Gibson, 2011; Patterson & McFadden, 2009; Willging & Johnson, 2009). Nationwide, the number of students taking online courses is growing. Although faculty have not embraced online teaching as fast as students have embraced online learning, the demand for online courses will continue to grow as more students continue to struggle to complete their degrees. California is facing a “college deficit” of college graduates. By 2030, it is anticipated that California will have a 1.1 million shortage of college-educated workers (Diaz, 2015). Offering courses online is one option that can help more students graduate.

Understanding student mindsets towards online courses and their satisfaction with those courses needs to be examined further. Online for the sake of online does not benefit anyone. Quality online courses lead to student satisfaction. One meaningful way to understanding student viewpoints and perceptions about course quality and satisfaction is by asking them.

The results of this study suggests the Quality Online Teaching and Learning (QOLT) student instrument is an effective tool in providing feedback to instructors about their course that can be utilized as part of the continuous improvement process. In the California State University system, 37 faculty and instructional developers have successfully completed QOLT peer review training (CalState QA website, 2016). Since academic year 2011-2012, 55 faculty have been recognized as QOLT awardees (CSU QOLT Awardees, 2016). It takes a lot of time and effort on the part of the instructor to build a course that students perceive as high quality. The instructors who participated in this study are aware of the time and effort that they put into the course, the feedback they provide, and the importance of being connected with the students. The students in these courses appreciate all of the detail, time, and energy that the instructors spend assuring that the courses have social presence, teaching presence, and cognitive presence.

As we continue to grow in our understanding of students, what keeps them engaged, and what causes them to discontinue we are bound to keep changing the pedagogy of teaching overall. We are living in the days of disruptive innovation that is disrupting education. Students, parents, businesses, and legislators are questioning the need for higher education that often leads to increased student debt and continues to have high dropout rates. Now is the time to reflect on where we are going and what we are

doing. Now is the time to adopt online learning as a sustainable innovation that will have far reaching effects on students. Now is the time to listen to the voice of students and what they need to be successful. Completing a degree in higher education is often a struggle...and the struggle is real.

Appendix A

Student Invitation to Participate in Survey

Introduction

You are invited to take part in a research study of online course quality. You were chosen for the study because you are taking an online course during the Spring 2015 semester. This form is part of a process called informed consent that helps you to understand this study before deciding to take part. Barbara Taylor, who is a doctoral student at the University of California San Diego and California State University San Marcos, is conducting this study. There are no risks involved in this study. Your input will help to improve the quality of online courses and provide valuable feedback.

The first section of this survey asks for demographic information. The second part of this survey relates to the course experience and consists of the following nine sections, each with the number of separate items that need to be addressed shown in parentheses.

1. Course Overview and Introduction (8 items)
2. Assessment of Student Learning (6 items)
3. Instructional Materials and Resources Utilized (6 items)
4. Student Interactions and Community (8 items)
5. Facilitation and Instruction (8 items)
6. Technology for Teaching and Learning (6 items)
7. Learner Support and Resources (3 items)
8. Accessibility and Universal Design (4 items)
9. Course Summary and Wrap-up (3 items)

Procedures:

It will take 30-40 minutes to complete this survey. If you need to exit any part of the QOLT student feedback survey before you've completed it, there is a "Save and continue survey later" option at the top of each page (except the first). To save what you've already entered on a page, you must click "Next" before clicking on "Save and continue survey later". You will receive an email with a link to complete the survey.

Compensation:

Your participation will be greatly appreciated, however, you will not be financially compensated in any way for your involvement. Some instructors are providing extra credit for participation. The instructors will only receive a list of students who have participated. They will NEVER know the feedback that you provided.

Confidentiality:

You will be asked to provide your student ID number. This information and the information you provide in the survey will be kept confidential. I will not use your information for purposes outside of this research project. Also, I will not include your name or anything that could identify you in any reports of the study.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact me at 760-750-8673 or email me at btaylor@csusm.edu. The IRB approval number for this study is: A copy of your answers will be provided upon request.

Statement of Consent:

I have read the above information and by completing this survey I am indicating that I feel I understand the study well enough to make a decision about my involvement.

Appendix B

Quality Online Learning and Teaching (QOLT) Course Assessment for Students – AY 2014-2015

Introduction - How to Use the QOLT Course Assessment

This QOLT Course Assessment has two parts. Part I has 15 items that address course demographics. Part II has 54 (plus 4 optional) items for you to rate that reflect your course experience and that are organized into the following 10 sections:

1. Course Overview and Introduction (8 items)
2. Assessment of Student Learning (6 items)
3. Instructional Materials and Resources Utilized (6 items)
4. Student Interaction and Community (7 items)
5. Facilitation and Instruction (8 items)
6. Technology for Teaching and Learning (5 items)
7. Learner Support and Resources (4 items)
8. Accessibility and Universal Design (7 items)
9. Course Summary and Wrap-up (3 items)

Recommendations for completing Part II – Course Experience are provided.

If you need to exit any part of the QOLT Course Assessment before you've completed it, there is a "Save and continue survey later" option at the top of each page. To save what you've already entered on a page, you must click Next before clicking on "Save and continue survey later".

If you have any questions or comments about the content of the QOLT Course Assessment, please Barbara Taylor, btaylor@csusm.edu or 760-750-8673

REMINDER: Submissions must be made by May 15, 2015.

Course Demographics

Part I - Course Demographics

1. Campus Name:*

San Marcos

2. Please select the course you are assessing from the list below:

3. Instructor Name:*

4. What type of course was it in terms of delivery?

() Hybrid/Blended: 30–70% of the course activities or interactions took place in the online environment.

() Online: More than 70% of the course activities or interactions took place in the online environment.

5. Is this your first online course at CSU San Marcos

Yes

No

6. Have you taken an online course at any other institution?

Yes

No

7. What is your academic rank?

Freshman

Sophomore

Junior

Senior

8. What is your gender?

Female

Male

Transgender

Other – required

9) What is your age?

18-21

22-25

26-29

30-33

34-37

38-41

42-45

46-49

50+

10. Would you recommend this course to a friend?

Yes

No

11. Do you want more online courses to be available through CSU/CSUSM?

Yes

No

12. If yes, how do online courses benefit you? Why should CSUSM offer more online courses?

13. Should CSUSM offer online courses (check all that apply)

In your major

Lower division general education

Upper division general education

14. Are you of Hispanic, Latino, or Spanish origin?

Yes

No

15. Which category best describes your race? (One or more categories may be marked)

Asian/Pacific Islander

Black/African-American

Caucasian

Hispanic

American Indian/Alaska Native

Two or More Races

Decline to Respond

Course Assessment Section 1

Part II – Course Experience

Recommendations for Completing Part II – Sections 1-9

1. Read each item carefully and select the response that best reflects your course experience. Note: The response options are identical for all items in this part of the assessment.

2. Feel free to use the Comments box at the end of each section to provide any additional information or details or to clarify an item you marked as Not Applicable/No Opinion.

3. Consult the [QOLT Glossary](#) if you need help understanding any of the terms used.
 Note: Link opens a new browser window.

Section 1: Course Overview and Introduction – 8 items

Addresses how well the instructor described the course and introduced you to the course protocol and expectations.

Objective
*1.1: How to get started in the course and find the course schedule, calendar, and syllabus were clear to me.***
*1.2: The purpose and format of the course and the prerequisite knowledge and skills were clear to me.***
*1.3: After viewing the course website, I knew who the instructor was, when he or she was available, and how to contact him or her.***
1.4: The rules regarding emails, how to conduct online discussions, and other communication strategies were clear to me.**
*1.5 Policies regarding academic dishonesty such as cheating and plagiarism were clear to me.
1.6 How to use the technology tools in the course was clear to me.
1.7 I had the opportunity to see samples of student work/assignments and to ask questions.***
1.8 I had the opportunity to share my own learning goals and why I took the course.***
Section 1 Total

Section 2: Assessment of Student Learning - 6 items

Addresses the process and methods used to gather evidence of the achievement of the Student Learning Objectives to evaluate the outcomes the instructor wanted you to achieve by the end of the course.

Objective
2.1 What I was supposed to accomplish each week and by the end of the course was clear to me.***
* 2.2 How assignments were graded and points were distributed was clear to me.***
* 2.3 How the learning activities (including the assignments and ungraded activities) helped me achieve the learning goals each week made sense to me.***
2.4 The different types of assignments (papers, exams, projects) were related to each other and helped me learn the topics.***
* 2.5 I had multiple opportunities to receive feedback from the instructor and self-check my progress in the course.***
2.6 I had multiple opportunities to provide feedback to the instructor about my learning progress.****
Section 2 Total

Section 3: Instructional Materials and Resources Utilized – 6 items

Addresses how carefully the instructor selected a variety of materials to teach course content and enable you to meet the learning goals and outcomes.

Objective
* 3.1 The instructor gave me adequate time and notice to acquire course materials.***
3.2 It was clear to me which textbooks and materials were required and which were recommended.***
3.3 I understood how all the materials were related to helping me achieve the learning goals.***
3.4 The instructor gave me options to use free course materials such as websites and other Open Educational Resources.***

Objective
* 3.5 The instructor provided materials that included more than text and that came from multiple authors/scholars.***
3.6 The sources of all resources and materials used in the course were clear to me.***
Section 3 Total

Section 4: Student Interaction and Community – 8 items

Addresses how well the instructor designed the course to (1) provide opportunities for you to interact with the content, your peers, the Learning Management System, and your instructor and (2) encourage you to become an active learner and build the online community.

Objectives
* 4.1 At the beginning of the course, getting to know other course participants gave me a sense of belonging in the class.**
4.2 The information about how to be successful in the course was helpful.***
* 4.3 It was easy to navigate the online components of the course.***
* 4.4 The learning activities (e.g., discussions) encouraged me to log on and interact with people frequently.**
4.5 The online and other resources encouraged me to interact with the course materials frequently.***
4.6 I understood how to participate in various learning activities such as reading and completing assignments, and the requirements were clear to me.***
4.7 The instructor's role in class participation was clear to me.**
4.8 The learning activities helped me understand fundamental concepts and apply skills that are useful outside of the classroom.****
Section 4 Total

Section 5: Facilitation and Instruction – 8 items

Addresses how well the instructor facilitated the course, communicated with you, encouraged you to be an active learner, and reinforced the development of a sense of community among course participants.

Objective
5.1 The instructor helped identify areas of agreement and disagreement among students on course topics that helped me learn.***
5.2 The instructor helped guide the class toward understanding course topics in a way that helped me think more clearly and carefully.***
5.3 The instructor encouraged me to participate in meaningful dialogues.**
5.4 The instructor encouraged me to explore new concepts in the course.*****
5.5 The instructor helped me focus discussions on relevant issues.***
5.6 The instructor provided me with feedback in a timely fashion.**
5.7 I received frequent communications, such as announcements and emails, from the instructor.***
5.8 The instructor's communications about things like due dates and assignment instructions helped keep me on task.***
Section 5 Total

Section 6: Technology for Teaching and Learning – 6 items

Addresses how well the instructor used technology to effectively deliver course content, engage you in learning activities (individual, student-to-student, and instructor-to-student), and allow you to express yourself or demonstrate learning.

Objective
6.1 The tools (e.g., chat, Live Classroom, and discussion forums) and media (e.g., videos) used in the course helped me learn.***
6.2 The course tools and media engaged me and encouraged me to interact with others in the course.**
6.3 The course tools and media encouraged me to become an active learner and to interact with the course content.****
6.4 Information about access to the technologies required in the course was clear to me.***
6.5 I clearly understood the acceptable formats for assignments and how to submit them.***
6.6 The instructor used technology tools such as Dropbox, Wikis, Turnitin, Chat, Live Classroom, Google docs, and Twitter that go beyond MS Word and PowerPoint.
Section 6 Total

Section 7: Learner Support and Resources – 3 items

Addresses the information your instructor provided about the technical, academic, and student support services and information available to you. Academic Support Services are designed to help you succeed academically and may include library, writing center, and tutoring services. Student support services are designed to help you with campus life and related needs such as financial aid, registration, and advising.

Objective
* 7.1 The instructions and/or information for how to get TECHNICAL support (e.g., from the IT helpdesk, Moodle, Blackboard, or Desire2Learn) were clear to me.***
* 7.2 The instructions and/or information for how to get ACADEMIC support (services and resources such as the library, writing center, and tutoring services) were clear to me.***

Objective
7.3 The instructions and/or information for how to get STUDENT support (services and resources such as registration, career center, financial aid, and student health center) were clear to me.***
Section 7 Total

Section 8: Accessibility and Universal Design – 4 items

Addresses how well the course design followed accessibility and universal design principles to make it easy for you to (1) access Web content and the information provided by the various course materials and (2) how well the course was designed to accommodate students with disabilities if applicable to you.

Objective
* 8.1: The instructor provided a statement of the Americans with Disabilities Act, campus accessibility policies, and accessibility information about the Learning Management System (e.g., Moodle or Blackboard).
8.2 I am officially registered with my campus Disability Services office, and I clearly understand the instructor's role in helping me succeed in the course.
* 8.3 I was able to access all course materials.
8.4 I was able to access all the tools used for delivering course content and for completing assignments.
Section 8 Total

Section 9: Course Summary and Wrap-up – 3 items

Addresses the opportunities you were given to summarize the term (semester or quarter), establish the connection between this and other courses, and get prepared for the next phase of your educational journey.

Objective
9.1 During the last week or on the last day of class, I was given an opportunity to ASK QUESTIONS as a way to gain closure and insight into my course accomplishments. ****
9.2 During the last week or on the last day of class, I was given an opportunity to GET FEEDBACK about my overall course experience. ***
9.3 I was given an opportunity to REFLECT on my overall learning experience in the course. ****
Section 9 Total

* Designates the core 24 objectives that are in a quality core

** Designates objectives that align with Social Presence

*** Designates objectives that align with Teaching Presence

**** Designates objectives that align with Cognitive Presence

Appendix C

Quality Online Learning and Teaching (QOLT) Instrument Faculty Self-Rating

The Course Objectives part is comprised of 54 objectives organized into nine sections as follows:

1. Course Overview and Introduction (8 objectives)
2. Assessment and Evaluation of Student Learning (6 objectives)
3. Instructional Materials and Resources Utilized (6 objectives)
4. Students Interaction and Community (7 objectives)
5. Facilitation and Instruction (8 objectives)
6. Technology for Teaching and Learning (5 objectives)
7. Learner Support and Resources (4 objectives)
8. Accessibility and Universal Design (7 objectives)
9. Course Summary and Wrap-up (3 objectives)
10. Mobile Design Readiness (optional) (4 objectives)

Please read each section title and objective carefully. Examples are provided to promote clarity. Use the ratings scale below to effectively assess how well you met each objective. It is helpful to make comments on each objective as to where/how the objective is being met and/or addressed in your course. See example below.

Number	Number Description	Example of Criterion
3	Exceeds/Always	Criterion evidence is clear, appropriate for the course, and demonstrates "best practices."
2	Meets/Often	Criterion evidence is clear and appropriate for the course, but there is some room for enhancement
1	Partially meets/Sometimes	Criterion evidence exists but needs to be presented more clearly and/or further developed.
0	Does not meet/Rarely or Never	No criterion evidence exists, or is present but not appropriate for the course.
NA	Objective does not apply to the course	It may be something only a fully online course would need and you are teaching a blended course for example.

Section 1. Course Overview and Introduction (8 objectives)

Instructor gives a thorough description of the course, as well as introducing students to the course.

Objectives	Example	Rating
1.1* Instructor uses course environment to provide clear and detailed instructions for students to begin accessing all course components, such as syllabus, course calendar, assignments, and support files.	Welcome message or materials introducing course structure/ components is highly recommended. Is there a “start here” or “welcome” link? Is there a course tour or overview? Are there clear statements for students about how to begin coursework?	
1.2* Detailed instructor information is available to students and includes multiple formats for being contacted by students, availability information, brief biographical information, and a picture of the instructor.	Instructor introduces him/herself to the class and provides more than one way to be contacted such as email, phone, and/or office hours (in-person and/or online).	
1.3* Course description includes the purpose and format of the course, as well as prerequisite knowledge and competencies, if applicable.	Instructor introduces the purpose of the course, the course format (online/blended), and any prerequisite knowledge required.	
1.4 Online etiquette expectations for various forms of course communication and dialog (e.g., chat, "hangout," email, online discussion) are presented and clear to the student.	Rules of conduct may include use of the language and formatting. See further at Netiquette: Make it Part of Your Syllabus	
1.5* Academic integrity or "code of ethics" is defined. Related institutional policies for students to adhere are clearly stated and/or links to those policies (e.g., online catalog; institution web page) is provided.	Policies typically include cheating, plagiarism, and copyright. Instructor may also provide sample work that demonstrates plagiarism. It is important to include any links to campus policies.	
1.6 A list of technical competencies necessary for course completion is provided, identifying and delineating the role/extent the online	Technical competencies may include the use of Learning Management System, downloading and uploading, file management/sharing, communications tools, collaboration tools,	

Objectives	Example	Rating
environment plays in the total course.	discipline-specific software or hardware. In addition, instructors may want to point students to the CSU Stanislaus Online Readiness Self-Assessment.	
1.7 Instructor provides samples of student work and provides opportunity to students to ask questions.	Instructor can do a mock exercise, show an example of an assignment, discuss readings, and review projects.	
1.8 Instructor asks students to share their own learning goals.	Instructor encourages students to share why they take the course, and asks about the relevancy of the course to their academic degree, daily life, and potential careers.	

Section 2. Assessment of Student Learning (6 objectives)

Student Evaluation and Assessment refers to the process used to gather evidence of the achievement of the Student Learning Objectives/Outcomes (SLOs). We strongly recommend that instructors contact the Office of Academic Assessment for assistance and information about this section.

Objectives	Example	Rating
2.1* All Student Learning Objectives/Outcomes (SLOs) are specific, well-defined, and measureable.	Learning Objectives are measurable and observable, (e.g., define, apply, synthesize) in Bloom's Taxonomy. Note: If your course level objectives are mandated and not measurable, then module or weekly level objectives should be measurable and support course level objectives.	
2.2* Grading policy is provided in a manner that clearly defines expectations for the course and respective assignments.	Instructor provides late submission policy and scale, weights of respective assignments, and the corresponding letter grade if scores are accumulated at the end.	
2.3* The learning activities (including the assignments and ungraded activities) promote the achievement of the SLOs.	Instructors explain how learning activities such as assignments or discussions contribute to the achievement of the stated SLOs. e.g., A quiz asking students to identify and label body parts would align with an objective such as	

Objectives	Example	Rating
	“Students will be able to identify and label body parts of a human female”. A forum having students talk about various body parts, would not align with the objective.	
2.4* The assessment instruments (e.g., rubrics, grading sheets) are detailed and appropriate to the student work and respective outcomes being assessed. This includes assessing modes of online participation and contributions.	There are multiple ways for students to demonstrate competence or mastery. e.g., research project, paper, tests, presentations, or multimedia projects. Students are not just graded for online participation but the quality of their participation and contributions. A clear articulation of requirements to be successful at the assignment must be present.	
2.5* Throughout the semester, instructor provides multiple opportunities to give feedback on students learning and to help students “self-check” their learning.	Activities may include but not limited to blogs for reflection, peer review, practice test and draft of term paper, module summary. Instructor effectively uses Learning Management System grade book (or similar) for timely quantitative and qualitative feedback	
2.6 Throughout the semester, instructor provides multiple opportunities to solicit feedback from their students about their learning and on the course for the improvement of the course.	Consider the use of surveys, discussion forums, or item analyses to collect feedback or attitudinal data (that goes beyond student learning outcomes) on the effectiveness or difficulty of the resources and activities (e.g., “Muddiest Point”), or item analysis of test questions in order to improve the course in the future.	

Section 3. Instructional Materials and Resources (6 objectives)

Addresses the variety of materials and material formats the instructor has chosen to present course content and enable students to meet relevant learning outcomes and, when possible, the affordability of chosen course materials.

Objectives	Example	Rating
3.1* Instructor provides students with adequate time and notice to acquire course materials.	Instructor includes instruction in the syllabus or elsewhere in the course as to acquire course materials including textbooks, and other types of external resources. This information is released to students prior (emails, or announcements) to the course start.	
3.2 Syllabus lists whether textbooks and materials are required or recommended.	Instructor separates the materials and labels them as either required or recommended.	
3.3 Instructor articulates the purpose of all materials as to how they are related to the course and module learning objectives.	For required and recommended materials, there are brief statements as to the value/purpose in meeting student learning objectives/outcome(s). If external links/websites are used, the links should be self-evident or a short description of the specific link needs to be provided instead of posting a general link for students to explore.	
3.4 When possible, instructor provides options in terms of how students acquire course materials, including Open Educational Resources.	Course materials include both the Open Educational Resources (e.g., MERLOT) and external materials.	
3.5* There is a variety of instructional material types and perspectives, while not overly relying on one content type such as text.	Materials types include PowerPoint, videos, text. Multiple perspectives refer to different opinions from scholars in the field.	
3.6 Modeling academic integrity, instructor appropriately cites all resources and materials used throughout the course.	These resources and materials include text, images, tables, videos, audio, and website. In addition to citation, when possible, direct link to the source may be provided.	

Section 4. Students Interaction and Community (Course Design) (7 objectives)

Addresses (1) the opportunities students have to interact with the content, their peers, and their instructor,

and (2) how well the course design encourages students to become active learners and contribute to the online course community.

Objectives	Example	Rating
4.1* At the beginning of the course, instructor provides an opportunity to have students self-introduce to develop the sense of community.	Instructor may encourage students to post their pictures and share some personal information such as hobbies to build the community at the beginning. Example: Icebreaker forum, glossary posts, or a blog.	
4.2 Instructor provides the information about being a successful online learner/student.	Instructor provides a self-assessment for students to identify their readiness for learning online and learning strategies or provides a link to an online readiness survey such as the Online Readiness Self-Assessment from CSU Stanislaus.	
4.3* Navigation throughout the online components of the course is logical, consistent, and efficient.	Discussions are organized in clearly defined forums, threads, or communities. The course carries consistent structure for across modules.	
4.4* Learning activities facilitate and support active learning that encourages frequent and ongoing peer-to-peer engagement.	If group work required, a statement of the task is provided, with clear and concise outcomes that are appropriate and reasonable. Rules for forming groups, assigning roles, benchmarks and expectations of group participants clearly stated.	
4.5 The modes and requirements for student interaction are clearly communicated.	Requirements for participation (e.g., frequency, length, timeliness) are included in the syllabus and/or in the description of the assignment in within the module.	
4.6 Instructor clearly explains his or her role regarding participation in the online environment. Instructor participates and manages, yet lets students take reasonable ownership.	Instructor works to keep students on task/topic with their online discussions. Instructor may offer prompts to refocus students to the task at hand or there may be the desired effect simply by them engaging with the discussion group.	
4.7* The course learning activities help students understand fundamental concepts, and build	Learning activities engage students in learning some basic concepts, but also give students opportunities to use higher level learning skills such as apply, analyze, etc., to make connections	

Objectives	Example	Rating
skills useful outside of the course.	with real-world problem solving.	

Section 5. Facilitation and Instruction (Course Delivery) (8 objectives)

Addresses how well the instructor facilitates the course, communicates with students, engages students to be active learners, and reinforces the development of a sense of community among course participants.

Objectives	Example	Rating
5.1 The instructor was helpful in identifying areas of agreement and disagreement on course topics.	Through moderation of course discussions, instructor presents areas where ideas or viewpoints differ. S/he uses differences as teachable moments, either resolving them based on hard data or acknowledging the respective viewpoints as valid.	
5.2 Instructor helps students understand importance of course topics and related outcomes	Instructor sequences and moderates content delivery and related activities while maintaining overall focus on meeting the stated learning objectives and outcomes.	
5.3 The instructor helps keep course participants engaged and participating in productive dialogues.	Instructor, as moderator, guides students who have gotten "off track" back to the tasks and related outcomes.	
5.4 Instructor encourages students to explore new concepts through the course experience.	Rather than limiting all students to the same traditional or narrow focus, instructor allows students latitude/choice around course topics. Note: The ability to do this varies by discipline and topic.	
5.5 The instructor helped to focus discussion on relevant issues.	None	
5.6* The instructor provides feedback in a timely fashion.	Instructor uses the Learning Management System efficiently to respond to student work submissions with scores and feedback related to strengths and/or weaknesses.	

Objectives	Example	Rating
5.7 Instructor sends communications about important goals and course topics as opportunities arise.	e.g., The instructor sends an announcement about a change of lecture focus and proper readings prior to class. The instructor may post a clarification on a common question about a topic.	
5.8* Instructor sends reminders of due dates and duration of respective modules, as well as other instructions to keep students on task.	Instructor enters all date ranges and due dates into the Learning Management System, and reminders are sent to students.	

Section 6. Technology for Teaching and Learning (5 objectives)

Addresses how well the instructor utilizes technology to effectively deliver course content, engage students in learning activities (individual, student-to-student, and instructor-to-student), and allow students to express themselves or demonstrate learning.

Objectives	Example	Rating
6.1 The tools and media support the course learning objectives/outcomes.	Examples include use of videos or animation to demonstrate the process of photosynthesis.	
6.2* Instructor takes advantage of the current tools provided by the Learning Management System (or similar) to enhance learning.	The course uses a virtual classroom for synchronous web conferencing (e.g., chat, Zoom). The glossary tool is used to post important course terms. Group tools are used to enhance peer-to-peer engagement.	
6.3 Technological tools and resources used in the course enable student engagement and active learning.	Instructor uses collaborative software such as Google docs, wikis, or Zoom to work on group projects and/or SoftChalk to engage students in mediated learning.	
6.4* Instructor provides clear information regarding access to the technology and related resources required in the course.	Instructor provides information about where and how to acquire and use the technologies. For downloads, instructor provides direct links. Any costs are specified up-front. Tutorials are provided on how to use the tool/technology.	

Objectives	Example	Rating
6.5 Acceptable technological formats for assignment completion and submissions have been articulated.	Rather than limiting the acceptable format to one content or technology type, instructor is open to allowing students to meet objectives using multiple formats for assignment completion such as word processing, electronic poster creation, multimedia artifact, or combination of these (mash-up).	

Section 7. Learner Support and Resources (4 objectives)

Addresses the program, academic, and/or technical resources available to learners. Though instructors may not play the direct support role, they should be aware of potential issues and promote what is available to support students.

Objectives	Example	Rating
7.1 Instructor states her or his role in the support process.	Though some of the support necessary may fall outside of the instructor role or expertise, instructors can advocate for students to avail themselves of related support services.	
7.2* The course syllabus (or related) lists and/or links to a clear explanation of the technical support provided by the campus and suggestions as to when and how students should access it.	Technical support may mean the Information Technology (IT) help desk where students would seek assistance when they have technical problems with the Learning Management System.	
7.3* Course syllabus (or related) provides an introduction to campus academic (non-technical) support services and resources available to support students in achieving their educational goals. e.g., Disability Support Services, Writing Center, Tutoring Center).	Academic support services may include but not limited to the Library, writing center, online tutoring service. Resources may include online orientation for new students, successful learning strategies for online learners, Lynda.com training videos.	
7.4 Course syllabus (or related) provides information regarding how the institution's student support (non-academic, non-technical) services and resources (e.g., advising, mentoring) can help students	Such services usually include but not limited to online registration, advising and counseling.	

Objectives	Example	Rating
succeed and how they can these services.		

Section 8. Accessibility and Universal Design (7 objectives)

Addresses the course's adherence to accessibility and universal design principles that are critical to some learners but that benefit all learners. NOTE: We strongly recommend that instructors contact their campus disability service center for assistance and information related to this section.

Objectives	Example	Rating
8.1* Syllabus (or similar) links to the campus accessible policy, whether it is required or recommended that instructors do so.	See Iowa State University's Sample Syllabus Statements Regarding Disabilities for a list of sample syllabus statements regarding accommodations or support for students with disabilities.	
8.2 Instructor articulated how s/he proactively supports a wide range of learning styles and abilities of all students, as opposed to just making reactive accommodations for those with registered disabilities. Note: This support does not entail sacrificing academic rigor or student learning outcomes. The goal is supporting the needs of all learners as opposed to having an inflexible teaching and learning process.	See EnACT's UDL-Universe: A Comprehensive Faculty Development Guide for how to state proactive support for all students in a syllabus.	
8.3* Students are given accessibility information and policies related to the online course environment.	Instructor provides the campus ADA compliance statement and the Learning Management System accessibility statement and/or provides a link to the institution's disability services and Learning Management System accessibility information. (e.g., Moodle Access Statement)	
8.4 Students can clearly ascertain the role of the instructor in providing support for those officially registered	Instructor includes information from Services for Students with Disabilities to address working	

Objectives	Example	Rating
with the campus disability services office.	with students with disabilities.	
8.5* Course materials created by the instructor or from external sources are in formats that are accessible to students with disabilities.	Text formatting and document organization, navigation and links, images and graphics, tables, and background and colors accommodate assistive technology. (e.g., the link to take a quiz says, "Take Quiz 1," NOT "Click Here". Images and graphics have Alternate Text Tags. File formats including audio and video, Word, PowerPoint, and PDF are all accessible. (e.g., videos are captioned or a text script is provided.)	
8.6 All tools used within learning management system or that are third-party are accessible and assistive technology ready.	Tools may include but not limited to virtual classroom and plug-ins such as Studymate Class, Web 2.0 social networking technologies (wiki, twitter, and more). Some of these tools may not be completely accessible. Versions, such as, EasyChirp (Twitter) and EasySlideshare (Slideshare) have significant accessibility enhancements. Check with your instructional development team when needed.	
8.7 If accessibility of a particular course resource or activity is not practicable, instructor provides an equally effective accessible alternative for students.		

Section 9. Course Summary and Wrap-up (3 objectives)

Addresses the opportunities students are given to summarize the semester, establish the connection between this course and other courses, and prepare to start the next phase of their program/progress.

Objectives	Example	Rating
9.1 Instructor provides students opportunities to ask questions as a form of closure and to foster insight into accomplishments.	Instructor uses discussion threads to ask students (1) if they have any questions and (2) to reflect on their progress toward their learning objectives and outcomes.	

9.2 Instructor provides students with feedback about their overall learning and progress and their experiences of the term.	Instructor includes specific, summative feedback on student learning across the term (semester or quarter).	
9.3 Instructor provides opportunities for students to reflect on their learning and connect their individual learning goals with the expectations (stated learning objectives and outcomes) of the instructor.	Instructor asks students questions to compare what they can do now, having met the student learning objectives, with what they could do prior to taking the course.	

Section 10. Mobile Design Readiness (optional) (4 objectives)

As students increasingly rely on mobile phones and tablets to access and interact with course content, it is important to be aware of a few factors that can make the experience more successful for students. This does not mean that all course components (e.g., online exams) must be tailored toward mobile device usage. However, general course resources (text, audio, video) should be mobile-friendly

Objectives	Example	Rating
10.1 Course content was easy to read on multiple platforms such as PCs, tablets, and smartphones.	Instructor avoided the use of pop-up screens, moving text, large images, and long headings/labels for general course content on main pages. Content did not require excessive scrolling (especially horizontal scrolling) to view. Images and text in main content body adjusted automatically to the width of viewer screens or were maximum 600px in length. Smaller images that allowed content to load quickly were used to convey essential information.	
10.2 Audio and video content displayed easily on multiple platforms such as PCs, tablets, and smartphones	Audio and video clips were each 15 minutes or less. Audio/video content was in a mobile-friendly format such as MP3 or MP4 or was linked to YouTube. Video resolution was 480x320 for phones and 640x480 for tablets. Video presets allowed for	

Objectives	Example	Rating
	use on mobile platforms.	
10.3 The number of steps users had to take in order to reach primary content was minimized.	Primary course content, activities, and assessments were at most two clicks away from the course landing page.	
10.4 The visibility of content not directly applicable to student learning outcomes was minimized.	Supplemental resources and optional content were clearly labeled as such and placed at the bottom of course pages.	

Retrieved from <http://courseredesign.csupprojects.org/wp/qualityassurance/qolt-instruments/>

Appendix D

Instructor Letter to Participate

Introduction

You are invited to take part in a research study of online course quality. You were chosen for the study because you taught an online course during the Spring 2015 semester. This form is part of a process called informed consent that helps you to understand this study before deciding to take part. Barbara Taylor, who is a doctoral student at the University of California San Diego and California State University San Marcos, is conducting this study.

Background Information

The purpose of this study is to evaluate online courses from the student perspective.

Procedures:

If you agree to be in this study, you will be asked to:

Participate in a face-to-face interview by answering questions about the quality of the online section of the course you completed. There will be approximately 8-12 questions that are scripted and the expected duration of interview is 30 minutes. The interview will be recorded.

Voluntary Nature of the Study:

Your participation in this study is voluntary. This means that everyone will respect your decision to participate or not in this study. No one at California State University San Marcos will treat you differently if you decide not to be in the study. You can change your mind before, during, and after the interview. You may skip any questions that you feel are too personal to answer.

Risks and Benefits of Being in the Study:

There are no risks involved in this study. Your input will help to improve the quality of online courses and provide valuable feedback.

Compensation:

Your participation will be greatly appreciated, however, you will not be compensated in any way for your involvement.

Confidentiality:

Any information you provide will be kept confidential. I will not use your information for purposes outside of this research project. Also, I will not include your name or anything that could identify you in any reports of the study.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact me at 760-750-8673 or email me at btaylor@csusm.edu. The IRB approval number for this study is: A copy of your answers will be provided upon request.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By writing and signing my name and date below, I am agreeing to the terms described above.

Printed Name of Participant

Signature of Participant

Date of consent: _____

Appendix E

Instructor Interview Questions

1. How did you become involved in online teaching?
2. What kind of training and/or support did you receive when developing your online course?
3. What types of support have you received once you started teaching the course?
4. How long have you been teaching this course online?
5. How can you tell if a student is struggling and how do you assist the student?
6. What do you see are some of the advantages/disadvantages of teaching online?
7. How do you communicate with students online?
8. What activities do you have in your course that gives students the opportunity to communicate with each other?
9. What types of resources do you provide to your students that help them understand the content?
10. Did you create micro-lectures for your course?
11. Do you have activities that give students the opportunity to make connections between what they knew before they took your course, what they have learned in the course, and how they can apply what they are learning?
12. Do you provide opportunities for students to reflect on their learning (ie: journal)
13. Describe how you create a sense of community in your online course.
14. What strategies do you use to engage the students with the course content?
15. What strategies do you use to engage the students with their fellow scholars?
16. What strategies do you use to engage the students with you?
17. How do you define what constitutes quality in your online course?

Appendix F

Example of End of Course Survey Items as Indicators of Student Satisfaction

Class Climate	Student Evaluation of Course Instruction-On-Line			
[ORGANIZATION]	[AUTHOR]			
[SUBUNIT] [PERIOD]	[SURVEY]			

Mark like shown: ☐ ☒ ☐ ☐ [MARK]

Correction: ☐ ☒ ☒ ☐ [CORRECTION]

1. General Questions

1.1 I took this course because it is a requirement for my major/degree program.	☐ Yes	☐ No
1.2 I took this course because it fulfills a GE requirement.	☐ Yes	☐ No
1.3 Based on your performance in this course thus far, what grade do you expect to receive?	☐ an A ☐ a C or a D	☐ a B ☐ Credit ☐ a B or a C ☐ an F or no credit
1.4 In this class, how actively have you participated in all aspects of the learning process (e.g., completing required readings and assignments, participating in class activities)?	☐ Very ☐ Hardly at all	☐ Moderately ☐ Somewhat
1.5 On average, approximately how many hours per week have you spent preparing for this class?	☐ at least 10 hours ☐ 4-5 hours	☐ 8-9 hours ☐ 2-3 hours ☐ 6-7 hours ☐ 1 hour at most
1.6 When you first enrolled in this course, how interested were you in its subject matter?	☐ Very ☐ Hardly at all	☐ Moderately ☐ Somewhat
1.7 Now that the course is nearly over, how interested are you in the subject matter?	☐ Very ☐ Hardly at all	☐ Moderately ☐ Somewhat

2. General Questions Section II

To what extent do you agree with each of the items listed below and on the other side of the form (If you feel an item does not pertain to this course, mark the box in the "NA" column.)
5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree, NA=Not Applicable

	5	4	3	2	1	NA
2.1 The overall quality of this course was high.	☐	☐	☐	☐	☐	☐
2.2 I learned a great deal in this course.	☐	☐	☐	☐	☐	☐
2.3 The instructor is an effective teacher.	☐	☐	☐	☐	☐	☐
2.4 The instructor is enthusiastic about communicating the subject matter.	☐	☐	☐	☐	☐	☐
2.5 The instructor showed genuine interest in students' learning.	☐	☐	☐	☐	☐	☐
2.6 The course objectives and requirements were clearly outlined in the course syllabus.	☐	☐	☐	☐	☐	☐
2.7 Required assignments (e.g., exams, papers, projects, etc.) contributed positively to my learning experiences in this course.	☐	☐	☐	☐	☐	☐
2.8 The instructor responded when I asked for individual help.	☐	☐	☐	☐	☐	☐

Adopted by Academic Senate 5/5/04 (OVER)

F36U0P1P0V0
2007-01-24, Page 1/2

SAMPLE

REFERENCES

- Ali, R., & Leeds, E.M. (2009). The impact of face-to-face orientation on online retention: A pilot study. *Online Journal of Distance Learning Administration*, 12(4). Retrieved from <http://www.westga.edu/~distance/ojdla/winter124/ali124.html>
- Allen, I.E. & Seaman, J. (2013). Changing course. Ten years of tracking online education in the United States. Retrieved from <http://www.onlinelearningsurvey.com/reports/changingcourse.pdf>
- Allen, I.E. & Seaman, J. (2014). Grade change tracking online education in the United States. Retrieved from <http://www.onlinelearningsurvey.com/reports/gradechange.pdf>
- Allen, I.E. & Seaman, J. (2016). Online report card. Tracking online education in the United States. Retrieved from <http://onlinelearningsurvey.com/reports/onlinereportcard.pdf>
- Angelino, L.M., Williams, F.K.W., & Natvig, D. (2007). Strategies to engage online students and reduce attrition rates. *The Journal of Educators Online*, 4(2), 1-14. Retrieved from <http://www.thejeo.com/Archives/Volume4Number2/Angelino%20Final.pdf>
- Arbaugh, J.B., Cleveland-Innes, M., Sebastian, R.D., Garrison, D.R., Ice, P., Richardson, J.C., & Swan, K.P. (2008). Developing a community of inquiry instrument: Testing a measure of the community of inquiry framework using a multi-institutional sample. *Internet and Higher Education*, 11, 133-136. <http://dx.doi.org/j.iheduc.2008.06.003>
- Astani, M., Ready, K., & Duplaga, E. (2010). Online course experience matters: Investigating students' perceptions of online learning. *Issues in Information Systems*, 11(2), 14-21.
- Aslanian, C. B., & Clinefelter, D. L. (2012). Online college students 2012: Comprehensive data on demands and preferences. Louisville, KY: The Learning House, Inc.

- Bangert, A.W. (2004). The seven principles of good practice: A framework for evaluating on-line teaching. *The Internet and Higher Education*, 7(3), 217-232. doi:10.1016/j.iheduc.2004.06.003
- Betts, K. S. (2014). Factors influencing faculty participation & retention in online & blended education. *Online Journal of Distance Education Administrators*, 17(1). Retrieved from <http://www.westga.edu/~distance/ojdla/spring171/betts171.html>
- Beyrer, G.M.D. (2010). Online student success: Making a difference. *MERLOT Journal of Online Learning and Teaching*, 6(1), 89-109. Retrieved from http://jolt.merlot.org/vol6no1/beyrer_0310.htm
- Brindley, J., Blaschke, L., & Walti, C. (2009). Creating Effective Collaborative Learning Groups in an Online Environment. *The International Review Of Research In Open And Distributed Learning*, 10(3). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/675/1271>
- Boling, E., Hough, M., Krinsky, H., Saleem, H., & Stevens, M. (2012). Cutting the distance in distance education: Perspectives on what promotes positive, online learning experiences. *The Internet and Higher Education*, 15(2), 118-126. doi:10.1016/j.iheduc.2011.11.006
- Boston, W.E., Ice, P., & Gibson, A.M. (2011). Comprehensive Assessment of Student Retention in Online Learning Environments. *Online Journal of Distance Learning Administration*, 4(1) retrieved from http://www.westga.edu/~distance/ojdla/spring141/boston_ice_gibson141.html
- Boston, W., Diaz, S.R., Gibson, A.M., Ice, P., Richardson, J. & Swan, K. (2010). An Exploration of the Relationship between Indicators of the Community of Inquiry Framework and Retention in Online Programs. *Journal of Asynchronous Learning Networks*, 14(1), 3-19.
- Carr, S. (2000). As distance education comes of age, the challenge is keeping the students. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/As-Distance-Education-Comes-of/14334>

- Certified CSU Online Course Reviewers. (n.d.). Retrieved from <http://courseredesign.csuprojects.org/wp/qualityassurance/csu-online-course-reviewers/>
- CSU QOLT Awardees. (n.d.). Retrieved from <http://courseredesign.csuprojects.org/wp/qualityassurance/csu-qolt-awardees/>
- Chaney, B., Eddy, J., Dorman, S., Glessner, L., Green, B., & Lara-Alecio, R. (2007). Development of an instrument to assess student opinions of the quality of distance education courses. *The American Journal of Distance Education*, 21(3), 145-164.
- Chickering, A.W., & Gamson, Z.F. (1987). Seven principles for good practices in undergraduate education. *American Association Higher Education Bulletin*, 39(7), 3-7. Retrieved from <http://www.aahea.org/articles/sevenprinciples1987.htm>.
- Clark, R. E. (1983) Reconsidering research on learning from media. *Review of Educational Research*, 53(4), 445-459.
- Cochran, J., Campbell, S., Baker, H., & Leeds, E. (2014). The Role of Student Characteristics in Predicting Retention in Online Courses. *Research In Higher Education*, 55(1), 27-48. <http://link.springer.com/article/10.1007/s11162-013-9305-8>
- Collins, D., Weber, J., & Zambrano, R. (2013). Teaching business ethics online: Perspectives on course design, delivery, student engagement, and assessment. *Journal of Business Ethics*, 125(3), 513-529. <http://dx.doi.org/10.1007/s10551-013-1932-7>
- Committee for Online Instruction (2003). What does a high quality online course look like? Retrieved 2014 from <http://www.csuchico.edu/tlp/resources/rubric/rubric.pdf>
- Dahlstrom, E. & Bichsel, J.. ECAR Study of Undergraduate Students and Information Technology, 2014. Research report. Louisville, CO: ECAR, October 2014. Retrieved from <http://www.educause.edu/ecar>

- Dennen, V.P., Darabi, A.A. and Smith, L.J. (2007). Instructor-learner interaction in online courses: The relative perceived importance of particular instructor actions on performance and satisfaction. *Distance Education*, 28(1), 65-79.
- Diaz, J. (2015, October 16). California facing severe shortage of college graduates. *San Francisco Chronicle*. Retrieved from <http://www.sfchronicle.com/opinion/diaz/article/California-facing-severe-shortage-of-college-6575197.php>
- Dietz-Uhler, B., & Hurn, J.E. (2013). Strategies for engagement in online courses: Engaging with the content, instructor, and other students. *Journal of Teaching and Learning with Technology*, 2(1), 62-65. Retrieved from <http://jotlt.indiana.edu/article/view/3294>
- Fetzner, M. (2013). What Do Unsuccessful Online Students Want Us To Know?. *Online Learning: Official Journal Of The Online Learning Consortium*, 17(1). Retrieved from <http://olj.onlinelearningconsortium.org/index.php/jaln/article/view/319>
- Gallien, T. & Oomen-Early, J. (2008). Personalized Versus Collective Instructor Feedback in the Online Courseroom: Does Type of Feedback Affect Student Satisfaction, Academic Performance and Perceived Connectedness With the Instructor?. *International Journal on E-Learning*, 7(3), 463-476. Chesapeake, VA: Association for the Advancement of Computing in Education (AACE). Retrieved 2/14/15 from <http://www.professoryates.com/seu/Podcasts/Dissertation%20Research/SteveArticles11.12C/Gallien08InstructorPersonalizedFeedback.pdf>
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education*, 2 (2-3), 8-105. [http://dx.doi.org/10.1016/s1096-7516\(00\)00016-6](http://dx.doi.org/10.1016/s1096-7516(00)00016-6)
- Garrison, D. R., Cleveland-Innes, M., & Fung, T. S. (2010). Exploring causal relationships among teaching, cognitive and social presence: student perceptions of the community of inquiry framework. *The Internet and Higher Education*, 13, 31-36.
- Hart, C. (2012). Factors associated with student persistence in an online program of study: A review of the literature. *Journal of Interactive Online Learning*, 11(1),

19-42. Retrieved February 15, 2015, from
<http://www.ncolr.org/issues/jiol/v11/n1/factors-associated-with-student-persistence-in-an-online-program-of-study-a-review-of-the-literature#.VPPjfbmb13OU>

Hew, K. F., & Cheung, W. S. (2013). Audio-based versus text-based asynchronous online discussion: Two case studies. *Instructional Sciences*, 41, 365–380. doi: 10.1007/s11251-012-9232-7

Holder, B. (2007). An investigation of hope, academics, environment, and motivation as predictors of persistence in higher education online programs. *Internet and Higher Education*, 10(4), 245-260. <http://dx.doi.org/10.1016/j.iheduc.2007.08.002>

Illinois Online Network. (2010). ION's Quality Online Course Initiative. Retrieved from <http://www.ion.uillinois.edu/initiatives/qoci/index.asp>

Jackson, L. C., Jones, S. J., & Rodriguez, R. C. (2010). Faculty actions that result in student satisfaction in online courses. *Journal of Asynchronous Learning Networks*, 14(4), 78-96. Retrieved from <http://eric.ed.gov/?id=EJ909918>

Jaggars, S.S. & Xu, D. (2013). Predicting online student outcomes from a measure of course quality. Community College Research Center.

Johnson, N. (2012). The institutional costs of student attrition. Delta Cost Project. Retrieved from <http://eric.ed.gov/?id=ED536126>

Joo, Y. J., Lim, K. Y., & Kim, E. K. (2011). Online university students' satisfaction and persistence: Examining perceived level of presence, usefulness and ease of use as predictors in a structural model. *Computers & Education*, 57(2), 1654–1664.

Keengwe, J., & Kidd, T. (2010). Towards best practices in online learning and teaching in higher education. *Journal of Online Learning and Teaching*, 6(2), 533-541.

Keil, S., & Brown, A., (2014). Distance education policy standards: A review of current regional and national accrediting organizations in the United States. *Online Journal of Distance Learning Administration*, 17 (3). Retrieved from http://www.westga.edu/~distance/ojdla/fall173/keil_brown173.html

- Kranzow, J. (2013). Faculty leadership in online education : Structuring courses to impact student satisfaction and persistence. *Merlot Journal of Online Learning and Teaching*, 9(1), 131-139. Retrieved from http://jolt.merlot.org/vol9no1/kranzow_0313.htm
- Kuo, Y., Walker, A.E., Schroder, K.E.E., & Belland, B.R. (2014). Interaction, internet self-efficacy, and self-regulated learning as predictors of student satisfaction in online education courses. *Internet and Higher Education*, 20, 35-50. <http://dx.doi.org/10.1016/j.iheduc.2013.10.001>
- Lear, J. L., Isernhagen, J. C., LaCost, B. A., & King, J. W. (2009). Instructor presence for web-based classes. *The Delta Pi Epsilon Journal*, 51(2), 86–98.
- Lee, J. (2010). Online support service quality, online learning acceptance, and student satisfaction. *Internet and Higher Education*, 13(4), 277-283. <http://dx.doi.org/10.1016/j.iheduc.2010.08.002>
- Lee, S.J., Srinivasan, S., Trail, T., Lewis, D., & Lopez, S. (2011). Examining the relationship among student perception of support, course satisfaction, and learning outcomes in online learning. *Internet and Higher Education*, 14(3), 158-163. <http://dx.doi.org/10.1016/j.iheduc.2011.04.001>
- Lloyd, S.M., Byrne, M.M., and McCoy, T.S. (2012). Faculty-perceived barriers of online education. *MERLOT Journal of Online Learning and Teaching*. 8(1).Retrieved from http://jolt.merlot.org/vol8no1/lloyd_0312.pdf
- Major, C. (2010). Do virtual professors dream of electric students? University faculty experiences with online distance education. *Teachers College Record*, 112(8), 2154-2208. Retrieved from http://jolt.merlot.org/vol8no1/lloyd_0312.pdf
- Martinez, M. (2003). High attrition rates in e-learning: Challenges, predictors, and solutions. *The E-Learning Developers Journal*, July, 1-9. Retrieved from <http://www.elearningguild.com/pdf/2/071403MGT-L.pdf>
- McLawn, R., & Cutright, M. (2012). Instructor learning styles as indicators of online faculty satisfaction. *Educational Technology & Society*, 15(2), 341-353. <http://dx.doi.org/10.3998/jsais.11880084.0001.104>

- McQuiggen, C.. (2007). The Role of Faculty Development in Online Teaching's Potential to Question Teaching Beliefs and Assumptions. *Online Journal of Distance Learning Administration*, 10 (3). Retrieved from <http://www.westga.edu/~distance/ojdla/fall103/mcquiggan103.htm>
- McQuiggen, C. (2012). Faculty development for online teaching as a catalyst for change. *Journal of Asynchronous Learning Networks*, 16 (2), 27–61.
- Meyer, K. A. (2002). Quality in distance education: Focus on on-line learning. In A.J. Kezar (Ed.), *ASHE-ERIC Higher Education Report* (Vol. 29, pp. 1-134). Hoboken, NJ: Jossey Bass.
- Middle States Commission on Higher Education (MSCHE) (2011). Distance Education Programs. Interregional Guidelines for the Evaluation of Distance Education (Online Learning). Retrieved from <http://www.msche.org/publications/Guidelines-for-the-Evaluation-of-Distance-Education-Programs.pdf>
- Moore, J.C. (2005). The sloan consortium of quality framework and the five pillars. *Journal of Asynchronous Learning*. Retrieved from <http://tinyurl.com/o5acge5>
- Moore, J.C. (2012). A synthesis of sloan-c effective practices, December 2011. *Journal of Asynchronous Learning Networks*, 16(1), 91-115. Retrieved from <http://eric.ed.gov/?id=EJ971042>
- Morris, L. V., Xu, H., & Finnegan, C. L. (2005). Roles of faculty in teaching asynchronous undergraduate courses. *Journal of Asynchronous Learning Networks*, 9(1), 65-82.
- Mortagy, Y. & Boghikian-Whitby, S. (2010). A longitudinal comparative study of student perceptions in online education. *Interdisciplinary Journal of E-Learning and Learning Objects*, 6(1), 23-44. Informing Science Institute.
- Nash, R. D. (2005). Course completion rates among distance learners: Identifying possible methods to improve retention. *Online Journal of Distance Learning Administration*, 8(4). Retrieved from <http://www.westga.edu/~distance/ojdla/winter84/nash84.htm>

- NCES (2014). Fast facts. Graduation rates. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=40>
- NCES, (2014). Institutional retention and graduation rates for undergraduate students. Retrieved from http://nces.ed.gov/programs/coe/indicator_cva.asp
- Noel-Levitz Corporation (2007). Web site retrieved January, 20 2007. https://www.noellevitz.com/NR/rdonlyres/8F7A812B-C791-452D-AFAC-54C536B-BEB70/0/06ONLINE_report.pdf
- Norton, P. & Hathaway, D. (2008). Exploring Two Teacher Education Online Learning Designs: A Classroom of One or Many? *Journal of Research on Technology in Education*, 40(4), pp. 475-495.
- Obama, B. (2009). Remarks of President Barack Obama. Address to Joint Session of Congress. Retrieved from <https://www.whitehouse.gov/the-press-office/remarks-president-barack-obama-address-joint-session-congress>
- Pagliari, L., Batts, D., & McFadden, C. (2009). Desired versus actual training for online instructors in community colleges. *Online Journal of Distance Learning Administration*, 12 (4). Retrieved from <http://www.westga.edu/~distance/ojdl/winter124/pagliari124.html>
- Patterson, B., & McFadden, C. (2009). Attrition in online and campus degree programs. *Online Journal of Distance Learning Association*, 12(2). Retrieved from <http://www.westga.edu/~distance/ojdl/summer122/patterson112.html>
- QOLT evaluation instruments. (2016) Retrieved from <http://courseredesign.csuprojects.org/wp/qualityassurance/qolt-instruments/>
- QOLT Program Background. (2014). Retrieved from <http://courseredesign.csuprojects.org/wp/qolt/>
- Quality Matters: Rubric. Retrieved from <https://www.qualitymatters.org/rubric>
- Raisman, N.A. (2013). The cost of college attrition at four-year colleges & universities. An analysis of 1669 US institutions. Retrieved from <http://tinyurl.com/orx8avz>

- Ralston-Berg, P. (2009). What makes a quality online course: The student perspective? 24th Annual Conference on Distance Teaching and Learning. Madison, WI. <http://www.slideshare.net/plr15/what-makes-a-quality-online-course-the-student-perspective-1829440>
- Reily, J.R., Vandenhouten, C., & Galleagher-Lepak, S., & Ralston-Berg, P. (2012). Faculty development for e-learning: A multi-campus community of practice (cop) approach. *Journal of Asynchronous Learning Networks*, 16(2), 99-110.
- Roman, T., Kelsey, K., & Lin, H. (2010). Enhancing online education through instructor skill development in higher education. *Online Journal of Distance Learning Administration*, 13(4). Retrieved from http://www.westga.edu/~distance/ojdl/winter134/roman_kelsey134.html
- Schaeffer, C.E. & Konetes, G.D. (2010). Impact of learner engagement on attrition rates and student success in online learning. *International Journal of Instructional Technology & Distance Learning*. 7(5). Retrieved 2/15/15 from http://itdl.org/Journal/May_10/index.htm
- Schell, G.P. & Janicki, T.J. (2013). Online course pedagogy and the constructivist learning model. *Journal of the Southern Association of Information Systems*, 1(1), <http://dx.doi.org/10.3998/jsais.11880084.0001.104>
- Shea, P., & Bidjerano, T. (2009). Community of inquiry as a theoretical framework to foster “epistemic engagement” and “cognitive presence” in online education. *Computers & Education*, 52, 543–553.
- Stanford-Bowers, D.E. (2008). Persistence in online classes: A study of perceptions among community college stakeholders. *MERLOT Journal of Online Learning and Teaching*, 4(1), 37-50. Retrieved from <http://jolt.merlot.org/vol4no1/stanford-bowers0308.htm>
- Stewart, C., Bachman, C., & Johnson, R. (2010). Faculty leadership in online education : Structuring courses to impact student satisfaction and persistence. *Merlot Journal of Online Learning and Teaching*, 6(2), 367-379. Retrieved from http://jolt.merlot.org/vol6no2/stewart_0610.htm

- Sutton, S.C., & Nora, A. (2008). An exploration of college persistence for students enrolled in web-enhanced courses: A multivariate analytic approach. *Journal of College Student Retention: Research, Theory and Practice*, 10(1), 21-37. <http://dx.doi.org/10.2190/CS.10.1.c>
- Swanson, A., Davis, B., Parks, O., Atkinson, S., Forde, B., & Choi, K. (2015). Student engagement, e-connectivity, and creating relationships in the online classroom: emerging themes. *Instructional Technology*, 66. Retrieved from http://www.itdl.org/Journal/Jan_15/Jan15.pdf#page=70
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125. Retrieved from <http://www.jstor.org/stable/1170024>
- Tirrell, T., & Quick, D. (2012). Chickering's seven principles of good practice: Student attrition in community college online courses. *Community College Journal of Research and Practice*, 36(8), 580-590. doi: 10.1080/10668920903054907
- Twigg, C. A. (2001). Quality assurance for whom? Providers and consumers in today's distributed learning environment. Center for Academic Transformation, Rensselaer Polytechnic Institute
- Unal, Z., Unal, A. & Bodur, Y. (2013). The Student Perspective on Application of Quality Matters Rubric on Online Course. In R. McBride & M. Searson (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2013* (pp. 1099-1105). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE). Retrieved March 17, 2015 from <http://www.editlib.org/p/48264>.
- Vaill, A.L. & Testori, P.A. (2012). Orientation, mentoring and ongoing support: A three-tiered approach to online faculty development. *Journal of Asynchronous Learning Networks*, 16(2), 111-119. Retrieved from <http://tinyurl.com/kwq93yr>
- Willging, P., & Johnson, S. (2009). Factors that influence students' decision to dropout of online courses. *Journal of Asynchronous Learning Network*, 13(3), 115-127.

- Xu, D. & Jaggars, S.S. (2013). Adaptability to online learning: Difference across types of students and academic subject areas. CCRC Working Paper No. 54. Retrieved from <http://ccrc.tc.columbia.edu/publications/adaptability-to-online-learning.html>
- Young, A., & Norgard, C. (2006). Assessing the quality of online courses from the students' perspective, *The Internet and Higher Education*, 9(2), 107-115, ISSN 1096-7516, <http://dx.doi.org/10.1016/j.iheduc.2006.03.001>.
- Zacharis, N. Z. (2011). The effect of learning style on preference for web-based courses and learning outcomes. *British Journal of Educational Technology*, 42, 5, 790–800. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.2010.01104.x/full>
- Zhang, J., & Walls, R. (2006). Instructors self-perceived pedagogical principle implementation in the online environment. *Quarterly Review Of Distance Education*, 7, 413–426.