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Student Perceptions of Connectedness in Online Courses

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COLLEGE OF EDUCATION

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2015

Abstract

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MBA, Walden University, 2007

BS, High Point University, 2005

Doctoral Study Submitted in Partial Fulfillment

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Abstract

Students who obtain college degrees have a higher earning potential and greater likelihood of employment. Although researchers have found that student enrollment and performance in online college courses has increased, attrition has also risen at a higher rate than in face-to-face courses. The problem of declining persistence in online courses at a rural community college in the Southeastern United States was addressed in this study. The community of inquiry framework was used in this qualitative case study to explore perceptions of 10 experienced online learners. The research questions were focused on students' perceptions of the roles of connectedness and student engagement as well as the techniques and strategies used to maintain connectedness. Data were collected through semistructured online audio interviews that were recorded, transcribed, open coded, and analyzed thematically. Findings indicated that students perceived the presence of engaging materials, elevated instructor presence, established social presence, and confirmed learning as promoters of cognitive presence and students' online course persistence. The resulting project consisted of a hybrid workshop series designed to enhance instructors' pedagogical practices to promote engagement and persistence in online courses. The workshop evaluation provided both formative and summative feedback from the workshop participants. The project contributes to social change through the ability of educators and program developers of online courses to garner new knowledge, as well as contributions to the continued viability of the focus institution and long-term economic stability for students.

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Dedication

I dedicate this study to the memory of my late father. His life was a testament to perseverance, despite the unending obstacles he faced. His battle taught me to fight on and work diligently to reach my goals. This is for you, Dad!

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I would like to express my sincere gratitude to Dr. Dan Cernusca and Dr. Mari Vawn Tinney for their guidance throughout the doctorate process. Their advice and assistance proved invaluable during this experience. Thank you to all of my study participants, as your candor may provide an online environment more conducive to engagement and persistence. To all of my sideline cheerleaders, including my Mom, family, friends, and doctorate colleagues, I appreciate your positive contributions throughout this process. A special thank you to my husband for his unending support. Without him, my journey would not have been possible. Finally, I wish to thank God for His grace and for the fortitude to move ahead. Onward and upward!

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Section 1: The Problem

Introduction

Earning a college degree provides a wide range of benefits for students and the communities in which they reside. First, obtaining a degree may provide a greater likelihood for employment (Baum, Ma, & Payea, 2010). Employment rates between 1990 and 2012 were higher for adults with a bachelor's degree than for adults without a bachelor's degree (Aud et al., 2013). An additional benefit of higher education includes the opportunity for higher earning potential (Baum et al., 2010). In 2008, the median earnings for individuals with a college degree were 74-79% higher than earnings for persons with a high school diploma (Baum et al., 2010). In 2012, estimated lifetime earnings for a high school graduate were $1.4 million compared to those earning a bachelor's degree at $2.4 million (Julian, 2012).

In addition to the opportunity for higher earning potential and likelihood of employment, adults who obtain a college degree are less likely to rely on social support from federal, state, and local governments than adults without college degrees (Baum et al., 2010). As the research illustrates, obtaining a college degree may contribute to sustainability for both the student and his or her family.

The impact of higher education is also evident within the local community as individuals with higher education are more likely to volunteer within their communities than those with less education. In 2008 and 2009, adults across the United States who

earned a bachelor's degree volunteered an average of 54 hours versus the 48 hours of time donated by those with high school diplomas (Baum et al., 2010).

As the advantages of education continue to accumulate, the needs of students desiring to earn a college degree are also changing. The landscape for earning a college degree is evolving to accommodate the needs of learners. The online environment is attractive to learners because it affords the opportunity to access their courses at any time and in any place (U.S. Department of Education, 2010). The online environment also offers flexibility to individuals who are employed full time or have an ambulatory disability preventing their attendance in traditional courses (Radford, 2011). During the last decade, continued evolution of technology within online courses now affords students the opportunity to interact with multiple forms of instructional media as well as join their classmates and instructors in synchronous and asynchronous communications (U.S. Department of Education, 2010).

The online environment's popularity and ease of access also provides for increased student performance. According to a report produced by the U.S. Department of Education (2010), students taking online courses performed better than their counterparts in face-to-face courses. However, the online environment does have shortcomings. As student performance and enrollment in online courses have increased, attrition has also risen at a higher rate than in face-to-face courses (Allen & Seaman 2011; Atchley, Wingenbach, & Akers, 2013; Moody, 2004). Issues that may contribute to attrition include, among others, a reduced sense of online community, lack of personal contact, unresponsiveness of instructors, low levels of comfort with technology, and

overall course design (Aragon & Johnson, 2008; Moody, 2004; Perry, Boman, Care, Edwards & Park, 2008). Understanding the reasons why students persist in online courses may provide information on establishing an online environment conducive to student engagement, learning, and success while combatting attrition at the community college level.

Definition of the Problem

The growth of online courses has significantly impacted the manner in which instructors deliver online course content in higher education. Online student enrollment accounted for only 9.7% of higher education enrollment in 2002. However, by 2006, nearly 20% of students were enrolled in online courses (Drouin & Vartanian, 2010). In 2010, online enrollment totaled more than six million students in the United States alone (Allen & Seaman, 2011). As online course enrollments have grown, so too have the concerns related to methods used to foster student engagement and promote student success. Researchers have proposed that establishing a sense of connectedness in online courses will increase both student engagement and student persistence (Drouin & Vartanian, 2010; Liu, Magjuka, Bonk, & Lee, 2007).

In this study, I will focus on one North Carolina community college, which I will refer to as NCCC. The retention rate, as measured by continued reenrollment in subsequent courses, for online courses at NCCC was only 70% in 2012 (Director of Institutional Research, personal communication, July 23, 2012). This low retention rate prompted my investigation into student perceptions of connectedness in online courses at NCCC. While the present retention rate aligns with the 65% retention rate standard set by

the North Carolina Community College System (NCCCS), the number of returning students continues to decline throughout the region (NCCCS, 2012). Eight community colleges within the region have reported rates from 61% to 64%. This performance standard reflects the number of students who "will graduate, remain enrolled at the same college, or transfer to a university or another community college one year later" (NCCCS, 2012, p. 23).

Reviewing only the number of returning students also reveals a decline in the number of students returning to NCCC after their first year. During the 2008-2009 academic year, 53% of students returned to complete their degrees. In comparison, in the 2010-2011 academic year, less than 50% of students returned to continue their education (NCCCS, 2012). Data for the remaining 57 colleges in the North Carolina Community College System also indicate a decline in the percentage of returning students, ranging from a minimum of 31% to a maximum of 52% of returning students (NCCCS, 2012).

In addition to the loss of students after the first year, according to the school's Office of Institutional Research, enrollment at the NCCC has decreased from 4,150 students during the 2008-2009 academic year to an enrollment of 3,531 during the 2011-2012 academic year. In response to the reduction in enrollment and retention, the local community college formed retention committees to examine methods to retain students, including new policies aimed at ensuring student success. The focus college implemented these policies in the Fall 2013 semester, which involved an early alert system devised to identify students who may potentially withdraw from courses, as indicated by the Student Services Office.

Distance education programs at the NCCC accounted for 471 of the 2,800 students enrolled for the Fall 2012 semester, according to the Office of Institutional Research. As enrollment in online courses accounts for a large portion of enrollment at NCCC, ensuring the persistence of current and future students is vital to their continued success. In his study, I addressed the problem of online students' persistence at NCCC. This study was needed because success in online courses influences the community college's program sustainability, student engagement, and retention of course material, as well as the continual receipt of federal and state funding.

Rationale

Evidence of the Problem at the Local Level

As I have illustrated in the previous section, retention rates continue to be a problem at the target local community college level. Retention is also an issue of national significance as retention rates at 2-year public institutions remained low, at a rate of 59%, while 4-year institutions retain students at a rate of 79% (Aud et al., 2013). In addition, only 1 in 4 students graduate from community colleges, as compared to a graduation rate of 3 out of 5 at 4-year institutions (Schneider & Yin, 2012). Student persistence continues to remain a top concern for community college systems.

In addition to lower rates of returning students, a national survey conducted at 2,500 higher education colleges and universities in the United States revealed that for-profit programs also reported online enrollment declines of 19% from Fall 2010 to Fall 2011 (Allen & Seaman, 2011). While this percentage seems low at first glance, it represents an enrollment decline that is more than double that for private nonprofit

institutions and public institutions, at 7% and 5% respectively (Allen & Seaman, 2011). Considering that 31% of students now take at least one online course (Allen & Seaman, 2011) and 12% of students now choose distance education classes (Radford, 2011), a loss of student enrollment may impede growth of certain online programs.

A decrease in retention also represents a reduction in graduation rates. The graduation rate for students completing their 2-year degree within 1.5 times of the normal required time is 20% for 2-year public institutions, whereas students at private for-profit 2-year institutions graduate at a rate of 62% (Aud et al., 2013). Therefore, addressing retention at the community college level may improve completion rates.

When retention rates decrease, community colleges also suffer economically, as their major revenues come from tuition and fees. Currently, about 72% of the revenue at 2-year public institutions comes from student tuition and fees (Aud et al., 2013). In addition to revenues earned at the local community college, the United States as a nation spends $29,201 a year on FTE (full-time equivalency) student education at the postsecondary level (Aud et al., 2013). The number of FTEs at a community college equates to the amount of government funding issued to the college. Therefore, if students do not persist with their education, the college loses federal dollars needed to sustain the organization. Retention in online courses also impacts organizational planning, as 65.5% of institutions indicated that online education is a critical part of their long-term strategy (Allen & Seaman, 2011).

Finally, decreasing the number of students who drop out of community colleges has financial benefits for the would-be graduates, government, and community

(Schneider & Yin, 2012). For example, with 5,744 dropouts in 2008-2009, the state of North Carolina would gain an additional $16,083,000 in federal tax and $7,761,000 in state tax if those students had continued their study (Schneider & Yin, 2012). In addition to lost tax revenues for North Carolina, these same 5,744 dropouts collectively lost potential salary gains of $74,672,000 annually (Schneider & Yin, 2012).

The national literature associated with retention indicates that investigating retention at the community college level can aid in increasing graduation rates, assist in sustaining online programs, promote economic growth and sustainability for community colleges, and provide financial benefits for students, as well as state and local governments. The next section will reinforce these findings.

Evidence of the Problem from the Professional Literature

The popularity of online courses has grown exponentially within the past 9 years (Allen & Seaman, 2011). The virtual environment has posed a new set of challenges related to student engagement and persistence in online courses (Rovai, 2002). Rising attrition rates are an issue confronting online educators and administrators in educational and corporate settings (Liu et al., 2007). Researchers also confirmed that students enrolled in online courses complete courses at a lower rate than students enrolled in traditional courses (Atchley, Wingenbach, & Akers, 2013).

A literature review of attrition and persistence in online courses revealed that students either persist or withdraw based upon contributing factors in or around their environment. In the following sections, I elaborate on these factors and discuss how they facilitate or hinder persistence in online courses.

Flexible environment and time management. Taking online courses during the first fall of enrollment is a strong predictor of student persistence from fall-to-fall semesters (Fike & Fike, 2008). Fike and Fike (2008) discovered that students who took Internet courses in the fall were more likely to enroll in online courses for the next term and the following year. The added convenience of taking online classes and balancing education with work and family commitments also facilitates student persistence in online courses (Ivankova & Stick, 2007; Müller, 2008). The flexibility of the online environment affords students the opportunity to complete assignments day or night and manage their time in accordance with their daily activities (Jaggars, 2014; Müller, 2008; Zembylas, 2008). In addition to the flexibility of the online environment, self-disciplined students who are conscious of deadlines also viewed their online education as a positive learning experience (Müller, 2008; Zembylas, 2008). Self-discipline and time management also contribute to academic performance, as students who spent more time on their course assignments had better grades than those who spent less time (Romero & Barberá, 2011). Students who took charge of their online learning also experienced greater success (Robinson & Hullinger, 2008; Wang, Shannon, & Ross, 2013).

Just as the flexibility of the online environment promotes persistence, it can also hinder persistence in the form of student procrastination and/or information overload. Students who reported withdrawing from online courses admitted falling behind in their assignments (Clay, Rowland, & Packard, 2009; Fetzner, 2013) and experienced difficulty managing their time (Fetzner, 2013; Nichols, 2010; Willging & Johnson, 2009). Students in this group also noted that assignments were too time consuming or difficult (Calvin &

Freeburg, 2010; Nichols, 2010; Yuen, Lee, & Tsang, 2011), and/or reported that they were overloaded with information to digest within the online course (Nichols, 2010).

Motivation, interest, and course relevance. Intrinsic motivation also contributes to students' desire to complete online courses (Baxter, 2012; Ivankova & Stick, 2007; Youngju, Jaeho, & Taehyun, 2013). The goal of attaining a higher degree provides motivation to persist in online courses (Ivankova & Stick, 2007). Continual improvement in online courses also promotes a sense of pride and accomplishment (Baxter, 2012; Zembylas, 2008). The value of having a degree can also outweigh student dissatisfaction and propel a student toward completion (Carroll, Ng, & Birch, 2009). Finally, students who have a clear commitment to their career goals, along with realistic expectations, are also more likely to persist in online courses; whereas students without such goals are more likely to withdraw (Bambara, Harbour, Davies, & Athey, 2009; Carroll et al., 2009).

Relevance of an online course to a student's future goals also facilitated learner persistence and motivation (Hyoseon, Yekyung, Insung, & Latchem, 2013; Müller, 2008; Park & Choi, 2009). Students reported being more engaged in courses with relevant content than courses they perceived as irrelevant (Bambara et al., 2009; Baxter 2012; Müller, 2008; Owens, Hardcastle, & Richardson, 2009; Yuen et al., 2011). Accordingly, students became disengaged and/or decided to withdraw from courses they did not deem as beneficial to their future aspirations (Carroll et al., 2009; Müller, 2008; Park & Choi, 2009; Pittenger & Doering, 2010). Additionally, the lack of student interest in the online content is a barrier to student learning (Bambara et al., 2009; Nichols, 2010; Yuen et al.,

2011). The addition of real-world scenarios that promote the application of learned material can enhance the relevance of an online course (Park & Choi, 2009; Pittenger & Doering, 2010).

Life circumstances. Despite students' motivation and desire to succeed in online courses, life circumstances can still impede their persistence. Scheduling time to complete assignments while balancing multiple responsibilities, work conflicts and/or commitments, health issues, and other personal problems were reported as reasons for non-completion (Aragon & Johnson, 2008; Fetzner, 2013; Hyoseon, et al., 2013; Nichols, 2011; Park & Choi, 2009; Perry et al., 2008). Students also reported changes in career path as a barrier to persistence; which, in some cases, made the content of the program no longer pertinent to their current situation (Perry et al., 2008; Yuen et al., 2011).

Academic factors. In addition to motivation, a student's grade point average (GPA) is a significant predictor of persistence in online courses (Aragon & Johnson, 2008; Harrell & Bower, 2011). A higher GPA is associated with fewer student withdrawals in online courses (Harrell & Bower, 2011). Students with a GPA of less than 2.00 completed fewer classes than students with higher GPAs (Aragon & Johnson, 2008). Academic preparedness may influence students with higher GPAs to complete additional courses (Aragon & Johnson, 2008; Harrell & Bower, 2011). Furthermore, passing an online course had a positive impact on future enrollment and potential success in additional online courses (Boston, Gibson, & Ice, 2011; Wang et al., 2013; Yuen et al., 2011). For example, students who received an F or a W as their final course grade were less likely to re-enroll in online courses (Boston et al., 2011).

As a higher GPA may increase the likelihood of student persistence, the number of courses and hours in which a student enrolls may also predict retention. Fike and Fike (2008) discovered that enrolling in more hours during the first fall semester, and completion of these hours, positively predicted retention. Conversely, withdrawing from semester hours equated to decreased persistence (Fike & Fike, 2008). Boston et al. (2011) also found that students taking more online courses during their academic program are less likely to withdraw.

Prior online learning experience also strongly correlated with success and retention in future online courses (Hachey, Wladis, & Conway, 2012). Students who successfully completed one online course performed better in future online courses than those taking online courses for the first time (Hachey et al., 2012). Hachey et al. (2012) also discovered that prior non-success in online courses decreased the chances for success in future online courses. Fetzner (2013) found that unsuccessful students were less likely to enroll in future online courses. Quality participation and contribution in an online course also influenced student persistence (Finnegan, Morris, & Lee, 2009; Nagel, Blignaut, & Cronje, 2009). Online students who completed their courses participated in the online course two to three times more frequently than those who withdrew from the course (Finnegan et al., 2009).

Preparing students to enter college level courses is also associated with student retention. Successful completion of developmental courses at the community college level strongly correlates with student persistence from fall-to-fall semesters (Fike & Fike, 2008). As community colleges have open-door policies, they are more likely to enroll

underprepared students than universities (Fike & Fike, 2008). For those students requiring developmental courses, successful completion of developmental mathematics and reading resulted in higher probability of retention (Fike & Fike, 2008).

Financial aid. Policies and procedures within the college institution also affect student retention. Receipt of financial aid was a positive predictor of student retention from fall-to-fall semesters (Fike & Fike, 2008). Through their review of the literature, Fike and Fike (2008) postulated that students with greater financial need required financial aid to persist. While the researchers discovered that financial aid was a predictor of student persistence, they noted that a sufficient model does not exist to effectively explain the reasoning behind this finding (Fike & Fike, 2008).

Learning style, preferences, and course design. A student's learning style and preferences can also facilitate or hinder his or her persistence in online courses. Online courses rely heavily on written versus oral communication, making the environment more conducive to learners who do not require spoken directions (Harrell & Bower, 2011; Ivankova & Stick, 2007; Perry et al., 2008). Auditory learners, who are required to process written information in online courses, may not persist online because this environment is incongruent with their learning style (Harrell & Bower, 2011; Hyoseon et al., 2013). Adding streaming video or audio files to online courses, as well as chat sessions with audio capabilities, will promote persistence for auditory learners (Harrell & Bower, 2011). Comfort with the Internet, familiarity with computers and technology, and difficulty of the subject matter also contribute to a student's persistence in an online

course (Calvin & Freeburg, 2010; Nagel et al., 2009; Owens et al., 2009; Perry et al., 2008; Yuen et al., 2011).

In addition to learning style and preferences, the overall course design can impact whether a student persists in an online course. Confusing or inaccurate directions, lack of instructor responsiveness for clarification, unavailable or hard-to-find materials, and technology issues can also impact course completion (Aragon & Johnson, 2008; Bambara et al., 2009; Clay et al., 2009; Erichsen & Bolliger, 2011; Nagel et al., 2009; Willging & Johnson, 2009). Technical issues with the Learning Management System (LMS), as well as lack of support from technical staff, also contributed to student withdrawal (Aragon & Johnson, 2008; Willging & Johnson, 2009).

Meaningful interactions and connectedness. Meaningful interactions within an online course may also prompt students to persevere with that course. Students noted that meaningful interactions include prompt instructor responses, constructive feedback, engaging with the content, and development of a sense of community in online courses (Arbaugh & Benbunan-Fich, 2007; Ivankova & Stick, 2007; Morris, 2011; Owens et al., 2009). Increased interactions with the instructor in an online environment also promoted higher student learning perceptions (Arbaugh & Benbunan-Fich, 2007; Dixson, 2010). Student engagement increased through greater interactions with other students (Dixson, 2010). Students also appreciated the option to make connections with other students to expand their learning opportunities (Zembylas, 2008) and promote progression (Baxter, 2012). Students exhibited more effort in online courses that they perceived as engaging and meaningful (Yang, Cho, Mathew, & Worth, 2011). Successful integration within the

online community, as well as repeated interactions, also promoted student success and course completion (Castaño-Muñoz, Sancho-Vinuesa, & Duart, 2013; Nagel et al., 2009).

Conversely, lack of meaningful interactions with students and instructors in online courses prompted student feelings of isolation and/or withdrawal from the course (Bambara et al., 2009; Erichsen & Bolliger, 2011; Owens et al., 2009; Willging & Johnson, 2009). Increased response time from instructors further alienated students and contributed to their withdrawal from online courses (Bambara et al., 2009). The opportunity to participate in synchronous and asynchronous discussions with the instructor and peers also contributed to overall student satisfaction and engagement, while facilitating persistence in online courses (Carroll et al., 2009; Müller, 2008; Robinson & Hullinger, 2008). However, some students reported that discussion forums impeded their progress, citing reasons of intimidation, confusion, or issues with practicality of the forum (Baxter, 2012). Finally, the opportunity to connect with other students in study groups further contributed to student persistence in online courses as students encouraged each other and developed camaraderie throughout the course (Carroll et al., 2009).

Student support services. Taking advantage of student support services offered by a college also encourages student retention (Fike & Fike, 2008). Student support services, federally funded, are tasked with increasing retention of students who come from disadvantaged backgrounds (Fike & Fike, 2008). Students participating in these services meet with their advisors on a regular basis, discuss their grades, and work with the advisor to create a comprehensive plan of study (Fike & Fike, 2008). Student

orientation also proved to have a positive impact on retention (Carroll et al., 2009). During student orientation activities, students had the opportunity to meet classmates and instructors, which aided in reducing perceived distance that students felt (Carroll et al., 2009). Inadequate student support negatively impacts retention, as students expect a system to be in place to provide assistance when they encounter difficulties with the course or technology (Aragon & Johnson, 2008; Carroll, Ng, & Birch, 2009; Ivankova & Stick, 2007). Students were more likely to withdraw from an online course if they perceived that the organization was not supporting their academic success (Park & Choi, 2009). Lack of student orientation and/or tutoring programs also posed a barrier to student persistence in online courses (Calvin & Freeburg, 2010). Nichols (2011) found that while online students did not cite student support services as a determinant of persistence, they were still sensitive to the lack of support services. The students indicated this sensitivity through their suggestions for improving support services to include regular contact with students via phone (Nichols, 2011).

Support from others within the educational institution, along with support from the students' family and friends, also contributed to retention. Support from administrators, instructors, family, and peers can aid students in course completion (Müller, 2008), while the lack of this type of support increased the probability of students dropping out of online courses (Park & Choi, 2009). The existence of a supporting and encouraging online environment is also a predictor of persistence (Ivankova & Stick, 2007). Faculty can promote persistence through availability, as well as providing timely and encouraging feedback to students (Hyoseon, et al., 2013; Ivankova & Stick, 2007;

Müller, 2008). Peers can support persistence through encouragement and friendship (Ivankova & Stick, 2007; Müller, 2008). Favorable support from families throughout the educational journey also encourages persistence (Ivankova & Stick, 2007; Park & Choi, 2009).

As illustrated by aforementioned factors that hinder or promote persistence in online courses, lack of connectedness is a contributing factor that hinders student persistence. Connectedness, for the purpose of online courses, means that students feel inclusion and a sense of belonging (Drouin, 2008). Lack of connectedness in online courses can also contribute to feelings of isolation and disconnection (Liu et al., 2007), and this can lead to decreased student satisfaction (Drouin, 2008) and diminished success in online courses (Liu et al., 2007), increasing the likelihood that students will not persist in an online course. Moisey, Neu, and Cleveland-Innes (2008) found a positive correlation between student satisfaction and a sense of community and connectedness in online courses. Park and Choi (2009) confirmed that social interaction is a factor that influences adult learners' decisions to drop out of online courses. They also discovered that learners are less likely to drop out of online courses if they have a higher level of satisfaction. Müller (2008) found that lack of engagement in an online community was a significant barrier to persistence in online courses while meaningful interaction with faculty, peers, and course content provided students with a sense of community or connectedness. Therefore, establishing connectedness in online courses is a method for improving completion rates. Attention to connectedness is also vital given that online education is a critical component in long-term strategic plans of community colleges

(Moloney & Oakley, 2010). The purpose of my study was to examine the perceptions of online students in relation to connectedness.

Definitions

The research on connectedness and online education includes certain operative terms. For the purpose of this study, these terms are defined as follows:

Attrition: The opposite of persistence, also referred to as withdrawal from the course (Park & Choi, 2009).

Cognitive presence: The extent to which members of a community of inquiry construct meaning as a result of sustained communication (Garrison, Anderson, & Archer, 2000).

Community of inquiry: A group of individuals who purposely collaborate through critical discourse and reflection to "construct personal meaning and confirm mutual understanding" (Garrison, Cleveland-Innes, & Vaughn, n.d., p. 1).

Connectedness: Feeling that members of an online group matter to one another and have a shared commitment (Liu et al., 2007). Synonyms for connectedness include the following: sense of community (Drouin & Vartanian, 2010), sense of virtual community (Blanchard, 2007), social community (Drouin & Vartanian, 2010), inclusion (Drouin, 2008), and a sense of belonging (Rovai, 2002).

Persistence: Refers to students who continue a course and relates to factors connected with course completion (Park & Choi, 2009).

Retention: Refers to successful completion of a course and subsequent reenrollment at the community college (NCCCS, 2012).

Social presence: The ability of participants within the community of inquiry to illustrate their individual characteristics, resulting in their appearance as a real person (Garrison et al., 2000).

Teaching presence: Describes the ability of a teacher to design and develop learning activities that facilitate cognitive and social presence, which are necessary to form a community of inquiry and promote meaningful learning (Garrison et al., 2000).

Significance

Studying student perceptions of connectedness in online courses will provide a means to assess the influence of a sense of connectedness in online courses at the local community college. In addition, examining the role that that connectedness plays in student completion may provide support for faculty through development of an online course environment conducive to local student engagement, success, and persistence. Based upon the discussed research findings, providing an engaging online environment will also increase course satisfaction and will promote social change for students through long-term economic stability achieved as a result of attaining a college degree. Social change for the institution will be the result of new knowledge for educators and program developers on the importance of establishing and maintaining connections in online courses.

Research Questions

Low retention rates at NCCC underscore the necessity to investigate student perceptions of connectedness in online courses. Prior research on persistence in online courses illustrates the importance of establishing connectedness in online courses as a

facilitator of student persistence. Establishing a virtual community is necessary to combat student isolation, increase student engagement, and promote satisfaction with online courses.

While prior research has identified factors associated with persistence in online courses, the social aspects of online learning require further investigation. Studying student perceptions of connectedness through a qualitative approach will provide a more in-depth view of online persistence and aid in understanding the role of virtual community and its significance for instructors, students, and content developers. The goal of this study is to identify factors within the community of inquiry framework that enhance student persistence in fully online courses.

The guiding research questions (RQ) that will aid in determining a project to address the study's findings include:

RQ1. How do students who persisted in online courses describe their desire for connectedness and its role in their success?

RQ2. What methods have students who persisted in online courses used to remain engaged with the provided instructional materials (e.g. teaching presence and cognitive presence)?

RQ3. What techniques and strategies have students who persisted in online courses used to help them stay connected with their peers (e.g. social presence)?

Review of the Literature

Theoretical Framework

The community of inquiry (CoI) framework focuses on the creation of a quality learning experience within the context of online courses (Garrison et al., 2000). The CoI framework centers on students' ability to form satisfying relationships to "engage in discourse that is foundational to learning" (Shea & Bidjerano, 2008, p. 343). The CoI framework consists of three prerequisites necessary for establishing a community within a virtual learning environment: cognitive presence, social presence, and teaching presence (Garrison et al., 2000). Cognitive presence refers to the construction of meaning through continuous communication. It brings the elements of knowledge and meaning to the community while facilitating learning. Cognitive presence is also a core component of critical thinking.

Cognitive presence alone is not sufficient to support a learning community, but when combined with social presence, cognitive presence assists in the creation of a learning community capable of higher-order thinking (Garrison et al., 2000). Social presence builds on the fact that students have the ability to project their personal characteristics and to identify with the community. It allows students to form trust while developing interpersonal relationships within the community. In addition, social presence supports cognitive presence and acts as a direct contributor to student success when combined with the affective goals of group interaction and course enjoyment. Teaching presence involves the design and facilitation of the educational experience. It brings the element of informed leadership to the community. Teaching presence also serves to

reinforce cognitive and social presence to realize learning outcomes (Garrison et al., 2000).

The need for social interaction in a virtual community is evident in the CoI model, and this theoretical model identifies the importance of social presence, cognitive presence, and teaching presence in achieving course outcomes and retaining students. Application of the CoI model to online courses revealed that social presence, the factor in the CoI model associated with connectedness, was the most difficult presence to establish in an online course (Kumar et al., 2011). In addition, teaching presence and cognitive presence were the only elements that demonstrated a significant relationship with student learning (Arbaugh, 2008; Aykol & Garrison, 2008). However, all three presences demonstrated a significant relationship with student satisfaction (Aykol & Garrison, 2008). Finally, Arbaugh (2008), Kumar et al. (2011), and Shea and Bidjerano (2008) also confirmed the CoI model as a useful instrument for examining online courses and creating an effective and sustained learning community.

Search Strategies for Literature Review

To conduct a thorough review of the literature, I used Walden University's databases containing peer-reviewed journal articles. I conducted searches in Academic Search Complete, ERIC, Education Research Complete, PsycArticles, and the Teacher Reference Center. In addition to these sources, I searched for journal articles through the use of Google Scholar with connection to Walden Library, the Community of Inquiry Website, and finally the snowball method involving the location of journal articles

through reference lists and dissertations. During my search, I removed opinion papers and journal articles designed only to review the literature.

I scanned all references to ensure they were appropriate for my research. Boolean operators were used to ensure I received literature relevant to my search. Search words with Boolean operators included: *online courses AND persistence, online course AND retention OR attrition, online courses AND retention, online courses AND isolation, online courses AND completion, distance education AND isolation, online courses AND barriers, online courses AND success, sense of community AND online courses, sense of belonging AND online courses, inclusion AND online courses, social presence AND online courses, cognitive presence AND online courses,* and *teaching presence AND online courses*. I used these terms sequentially until I reached saturation and could not locate new significant materials.

Criteria for articles included in the literature review consisted of the following: (a) published within the last 5 years, (b) appeared in a peer-reviewed journal, and (c) related to student persistence and/or connectedness. Items excluded were (a) items not related to higher education (i.e., K-12); (b) articles pertaining fully to faculty, or other stakeholders, instead of students, (c) articles not published in English, and (d) articles not related to online courses.

Synthesis of Findings from Literature Review

Tinto (1987) argued that the secret to retaining college students is developing a community involving all students socially and intellectually. He proposed that the lack of student integration into the college community results in student departures. While

Tinto's research applies to physical college settings, his work prompted further inquiry into developing a sense of community to ensure student persistence in online college courses. The examined current literature related to connectedness and student persistence revealed the role that connectedness plays in student persistence in online courses. The remaining part of this section synthesizes the main factors associated with this issue.

The Role of Connectedness

Lack of connectedness in online courses can result in students feeling distressed, isolated, and lonely (Gallagher-Lepak, Reilly, & Killon, 2009; Kyungbin, Daehoon, Eun-Jun, & Armstrong, 2010). Through five focus group sessions involving 18 nursing students who completed two or more online courses, Gallagher-Lepak et al. (2009) discovered that online students desired a sense of community. While the students expressed feelings of isolation and disconnect due to limited face-to-face interaction, they felt a sense of connectedness through mutual exchange between faculty feedback and peers (Gallagher-Lepak et al., 2009).

Kyungbin et al. (2010) also determined that students experienced isolation and distress in online environments perceived as unfriendly. Using semistructured interviews to gain an understanding of the perceptions of three Asian students at a Midwestern university, the researchers discovered that miscommunications in online forums, language limitations, and the asynchronous nature of online communications served as major barriers for forming a sense of community (Kyungbin et al., 2010). These studies illustrate the importance of establishing methods for developing connectedness in online courses.

Establishing connectedness in online courses can contribute to student satisfaction, enhance learning engagement, and reduce feelings of isolation, while facilitating student success and completion (Drouin, 2008; Liu et al., 2007). For example, Liu et al. (2007) utilized a case study with semistructured interviews, along with a correlational analysis, of 28 faculty members and 20 second-year MBA students to analyze the significance of community. Their study revealed: (a) a positive relationship between a sense of community, learning engagement, satisfaction, and learning outcomes; (b) a sense of belonging reduced feelings of isolation and decreased attrition in online courses; and (c) a sense of belonging positively related to instructor's presence (Liu et al., 2007).

Similar to the findings of Kyungbin et al. (2010), participants in this study also expressed the desire for synchronous communication as a method to promote a sense of community. Along the same lines, Drouin (2008) researched the significance of a sense of community by administering an online survey to 71 undergraduate students from three online psychology course sections. Her findings confirmed the conclusions of Liu et al. (2007), as she discovered that a sense of community significantly related to course satisfaction (Drouin, 2008). While Drouin (2008) confirmed a relationship exists between course satisfaction and a sense of community, she did not discover a link between a sense of community and retention of online students. Instead, she found that student achievement and intent to enroll in future courses were not related to the development of a sense of community.

Just as some researchers found that students desire connectedness, others found that students did not desire a sense of community. Drouin and Vartanian (2010) engaged 119 online students and 79 face-to-face students through an end-of-course survey that included Rovai's Classroom Community Scale, which measures sense of classroom community and connectedness. The researchers found that students in seated courses reported a higher level of connectedness, while online students were less likely to express a desire for a sense of community (Drouin & Vartanian, 2010). In addition, they found that online students established connectedness via other methods, such as developing camaraderie with coworkers (Drouin & Vartanian, 2010). However, this research study was limited to psychology courses only; students in other disciplines reported the desire for connectedness in their online courses (Gallagher-Lepak et al., 2009; Kyungbin et al., 2010; Liu et al., 2007).

Connectedness Through Social Presence

The desire for an online community, as well as feelings of isolation and loneliness, illustrate the importance of fostering a sense of community in online courses. To combat these feelings, researchers suggest establishing social presence in online courses (Kehrwald, 2008). Through the use of a collective case study involving 20 online postgraduate students at an Australian university, Kehrwald identified social presence as essential to online learning as it enhanced communication, served to combat students' feelings of loneliness and isolation, and enriched learning experiences.

Social presence can also enhance student success and course completion, contribute to the development of a sense of community, and promote perceived learning

in online environments (Cobb, 2011; Liu, Gomez & Yen, 2009; Mayne & Qiang, 2011). Liu et al. (2009) conducted a predictive quantitative study involving 108 online community college students and ascertained that social presence served as a significant predictor of course retention and course grade, as well as increased the likelihood that students would complete an online course (Liu et al., 2009). In addition, Mayne and Qiang (2011) conducted a two-group comparison study that utilized an online social presence questionnaire to examine the experiences of 26 master's degree students in online courses (Mayne & Qiang, 2011). They discovered that students assigned to a social presence section expressed greater perceptions that their online goals were met, and were more likely to continue taking online courses as a result (Mayne & Qiang, 2011). Cobb's (2011) correlational study, which included 143 online students in nursing courses, further indicated that social presence was highly correlated with perceived comfort and learning within an online course, as well as a sense of community (Cobb, 2011). It is important to note that participants in Cobb's study developed a sense of community through synchronous discussions. This further confirms the assertions by other researchers that synchronous discussions aid in establishing community (Kyungbin et al. 2010; Liu et al., 2007). However, Cobb (2010) postulated that establishing a sense of community in online courses may be of greater importance to learning than the medium utilized for course communications. The studies conducted by Cobb (2010) and Liu et al. (2007) also support original findings by Garrison et al. (2000), which posited that social presence directly contributes to educational success.

Connectedness Through Teaching and Social Presence

Establishing an effective combination of teaching presence and social presence in online courses can foster learning engagement while promoting a sense of community and diminishing feelings of isolation (Dixson, 2010; Tucker, 2012). Dixson (2010) utilized a self-developed online engagement scale to examine the online learning perceptions of 186 students from six Midwestern universities. She found that the level of both instructor presence and social presence significantly correlated with student engagement. Dixson (2010) also discovered that course activities, such as discussion forums and current event assignments, served to increase student engagement through interaction with course content. Like Dixson (2010), Tucker (2012) also sought to understand methods to establish social presence and student engagement when using synchronous learning technology. She utilized the social presence section of the CoI instrument and synchronous discussion data to examine perceptions of 93 online students at a large urban university (Tucker, 2012). The researcher discovered that synchronous communication alleviated isolation in online courses and increased social presence while affording the instructor the opportunity to promote a sense of community through teaching presence (Tucker, 2012). Her findings further support the assertion that synchronous communication fosters the development of a sense of community through social presence (Cobb, 2011; Kyungbin et al., 2010; Liu et al., 2007).

Social presence and teaching presence can also contribute to increased student persistence, course satisfaction, and further development of cognitive presence in online courses (Boston et al. 2009; Morris, 2011). Boston et al. utilized the CoI framework to

administer surveys to 28,877 bachelor's and associate degree level online students at one American public university. The researchers found that students desired social interaction and found it necessary for course persistence (Boston et al., 2009). In addition to Boston et al. (2009), Morris (2011) also examined the online learning perceptions of 25 community college students with experience in online learning through an adaptation of Brookfield's Critical Incident Questionnaire (CIQ), pre-established interview questions on social presence developed by Swan and Shih (2005), and course artifacts. The researcher confirmed that students' desire to persist related to the amount of teacher presence and development of social presence in discussion forums (Morris, 2011). Instructional design promoted student satisfaction with the course, while a combination of social interaction and course design contributed to the development of cognitive presence (Morris, 2011). Students attributed their success to engaging content, perseverance, self-confidence, and instructional design (Morris, 2011).

Combining Social, Teaching, and Cognitive Presences

While some researchers found that social and teaching presences promoted learning, others discovered that a combination of all three CoI presences were necessary to support a learning community (Aykol & Garrison, 2008, 2011; Garrison, Cleveland-Innes, & Fung, 2010; Rubin & Fernandes, 2013). Aykol and Garrison (2008) utilized transcript analysis and the CoI survey to illustrate how social presence, cognitive presence, and teaching presence changed over time for 16 online graduate students. Their findings illustrated that a significant relationship developed over time between student satisfaction and all three presences (Aykol & Garrison, 2008). However, the elements of

cognitive and teaching presence were the only factors associated with perceived student learning (Aykol & Garrison, 2008). Garrison, Cleveland-Innes, and Fung (2010) also explored the causal relationship among the CoI presences through an online survey of 205 online master's degree students. Garrison et al. (2010) discovered that perceptions of teaching presence had a direct influence on perceptions of social presence, as well as the development of cognitive presence in online courses. Their findings also revealed that teaching presence is essential for "sustaining and maintaining a community of inquiry" (Garrison et al., 2010, p. 35). These findings coincide with earlier findings that indicate a combination of teaching and social presences are necessary to develop a higher level of cognitive presence (Garrison et al., 2000).

Additional studies also confirmed the significance of combining social, teaching, and cognitive presences. Aykol and Garrison (2011) utilized transcript analysis, the CoI survey, and interviews to examine cognitive presence of graduate students: 11 enrolled in online courses and 9 enrolled in hybrid courses. Their findings revealed that students developed a high level of cognitive presence and satisfaction in both course mediums, as well as higher perceptions of social and teaching presences (Aykol & Garrison, 2011). The researchers discovered that the balance of all three CoI presences is necessary to support an online community (Aykol & Garrison, 2011). Rubin and Fernandes (2013) also examined the interrelation of the CoI elements in a study involving 874 online students in a large Midwestern university, as well as the use of the CoI instrument. They discovered that student engagement increased as the level of instructor involvement increased (Rubin & Fernandes, 2013). The researchers also concluded that social and

cognitive presences increased when students perceived a higher level of teaching presence in an online course (Rubin & Fernandes, 2013). The findings of these researchers (Aykol & Garrison, 2011; Rubin & Fernandes, 2013) further support the assertion that cognitive, teaching, and social presences are interrelated and support a meaningful learning experience (Garrison et al., 2000).

My review of recent literature indicates that students' feelings of isolation and loneliness, lack of engagement, course dissatisfaction, and declining achievement lead to diminished student success and attrition in online courses. The research illustrates and supports the collective impact of cognitive presence, teaching presence, and social presence within the online environment. Establishing connectedness through social presence, teaching presence, and cognitive presence can diminish isolation, foster engagement, enhance course satisfaction, cultivate student success, and promote course completion. Despite the large quantity of research on student persistence and connectedness in online courses at higher education institutions, limited research exists at the community college level. My research will explore and examine student perceptions of connectedness in online courses through the lens of the CoI framework, which is integral for developing strategies to promote student persistence, success, and satisfaction at a local community college.

Implications

Examining student perceptions of connectedness through the lens of the CoI model could provide stakeholders, faculty, staff, and students at the target community college with a greater understanding of establishing connectedness as a means to promote

student success and persistence. The research may stimulate changes to facilitation and design of online courses to provide an online environment conducive to student satisfaction. As instructors of traditional courses at NCCC also serve as online instructors, subject-matter experts, and creators of online course content, the research produced from this study will also be employed in the creation of a professional development workshop designed to educate instructors on connectedness in online courses.

Summary

As online course enrollment continues to rise, the issue of student retention continues to require investigation at the local level. Finding methods to promote student retention may increase student engagement and reduce feelings of isolation, reinforce student learning and interaction, and enhance satisfaction in online courses. Retaining students may also aid in the future success of students through their ability to secure employment, earn a competitive salary, and contribute to the economic sustainability of their local, state, and national governments. Increasing student retention may also garner additional revenues for the local community college in the form of tuition, fees, and additional federal funding. An increase in income for the community college may also result in the creation of new programs and ensure survival of the institution at the local level.

Examining student perceptions of connectedness using the CoI model will aid in determining the elements that are necessary to promote student success in online courses. A qualitative investigation of student perceptions related to student presence, teaching

presence, and cognitive presence will also aid in understanding the role that each presence performs in the establishment of an online community. In the next sections of this document, I focus on the study methodology, the results and the project. Reflections and conclusions will comprise the final section of this document.

Section 2: The Methodology

Introduction

The purpose of my study was to examine student perceptions of connectedness in online courses. In this section, I will discuss the research design and approach, participant selection, methods for data collection, and data analysis, along with methods to ensure protection of the study participants. I will also discuss procedures for maintaining credibility throughout the study, as well as the assumptions, limitations, and delimitations of the study.

Research Method

Qualitative Research Design and Approach

I used a qualitative research approach to examine student perceptions of connectedness through the lens of the CoI model (Garrison et al., 2000). Qualitative research focuses on how participants interpret and construct meaning from their experiences (Merriam, 2009). Understanding student perceptions of connectedness in online courses necessitates a qualitative design, as I focused on depth instead of breadth to gain an understanding of student experiences and desire for persistence in online courses (Glesne, 2011). A qualitative approach aided in understanding the development of social, teaching, and cognitive presences and how these presences impact online learning.

I employed a case study research design in my study to examine student perceptions of connectedness. A case study involves the study of small groups or individuals and affords the researcher the opportunity to examine an activity, event, or

program in depth (Creswell, 2012; Lodico, Spaulding, & Voegtle, 2010). The bounded group in my study included students with prior online learning experience from a single higher education institution (Merriam, 2009). The selection of a single institution illustrated the local problem, while choosing experienced online learners showcased retention and success within the online environment (Merriam, 2009).

A case study views the participant as both unique and common (Stake, 1995). The commonality allows comparison to other cases, while the uniqueness provides an in-depth understanding of that particular case (Stake, 1995). This commonality will also allow me to compare my research findings about online courses with the investigations of other researchers.

Various inquiry strategies can help the researcher to conduct a case study (Glesne, 2011). I employed a phenomenological inquiry strategy in my exploratory study to examine lived experiences of the participants. While I was not engaged in a full phenomenological design, its main characteristics are applicable to my case study. For example, phenomenological inquiry seeks meanings from reflections upon experiences, which consists of online experiences in this study (Moustakas, 1994). This type of inquiry also requires me as the researcher to refrain from making suppositions by suspending my own judgment (Moustakas, 1994). This approach also promotes the researcher's ability to bring a fresh perspective to the research (Moustakas, 1994).

Participants

Criteria for Selecting Participants

The setting for the study is a rural community college on the east coast of the United States. Permission to conduct my study at this community college was provided by the college Director of Institutional Research. The population consisted of 124 students enrolled in fully online courses at the local community college. According to the Vice President of Student Services, of these 124, 87 students were seeking degrees, 20 students were pursuing a certificate, and 17 were enrolled as diploma seeking students. At the time of this study, the college offered seven fully online curriculum programs. I selected participants from a listing of fully online students provided by the Student Services Division of NCCC.

Justification for the Number of Participants

For this study, I selected a purposeful sample of 10 students. The sample size is small, yet consistent with the requirements of qualitative research (e.g., Creswell, 2012). As the overall purpose of qualitative research involves an in-depth view of the complexity of a situation, adding additional participants diminishes this opportunity (Creswell, 2012). I selected participants for this study based upon their classification as fully online students having successfully completed two or more online courses. These criteria ensured that participants provided information based upon multiple experiences.

Procedures for Gaining Access to Participants

After obtaining a list of participants from the Student Services Office at the focus college, I recruited participants via e-mail. I used a random number generator in Excel to

select 10 participants. I e-mailed the first 10 randomly selected participants. This invitation e-mail confirmed that the students completed two or more online courses, as well as asked if they wished to learn more about my study (see Appendix D). Once participants expressed interest in my study, I sent a second e-mail that included information about the study and an informed consent form (see Appendix E).

Students electronically consented for the study by replying to the e-mail with the words *I consent*. I removed any students who did not consent to participate from the participant selection list. If I did not receive a response from the participants, I sent a total of three reminder e-mails, in accordance with my Walden Institutional Review Board (IRB) approval (06-17-14-0108849), asking if students received my invitation and if they had any additional questions that may aid them in making a decision about participating in the study (see Appendix F).

I continued in this process until I had 10 consenting participants. The selection criteria provided me with the opportunity to select students who had the ability to describe and analyze their experiences related solely to online courses. The students' ability to effectively reflect on their online experiences allowed for a more comprehensive analysis than simple comparisons with face-to-face or blended courses frequently reported in previous studies (Drouin & Vartanian, 2010; Liu et al., 2009). I excluded students having prior or future contact with me as an instructor from the sample. I removed any student I previously taught or had the potential for teaching from the list of available participants. Curriculum majors excluded included: Business Administration, Accounting, Office Administration, and Medical Office Administration. I

also excluded students seeking transfer degrees in the Associate in Arts program, as they often enrolled in courses that I teach.

Methods of Researcher-Participant Working Relationship

Ensuring that I respected the privacy and confidentiality of my participants aided in establishing a working relationship and rapport with my participants (Lodico et al., 2010). As the interviewer, I assumed a neutral stance in regards to the respondent's knowledge and values (Merriam, 2009). I also ensured that I used clear language throughout the interview session and respected the time donated by all participants. I sent each participant a $10 gift card to reward participation in the study (Glesne, 2011). I ensured that all participants understood the nature of the study and their role. Finally, as participants may have disclosed sensitive information, I ensured that I maintained confidentiality before, during, and after the study concluded.

Protecting Participants' Rights

Prior to gaining access to any participant data or institutional reports on retention, I submitted a preliminary IRB application unique to the local community college, as directed, to the school's Office of Institutional Research. In addition to this application, I submitted an IRB application required by Walden University. The IRB process at the focus college required that I wait one month for a letter of preliminary approval, while final approval was contingent upon confirmation from Walden's IRB.

As the study participants are human subjects, I ensured that I provided protection from harm throughout my study (Lodico et al., 2010). All study participants have the right to expect privacy when participating in a study (Glesne, 2011). To protect the

confidentiality of my participants, I did not discuss the specifics of my research with anyone (Glesne, 2011). I also used pseudonyms instead of participant names and refrained from providing descriptive characteristics that may otherwise help identify the participants (Glesne, 2011).

Given that one participant was a male, I assigned gender-neutral names to each participant. In the event that a participant wished to discuss his or her participation via phone, I refrained from leaving any messages that contained any information that linked the participant to the study. Instead, I only left my name and number. Participant data remained in a locked facility accessible only by myself, as the researcher. Prior to the interview, I obtained informed consent from the participants through the use of a consent form (Lodico et al., 2010), which I e-mailed to participants. The consent form described the study's purpose, delineated the voluntary nature of the study, discussed the potential risks and benefits of the study, and depicted methods to insure confidentiality throughout the study (see Appendix E). Lastly, to comply with standardization practices, I ensured that I used the same interview protocol and processes with each participant (e.g., Creswell, 2012).

Data Collection Procedure and Instrument

The use of semistructured interviews provided opportunities to acquire specific data while affording the researcher "the opportunity to probe beyond the protocol" (Lodico et al., 2010, p. 324). One-on-one interviews allowed students the option to share their perceptions without fear of judgment by their peers, as suggested by Creswell (2012). The actual length of the interview depended upon the level of elaboration by each

participant, and varied between 15 and 25 minutes. I encouraged all participants to expound upon their original answers through the use of probing questions. Once all interview questions concluded, I also asked interviewees if they wished to add any additional information. Several participants chose to elaborate on their experiences with online courses as a whole.

An interview protocol (see Appendix B), with both open-ended and prompting questions, guided the interview process and ensured that all participants answered the questions. Interview questions were focused on the three community of inquiry (CoI) presences: social presence, teaching presence, and cognitive presence, as well as methods for persisting in online courses. Questions 1, 7, and 8 of the interview protocol (see Appendix B) were intended to help me examined student perceptions of social presence. The role of teaching presence was investigated with Questions 3 and 4, while Questions 5 and 6 allowed students to elaborate on activities that promoted cognitive presence. Finally, Question 2 provided valuable data on techniques students used to persist in online courses.

In addition, before the interview session, I asked each participant demographic questions from a demographic survey (see Appendix C). The demographic survey included questions regarding age, gender, number of online courses taken, enrollment status, employment status, and online experience at other institutions. These questions provided foundational information about the overall study population. The demographic questions also aided in understanding the variables that may have affected participants'

responses (Merriam, 2009). I presented the demographic makeup of my study's participants in the research results section.

Collection and Storage of Data

The nature of online courses limits students' need for attendance on campus at specific times. For this reason, I used Version 9 of Adobe Connect's web conferencing software (Adobe Systems, Inc., 2015) to conduct and record interview sessions with the 10 participants in my study. Students were already familiar with Adobe Connect software as instructors utilized it for lectures, online meetings, and review sessions. Adobe Connect software allows audio and video interaction between multiple users via the Internet. However, to protect the anonymity of each participant, I only used the audio capability of Adobe Connect. I recorded each meeting session.

To avoid a potential loss of data, I took interview notes during the Adobe Connect sessions as a precautionary measure. As a faculty member of the local community college that is the focus of this study, I have unrestricted access to Adobe Connect software. However, as my role in this study is as a Walden student, I requested and received permission to utilize this software for the purpose of my research study.

To avoid bias in my study, I engaged in a process known as *epoche*. Epoche involved disclosing potential biases to suspend judgment in a phenomenological inquiry (Merriam, 2009). As the researcher, I reflected upon my subjectivity and how it would be monitored throughout the study (Glesne, 2011). Disclosing personal bias also aided in establishing credibility to the research study through a balanced presentation of perspectives (Lodico et al., 2010). The purpose of my study was to examine the perceptions of online students in relation to connectedness.

Role of the Researcher

As at the time of the study, I was both an online student and an educator desiring a sense of community in my courses, my personal bias had the potential to influence interpretation and dissemination of my study's results. My role as a researcher and educator at the focus community college, as well as my teaching relationship with the students, may have also influenced my study's results. To ensure that my personal biases did not hinder my research, I continually monitored my preconceptions through the use of a reflective journal. I also requested the services of a trusted colleague to act as a peer reviewer to gain an external perspective on my study (Lodico et al., 2010). The peer reviewer did not have access to the raw data in the form of digital audio files. This individual only received copies of the transcribed data with pseudonyms listed.

I transcribed the interview data at the conclusion of each interview and assigned pseudonyms to each participant. I worked alone or wore headphones during this process to preserve participant confidentiality. Transcripts were password protected and housed

on an external hard drive to protect confidentiality. The hard drive was stored in a locked facility accessible by myself. I recorded my emerging understandings of the data in the field notes section of my reflective journal.

Data Analysis

I analyzed data and coded transcripts throughout the data collection process to identify emergent themes. The concept of lean coding aided me in generating a manageable set of codes, as well as narrowing down the overarching themes (Creswell, 2012). I purchased a student license for Atlas.ti (version 7) qualitative coding software to aid in the coding process, as the software is searchable by code after insertion of transcribed data (Atlas.ti Scientific Software, 2013). After the first analysis of the entire set of transcripts, I identified 40 codes. I narrowed down any redundant codes and 22 codes remained, as shown in Appendix G. Once the codes were narrowed down, my coding selections generated a total of five emergent themes (Creswell, 2012). I built the major theming elements around three presences that comprise the CoI model: social presence, teaching presence, and cognitive presence. I also looked for any recurring themes that may have developed outside of these three elements. My reflective journal and my field notes also enabled me to identify prevalent themes in the interview transcripts. If I encountered any isolated themes that were not part of the major themes, but were strongly related to the study, I reported them as discrepant cases and offered possible explanations based on research findings reported in the literature.

Maintaining accuracy and credibility were paramount throughout the study. To ensure accuracy of my interpretations as a researcher, I utilized peer debriefing. I asked a

trusted colleague with a doctorate degree to help with the peer debriefing process. This colleague was familiar with ethical research practices and had the ability to remain objective. While the peer reviewer works at the same community college with myself, this person works in my division and did not have a teaching relationship with the participants due to the exclusion criteria added to the study. In addition, the peer reviewer only had access to the transcribed data containing pseudonyms. To add additional credibility to my study, my peer reviewer analyzed the transcripts and illustrated her identification of the most prevalent themes prior to seeing any of my codes or themes. Once we discussed these themes at length, I then revealed my own coding and themes. My peer reviewer and I both agreed on all of the themes and codes selected.

I also ensured the trustworthiness of my study by employing member checks. I provided each participant with his or her transcribed interview. I asked each participant to review the transcription for accuracy, as well as extended the opportunity to provide any additional comments or clarifications. Responding participants did not note any necessary changes to their transcripts. In addition, I continually monitored the personal bias through review of my reflective journal. Finally, as I analyzed the data, I disclosed any discrepant cases, if any, and provided possible explanations for any discrepancies.

Research Results

By importing the verbatim transcripts into the Atlas.ti software, as well as the electronic compilation of codes, I found themes associated with the CoI model and the guiding research questions. I used the guiding research questions to understand the following: 1) the desire for connectedness and its role in the success of persistent

students; 2) the methods persistent students used to remain engaged with the provided instructional materials; and 3) the techniques and strategies used by persistent students to help them stay connected with their peers. The CoI elements of social presence, teaching presence, and cognitive presence were intermingled within the resulting codes and themes. The majority of the interviewees provided specific examples of elements present in an online course that propelled or impeded their overall progress in an online course environment. The relationship between the emergent themes and the research questions in the study is illustrated in Table 1.

Table 1

Relationship of Themes to Research Questions (RQ)

Theme ID	Identified theme	RQ1	RQ2	RQ3
A	Strategies for persistence		X	
B	Engagement with instructional materials		X	
C	Obstacles in online learning		X	
D	Desire for instructor interaction	X	X	
E	Desire for interpersonal relationships	X	X	X

The interview questions provided support for the research questions and aided in the organization of themes. Interview Questions 1 and 7 align with RQs 1 and 3. Interview Questions 2-6 align with RQ2, while Question 8 aligns with RQ1.

Theme Description and Support Elements

As illustrated by Table 2, five main themes emerged from the resulting codes: (a) strategies for persistence, (b) engagement with instructional materials, (c) obstacles in online learning, (d) desire for instructor interaction, and (e) desire for interpersonal relationships. Below is a discussion of each theme and the supporting elements, as well as the relation of the theme to the guiding research questions for the study.

Strategies for Persistence

The evidence from the first theme, strategies for persistence, supported RQ2 and derived from comments made in relation to the second question in the interview protocol (see Appendix B). Interviewees were asked to identify the methods they used to promote their successful completion of online courses. Persistence factors related to staying organized, working ahead, and having an overall desire to learn. These factors, as well as their supporting elements, are exemplified below. Having each of these elements also served to promote cognitive presence, or overall learning, within the course.

Organization. Interviewees noted that they remain organized in an online course utilizing a variety of methods. Interviewee Avery noted, "I try to keep a calendar of when everything is due so I know I turn everything in on time without missing a due date." Other interviewees also referred to the presence of deadlines as motivation to be successful in an online course. For example, interviewee Taylor stated, "Just knowing that I have to get it done at a certain time just pushes me more to reach my goal to finish it that day if I can. If not, then it will be the next day." While some interviewees indicated that a calendar was important for staying on track, others took a more personal approach

to ensuring due dates were met. For instance, Emery stated that a physical location change was necessary to complete work. Emery attributed online success to "mostly just getting in a quiet place and just read and reread it [books/material]. Then, I make notes about the most important stuff that I think may be on a test or something." Another interviewee, Jamie, also echoed the need to change locations. Jamie declared, "I set aside time for myself in a quiet room. I try to focus on what I am doing." All interviewees were aware that remaining organized would allow them to complete their assignments in a timely manner.

Working ahead. Working ahead also emerged as a common tactic utilized by persistent online students. Interviewee Cameron indicated: "I try to, you know, work ahead and turn in assignments early so that I won't fall behind." Another interviewee, Emery, also anticipated the need to work ahead as a means to combat unforeseen circumstances, "like any free time I had, I tried to stay ahead just in case something happened and then I wouldn't get behind." Interviewees were aware that their individual circumstances dictated their need to complete assignments on certain days of the week and developed a routine accordingly.

Desire to learn. Staying organized and working ahead promoted timely submission of assignments. However, the desire to learn also prompted participants to forge ahead. Interviewee Jamie affirmed: "I study, I go over, and I rehearse," and "I go back on tests, if I have missed things. I like to have the test opened up so I can see what I missed so I can study that and gain that knowledge so I can use it later on." Interviewees also noted that they seek additional sources to increase their learning throughout a course.

In relation to gathering external sources, Kendall noted: "It is extra study material." Most interviewees placed importance upon not only learning the material, but also in retaining it for future use.

Engagement with Instructional Materials

The resulting evidence from the second theme, engagement with instructional materials, also supported RQ2. The codes that comprise this theme resulted from comments to Questions 3, 4, 5, and 6 in the interview protocol (see Appendix B). Answers to these questions illustrated the role that teaching presence plays in promoting cognitive presence within an online course. Interviewees experienced the connection and application of new ideas in relation to the design and organization of the course, which are indicators that cognitive and teaching presences have developed in an online course (Aykol & Garrison, 2008). Real-world assignments, relevant course material, seeking outside sources, the desire for interactive content, as well as hands-on assignments were resultant supporting elements indicating interviewees' desire to understand and apply their learning.

Real-world assignments. The use of real-world assignments promoted learning in online courses, which translated to application of a concept outside of the course. As Kendall indicated:

> The best class, and the teacher required that in the discussion post, that she would make us relate it to our lives. So we would take that chapter and use it in real-world applications and ask how it could affect us on a day-to-day basis. (Interviewee, Kendall)

Another interviewee, Jordan, also recognized the significance of translating learning into practice. Jordan discussed an experiment involving observations in an online biology class and noted: "We had to see the effect that was happening. We got to see it put in practice. It wasn't just something that went up and we were writing our opinions about it." Real-world assignments allowed for meaningful and worthwhile learning, which are both associated with the development of a community of inquiry (Aykol & Garrison, 2008).

Relevant course material. In addition to real-world assignments, interviewees commented on their desire to have relevant material in an online course. The addition of relevant content promoted cognitive presence through the connection of ideas in a particular course. Morgan, for example, liked the addition of "extra content, you know, thrown in there to help you to get the gist of what you are learning about in whatever class it may be." The desire for relevant course material extended outside of the assignments and was also present in perceptions of effective discussion boards. Jamie felt that, "honestly, the made up, instructor-guided discussions were more effective than those in the book." Jamie went on to illustrate that "I might not have even understood some of them," when referring to the discussion content presented by the textbook. Strengthening the importance of relevant content, Jamie also indicated, "There's also instructors who have put things that they think you may have questions about and they put those in a discussion forum for you. That has been very helpful." The addition of relevant course material appears to promote additional cognitive presence through information exchange,

which later translated to the connection of ideas, as demonstrated in the research findings (Aykol & Garrison, 2008).

Seeking outside resources. Participants also expressed their desire or need to seek additional outside resources to promote their learning. When speaking about the online material already posted in an online course, interviewee Camryn noted:

> I used to just go by the book and the videos posted by the professors, but, I found that this was not very helpful for me. So what I actually do is I look online for, say for example You Tube, helpful videos to help walk me through the easier approaches and better solve the problems or understand the material better. (Interviewee, Camryn)

Camryn was not alone in this endeavor, as another interviewee, Emery noted: "I would just read and Google everything I could about whatever subject that I needed to." Kendall also indicated that materials in an online course were more helpful to make a study guide and less helpful for learning. Kendall stated, "Overall it is just a summary of brief points. It is just not as effective as hearing it or seeing it on You Tube." Most of the interviewees were utilizing external sources, not only for additional resources, but also to confirm learning of a particular concept.

Interactive content. In addition to seeking their own learning resources, interviewees indicated their preference for interactive resources with a course. Avery noted: "Some of the notes that they give you that like help you remember stuff, it's not really effective if they do not have anything interactive with it." Camryn also expressed a desire for interactive resources by stating, "I have several instructors who will post videos

of lectures that they do in class, that's very helpful. As well as they'll post links to different websites that show different game strategies, and what not, to help you understand the material." Camryn also illustrated how these interactive materials were essential to support learning by stating, "As long as the teacher provides, I guess, notes that they have posted online and links to where we can better understand the material, it is very helpful. Now, if an instructor does not do this, then it is up to you to try to learn it by yourself, which for some people it is easy, but for me it is really not."

Other interviewees indicated that their desire for interactive content also related to the need to have visual confirmation of their learning, or to "see" the instructor on the other end. Kendall illustrated this point by stating:

> Anything visual helps me. You know, if there are videos, or step-by-steps, anything like that helps me. Anytime you can go through something and show me, I just get it better than just reading it on my own. It's just words. But if somebody shows me, then I'm good. I am a very visual learner. (Interviewee, Kendall)

Taylor also indicated the desire to have visual confirmation that an instructor was present in the course: "I like what some instructors do, they will post videos, where you actually see what the person you are talking to. They actually have face-time; which is nice." In accordance with research findings, interactive content appears to promote higher-order learning by enabling a student to grasp a concept through information exchange, which then prompts the ability to connect new ideas (Garrison et al., 2000; Simonds & Brock, 2014).

Hands-on assignments. The desire for hands-on assignment was also prevalent across the participants. Jordan spoke of the impact that hands-on software had on learning: "The outside labs that they [instructors] use, like MyMathLab or MySpanishLab or MyMedicalTerminology lab. All of those labs really work because they do really give you a lot of hands-on activities to help you. So those are a great, great thing." These software packages were designed to allow students to work on mastering course concepts, while providing immediate feedback and/or confirmation of their learning. In addition to software materials, Reese also confirmed that more knowledge was acquired from hands-on assignments. When describing the completion of a speech on You Tube, Reese noted, "I learned a lot more like that because I had to go over it and over it until I actually posted on You Tube." Hands-on assignments appeared to promote cognitive presence through connection and application of new ideas, as suggested in the literature (Garrison et al., 2000).

Obstacles in Online Learning

The resulting evidence from the third theme, obstacles in online learning, also supported RQ2. Answers to interview Questions 3, 4, 5, and 6 in the interview protocol (Appendix B) produced the supporting elements for this theme. Answers to these questions demonstrated that the lack of resources can hinder the development of cognitive presence and teaching presence within an online course. A preference for face-to-face interaction can also impede the development of social presence and teaching presence. Lack of resources or those that are incongruent with one's learning style, assignments that lack clarity, an overall preference for seated courses, and the task of

teaching oneself were all potential barriers to course completion and future persistence in online courses.

Incongruence to learning style and lack of resources. Interviewees mentioned that some assignments and/or resources were not congruent to their learning style and hindered their progress, or prompted the need to seek outside sources. The absence of learning resources also had the same effect. Kendall illustrated the desire to have a lecture posted instead of reading the chapter:

> I think it is easier for me to kind of skim over it [notes] rather than to make myself think. My eyes glaze over as I am reading this information. I have to reread over the information before I really get it. I am a hands-on learner. In an online class, it is much easier to process audio and visual information, rather than words on a page. (Interviewee, Kendall)

Just like Kendall, Dakota also echoed the desire to have additional resources congruent to his or her learning style, by stating that, "it is more easily [sic] to learn stuff on videos than it is in writing sometimes."

Camryn also explained the importance of having the necessary resources within a course and stated:

> With my current math class that I am taking, my teacher's biggest things that she says is 'read the book.' But, the book does not go through anything with exactly how to do it, or which formulas you need, or exactly how to find what you are looking for. So it makes it very difficult when, it's not, they're basically not helping you. (Interviewee, Camryn)

Lack of resources in an online course can also cause frustration and confusion, as Morgan noted: “One class that I have currently, there is very little there, as far as instructions. It’s pretty much here’s the chapter in the book, and that’s pretty much what the lecture notes are.” Morgan also asserted: “Sometimes it is overwhelming when there is too much stuff, but I think it is worse when there is not enough to look at and not enough to see and what not.” As prior research illustrates, the lack of resources can prevent interviewees from entering the exploration phase of cognitive presence, and may result in simply repeating ideas without making their own inferences about a particular subject matter (Garrison et al., 2000). In essence, learners would be learning for the sake of memorization without the ability to transfer their learning.

Clarity in assignments. The absence of clarity in assignments also impeded progress in online courses, and in some cases hindered learning. Interviewees expressed frustration with projects, discussions, and research. Dakota referenced how the lack of clarity in a marketing plan encumbered learning by stating, “Because, you know, her [instructor’s] assignments were confusing and I just couldn’t, you know, I always had to ask for her help about it. I just can’t seem to learn it.” Another participant also spoke about the confusion caused by the lack of clarity. When asked about the tasks that are least effective in a course, Jamie noted, “I guess the tasks would be the discussions that are not narrowly defined. First, you do not understand the discussion and you don’t even know how or where to go about finding the information.” Jamie went on to withdraw from this particular course.

Jordan also illustrated how the lack of clarity posed a problem that impeded learning. Jordan noted, "Not being specific in their [instructors'] questions and the answer they really want is a problem." Taylor also indicated that the lack of well-defined parameters in a research project can hinder learning, leading to more questions than answers: "There were times when we had to do research in the college library and we did not know specifically what the teacher was looking for. A lot of times we missed the mark. A lot of times they [instructors] put restrictions on the research and that it made it more difficult." The lack of clarity in assignments relates to the overall design of the educational experience and the facilitation in learning, which are characteristic of teaching presence, as mentioned in the literature (Garrison et al., 2000). In accordance with the literature, the effective promotion of cognitive presence, which includes higher-order thinking and learning, is dependent upon the establishment of teaching presence in a course (Garrison et al., 2000).

Preference for seated courses. While all of the interviewees in the study have taken at least three online courses, some of them noted that they still preferred seated courses. Their need to work full-time, as well as balance family obligations, compelled them to take online courses. Emery, who had taken three online courses, stated: "I just don't like online classes. I mean, I learn better in a seated class with the teacher in front of me." Time constraints were also attributed to a preference for seated courses, as Jordan indicated, "It takes more time from an individual for online than it does a seated class."

In addition to an overall preference for learning in a seated course, other interviewees revealed that the absence of body language was an obstacle to learning in

online courses. As Jamie noted, “You really need body language. You can write things, but as far as connecting with them [classmates], responding to their discussion, you don’t know how they are meaning it, even to know what they typed.” Taylor also indicated that the desire to take seated courses also relates to body language and/or connecting with others by stating: “I really feel more connected to people in a classroom. And doing it online, with people, sometimes I do feel disconnected, despite having that.”

Not all interviewees had an aversion to online courses. For example, Dakota expressed a preference for online courses by stating: “I enjoy doing online classes more than I do seated classes, which, you know, I have took [sic] some seated classes. I didn’t really enjoy that as much as online. And I think it helps people who does [sic] not have transportation as well.” The desire for face-to-face contact may indicate a lack of social presence and teaching presence within an online course. It may also be attributed to overall learning preferences.

Teaching self. Lack of instructional materials and content also led interviewees to feel as if they were teaching themselves rather than being guided by an instructor, which may further explain the desire to take seated courses. Jordan illustrated this by stating the following, ‘This [online class] is basically an individual experience, where you basically have to be hard on yourself to get your work done, to learn the material, to ask questions to your instructor, when you have to ask them.”

Other interviewees also expressed similar sentiments, citing that the task of teaching oneself may ultimately contribute to their taking seated courses over online courses. Reese noted:

> Online classes are a little bit harder than being in class because you really have to teach yourself instead of somebody teaching you. It was just a little bit harder for me to do. I don't know if I will do online class again, because it was difficult. (Interviewee, Reese)

Reese went on to note that completion of one class in the curriculum had to be completed online. Reese expressed an aversion to this:

> It's going to be very difficult for me. Like I said, I can't teach myself. You know, it's kind of hard. Somebody has to teach me. But, I would do the best that I can if I had to take it. (Interviewee, Reese)

As the participants' comments illustrate, the dislike of online courses due to having to teach oneself can hinder the development of all three presences, as well as prevent reenrollment in future online courses.

Desire for Instructor Interaction

The evidence from the fourth theming element, desire for instructor interaction, supports RQs 1 and 2. Answers from interview Questions 3 and 4 provided the resulting codes for this theme. The supporting elements illustrate the importance of instructor presence in building and confirming understanding, while facilitating learning in an online course. Instructor feedback, availability, and instructor involvement all contribute to the development of teaching presence, as well as cognitive presence, within online courses.

Instructor feedback. Interviewees expressed the desire to have instructor feedback within the discussion board, as well as on assignments. Immediate instructor

feedback within a discussion aided participants in understanding what they did incorrectly, as well as provided clear direction for how they should accomplish future tasks. Avery illustrated this by stating: "They [instructors] will give you help, like if you did it wrong or something. They will comment back something to you to help you on your next one." Instructor feedback within a discussion also allowed students to gauge the instructor's thoughts on a particular subject.

Other interviewees expressed the desire to receive instructor feedback to confirm their own learning within the discussion forum. Taylor explained:

> Feedback, either positive or negative, makes a big difference. I think for the instructor to communicate with the students, to let us know if we are on track or way off base. It is usually correct to do a modification, you know if we are off base, before we get too far off base.

Most of the interviewees expressed an interest in not only learning the material, but also in learning it and applying it in the correct manner.

Another interviewee, Emery, also asserted that instructor feedback was of much greater consequence than simply confirming learning. Emery illustrated this significance by stating: "You know some teachers will really make you feel good about yourself and you seem to do better. Then there are some instructors, I don't know, it seems like they just don't care." As the literature also illustrates, quality feedback from instructors appeared to promote cognitive presence within the discussion forum, as well as aid students in developing a relationship with the instructor through teaching presence (Dixson, 2010; Owens et al., 2009).

Instructor availability. Just as instructor feedback promoted learning in the course, interviewees also indicated their need to have an instructor who is available. It is a common practice at NCCC to allow instructors 24-48 hours to respond to a student's e-mail. Interviewees had mixed responses on this practice, as they encountered courses where the response time was less than ideal for meeting deadlines. Jamie expressed how the lack of instructor responsiveness can hinder completion of an assignment:

> Say the assignment just opened up and you have 48 hours to do it, if an instructor waits later to contact you back, and you needed help with it, you know, you are out of luck. I kind of panic. (Interviewee, Jamie)

Another interviewee, Jordan went on to suggest that a potential solution would include changing the time frame for instructor responses: "I think it should be a 12-24 time turnaround for a teacher with an online student. Because we don't have, it's almost like instructors think that online students have all this time. But we don't."

In addition to instructor availability online, an interviewee also voiced frustration with physical instructor availability during posted office hours. Camryn drove to campus and sought the assistance of an instructor for a particular problem. In continuing the story, Camryn noted: "But, with my experience, 9 times out of 10, when I go to the college to meet with the instructors to get help, then they are not available." Camryn did point out that this meeting was not scheduled with the instructor in advance. Feelings of frustration were evident, as interviewees felt they did not have access to their instructor in a timely manner. Interviewees were conscious of their instructor's time, but also

emphasized that they were working professionals who required input and/or clarification to move ahead with their assignments.

Instructor involvement. An instructor's level of involvement was also mentioned frequently among interviewees in both positive and negative comments. Some interviewees expressed feelings of isolation and disconnection brought about by an inactive instructor. Interviewees, like Taylor, expressed the desire to get to know the instructor teaching the course. When speaking about instructor participation within a discussion, Taylor commented: "If it's just a name and words on a screen, you feel disconnected." Interviewees were also conscious of the instructor's involvement and appeared to miss it if the instructor did not comment on their posts. Emery expressed frustration with an instructor's involvement in one particular religion course: "He was just, I don't know what to call him, and he was not person-friendly at all. I mean, he never commented on anything of mine during that whole class."

Interviewees also seemed to thrive in courses where the instructor was actively involved. Their happiness with a particular course or instructor was evident in their tone of voice and comments about a particular instructor. As Kendall noted:

> I find that the class I did the best in, the instructor was really involved. She made a couple of posts each week, she would post in our discussion forums along with the students and give her answers as well. I think that gave a really sense of connection in that class. It felt a lot like a class. (Interviewee, Kendall)

Conversely, Kendall is now enrolled in a class where the opposite is true. Kendall stated, “I don’t feel like she [instructor] is active in the course, and I don’t feel like my participation in that course is that active.”

Another interviewee, Emery, also expressed excitement about the level of involvement of an online instructor. Emery commented: “I know my English 111, yeah, that teacher was awesome. She would actually respond back and comment on everything you turned in. If you had a problem or something, you know, she more than happy to help me.” An instructor’s level of involvement directly influenced the level of participation from the students. In other words, greater instructor presence promoted a higher level social presence, which equates to findings from prior research (Dixson, 2010; Tucker, 2012).

Desire for Interpersonal Relationships

Evidence from the final theming element, desire for personal relationships, supports all three of the research questions. Answers from interview Questions 1 and 8 generated the codes contained in this section. The supporting elements for this theme demonstrate the impact of a sense of connectedness on the development of social, cognitive, and teaching presences in online learning environments. Working with peers, confirmation of learning from peers, discussion boards, familiarity with classmates, continuation of relationships, and a sense of connectedness are all methods interviewees utilized to develop social presence.

Working with peers. Interviewees expressed varying opinions when asked about the benefits of working with their peers in an online course. For example, Camryn

commented, “In order to better understand the classes, we set up our own little study groups and help each other with different areas that we did not understand.” These study groups were formed outside of the online environment. Camryn indicated that these study groups were strategically formed after identifying the strengths and weaknesses of classmates. In addition, these groups were often continual because some of the same students were in other online courses he/she had taken. Another interviewee, Reese, also indicated that it was desirable to work with peers, stating, “I got to know them and what they were studying.” In addition to communicating on social media and developing study groups, another interviewee, Dakota, also expressed interest in working with peers by making connections via e-mail.

Just as these interviewees enjoyed working with their peers both inside and outside an online course, others, such as Morgan, described a less than desirable experience when working on a group project: “Some folks just didn’t do what they were supposed to and it left it up to the others.” However, this experience happened when Morgan was in the group just to complete the assignments and did not make an effort to get to know any peers. Interviewees from other courses noted that they did not have an opportunity to connect through group work. Choosing to work with peers promoted social presence for those involved, as reported in the literature (Garrison et al., 2000). If an interviewee did not take the time to get to know his or her peers, then he or she reported working on projects in isolation.

Confirmation of learning from peers. Interviewees described meaningful learning within the online discussion boards, which enabled the development of cognitive

presence. Interviewees utilized the discussion board, as well as feedback from their peers, to confirm and identify new ways to apply their learning. Input from peers opened up new levels of thinking and promoted cognitive presence through the transition from information exchange to connecting and applying new ideas, which is consistent with prior research (Aykol & Garrison, 2008). When speaking about seeing the work of others in a discussion board, Taylor commented:

> It gave me context. It let me understand how to apply it. A lot of people had use for it themselves in their own personal lives. By looking at that it applied to their situation, it opened up my mind to really see how valuable it can be. (Interviewee, Taylor)

Jamie also illustrated the importance of learning from peers by indicating: "I got to see different views on a subject. I got to look at it in different perspectives, maybe when I wouldn't have done that on my own. That was very helpful." Feedback from other students also encouraged interviewees to continuously improve in their work. For example, Reese stated: "When I posted something on the discussion board and other students respond to me; which was good or bad response, then it was very helpful. What they had to say, I learned from that." Positive and negative feedback from their peers aided in participants' learning.

Interviewees also mentioned using other forums within the course to learn from their peers. Participants noted that some online courses have areas for informal student discussions, known as a "Help Me" forum or a "Student Coffeehouse." Interviewees gathered in these areas to learn from one another and discuss ideas. Morgan, who

frequently visited these areas, noted that: “If anybody can, you put in what’s going on, and if anybody else has that same problem, they chime in and say they have the same issue. Somebody else will say, hey look at this, you can do this and that.” Morgan went on to note that the instructor also visited this area and would help by answering multiple questions in one area.

Discussion boards. Not only have interviewees described the discussion boards as places for learning, but they also indicated that discussion boards were their primary tool for getting to know others. Students interacted in discussion forums on a weekly or bi-weekly basis and cited the greatest interaction when content was the most meaningful. Most online courses at NCCC have an *icebreaker* assignment that allowed students the opportunity to get to know others. Interviewees noted that they liked this assignment because it let them know who was in the class. Interviewees reported various habits for learning about others within the icebreaker assignment. For example, some interviewees looked at the ages and marital status of the students to find a level of comfort in the course and identify with others. Morgan stated: “I think that kind of helped me when I first started, to know that not everybody is 18.” Taylor also liked the icebreaker assignment and noted “It gives you kind of an idea to know who they are and where they are.” Taylor also expressed the desire to keep up with the discussion boards and post to them frequently.

Interviewees also used the discussion boards as means to identify other students who may be potential study partners. Avery intentionally sought to get to know others with common interests: “You form relationships like why you are in the same class and

what they are going to do when you get out of that class." While some participants liked discussion forums, other interviewees expressed their dislike for communicating in this format. When referencing the discussion board, Emery commented that: "To me, it is kind of pointless. I really didn't get anything out of it." It is important to note that social presence appeared to develop further when interviewees noted that they had a desire to participate in the discussion forums. As the literature indicates, a desire to persist is related to the development of social presence (Morris, 2011).

Familiarity with classmates. As interviewees utilized the discussion boards to get to know others, they developed a habit of looking for their classmates in future courses. This was a common practice among several interviewees. As Taylor noted, "It is usually the first thing I do when I sign in to a course. I start looking for names that I recognize." Taylor went on to state: "Well, just seeing the same names makes me feel like we are going through the same things. We are experiencing the same courses. The same stage in our lives sometimes." Morgan also indicated a similar experience, "Well, you know, you remember people's names from class to class. You remember their names, and some about what they told about themselves at the beginning of the semester."

While other interviewees went through courses with some of the same classmates, their familiarity with classmates was brought out during the interview. Jamie recalled some of the names, but noted having been successful at forming online relationships. Jamie indicated: "But most people were just trying to get their work done and not meet others." Seeing and identifying familiar names of classmates helped to promote social

presence for those who desired to develop a relationship, as well as alleviate some of the nervousness associated with beginning a new semester.

Continuation of relationships. As interviewees became acquainted with one another in online courses, a few of them decided to continue their relationships outside of the course. Dakota presently talks to some of her classmates on social media as well as through a student e-mail account. Similarly, Avery keeps in contact with those classmates who demonstrated common interests within the discussion board, some of whom were already acquaintances. Other interviewees noted that they did not develop any relationships within the course, and did not continue any relationships outside of the course. Some interviewees mentioned scheduling issues, multiple responsibilities, and the lack of a desire to socialize as reasons for not continuing any relationships outside of an online course.

Sense of connectedness. Getting to know others within an online class, as well as developing a relationship with an instructor, served to promote a sense of connectedness in online courses. Interviewees developed interpersonal relationships that led to the promotion of social presence and teaching presence, and later translated to higher-order learning, which equates to cognitive presence (Garrison et al., 2000). When asked the role that getting to know others played in overall learning, Camryn stated: "Well, it made you feel like you weren't alone in it." Camryn developed study relationships that promoted learning as a product of feeling connected to others. In addition to Camryn, Taylor also noted a similar sentiment in relation to getting to know others, "It's been interesting with other students. Sometimes we take the same courses over a number of

years. It has been very nice to see the same names and be able to update each other on our family and our situations. It really gives you a feeling of being connected." Instructor input in discussions also served to promote connectedness through teacher presence, as Kendall noted, "I think that gave a really sense of connection in that class." Having a teacher present within a discussion board also served to promote student participation, as well as guided and confirmed learning, which is consistent with the literature (Dixson, 2010; Tucker, 2012).

While some interviewees indicated they wanted to connect with their peers, there were others who expressed little interest in getting to know others or the feeling that it was not possible in an online course. Jordan indicated: "I don't really have time to be social." This may be attributed to the fact that Jordan works a full-time job and has children still living in the home. Jordan also frequently noted a preference for seated courses. Emery also expressed a lack of interest in getting to know others, by stating: "I didn't really have any need to need to talk to them. I just did what I needed to do and that was it."

Regardless of their desire to get to know other students, the interviewees expressed their need to know their instructor by "seeing" him or her within an online course. As previously noted, the lack of teacher presence decreased social presence, which, in turn, reduced the level of cognitive presence developed within the online course medium. A common barrier to getting to know others in online courses was the fact that only one assignment, the icebreaker assignment, provided ample opportunity to get to

know others. This barrier was eliminated in some courses through the creation of discussions that required students to relate their personal experiences.

Summary of Results

The interviewees in my study represented various levels of online learning experience, multiple age groups, and diverse backgrounds. Their experiences shaped their individual learning habits, as well as their unique learning needs. Table 2 illustrates the demographic profile of the interviewees.

Table 2

Summary of Demographics

Characteristic	Female	Male	Total	Percent
Age				
18-24	2		2	20%
25-34	3		3	30%
35-44	3		3	30%
45-54	1	1	2	20%
Enrollment				
Full-time	6			60%
Part-time	3	1		40%
Online course experience				
Three courses	3			30%
Four of more	6	1		70%
Employment status				
Full-time	5	1		60%
Not employed	4			40%
Prior online experience				
Yes	3			30%
No	6	1		70%

The themes that emerged from the research aligned with the research questions, as well as the elements of the CoI model. Five main themes emerged from the research, (a) strategies for persistence, (b) engagement with instructional materials, (c) obstacles in online learning, (d) desire for instructor interaction, and (e) desire for interpersonal relationships. Interviewees described an effective online environment as one equipped with interactive content, hands-on assignments, relevant content, immediate and meaningful feedback from their peers and instructor, and the opportunity to get to know others.

The identified themes served to answer the research questions proposed for this study. The first research question was: How do students who persisted in online courses describe their desire for connectedness and its role in their success? Interviewees described a desire to connect with other students inside and outside of the course. Developing connections with others aided in making the class seem real for some, as well as provided comfort in knowing others were learning alongside of the interviewees.

Some interviewees intentionally sought and continued relationships with their peers to aid in their learning. Working with peers in an online course solidified learning, promoted the development of relationships, and enhanced future application of concepts learned within an online course. Discussion boards prompted students to consider alternate viewpoints that they may not have considered otherwise, thus increasing cognitive presence. Interviewees sought learning validation and confirmation from their peers almost as often as their instructor. Connecting with an instructor also promoted the sense that the interviewees were not alone in a course. Teaching presence confirmed that

the instructor had a vested interest in student learning, as well as offered the opportunity to develop and promote additional trust within an online course.

The second research question was intended to answer to the following: What methods have students who persisted in online courses used to remain engaged with the provided instructional materials? Interviewees noted that they remained diligent in keeping a schedule, adhering to the course calendar, setting aside study time, and working ahead on assignments to prevent falling behind. Participants reported that the lack of engaging content in online courses prompted them to seek outside sources to teach themselves the concepts in a particular course. Interviewees cited this practice as an obstacle to learning in online courses, which may prohibit their reenrollment and/or retention in future online courses. In some cases, interviewees have developed skills to persist despite the fact that they label online courses as more difficult. Interviewees described the desire for instructional materials that were interactive, lecture notes that included visual and/or audio confirmation of their teacher's presence, and assignments that were meaningful and relevant for future practices. Interviewees who had courses with this type of content described a more satisfying learning experience. Teaching presence was necessary to facilitate discussions, solidify learning, and provide relevant feedback to enhance future learning. The instructor also possessed the ability to change the outlook of an interviewee through the types and quality of feedback provided.

The final guiding research question sought to determine: What techniques and strategies have students who persisted in online courses used to help them stay connected with their peers? Interviewees cited the discussion board as the primary means to connect

with peers. Recognizing names from course to course was a common practice and prompted promotion of social presence. Some interviewees developed relationships outside of online courses in the form of study groups, as well as friendships via e-mail and social media. Other interviewees followed the progress of their classmates within the discussion board only, citing the desire to connect within the course. Lastly, a select few interviewees expressed the desire to work on their own and cited little interest in getting to know others. The evidence illustrated that interviewees tend to identify with others in the course who share commonalities with them, as well those who have demonstrated mastery of the course concepts.

Assumptions and Limitations of the Research Study

There were several assumptions related to my research study. The first assumption was that the online environment continued to be vital for higher education. My research has demonstrated the steady and continued growth of online courses in higher education. The online learning format also continues to be conducive for working professionals and students who suffer from disabilities preventing their entry into traditional courses on campus. The second assumption was that the sample of online students selected represented the online learning population at the target college. My sample consisted of students enrolled in fully online courses in one of the seven degree programs at the local institution. I selected students completing two or more online courses to understand the perceptions of experienced online learners.

The following limitations should be considered upon interpretation of my study's results. First, the study was geographically delimited to one community college. Second,

given the small sample size of this study, the study's findings cannot be generalized to larger populations. Third, the results of the study were limited to comparisons with the characteristics of online learners only. These perceptions may not be comparable to the perceptions of students enrolled in traditional or hybrid classes. Fourth, this study focused on the online learning elements that comprise the community of inquiry (CoI) model and does not offer a comprehensive review of other elements that may be present in an online environment.

Conclusion

My qualitative study allowed me to examine student perceptions of connectedness in online courses. Semistructured interviews of 10 experienced online learners provided depth to my inquiry. A working relationship was established with my participants through the use of reciprocity, mutual respect, and clear delineation of their role in the study. Any identifying information that resulted from the study is stored in a locked facility accessible only by the researcher. To maintain the trustworthiness and validity of my study, I employed the use of member checks and peer-debriefing. Lean coding revealed five overarching themes that emerged from the collected data: (a) strategies for persistence, (b) engagement with instructional materials, (c) obstacles in online learning, (d) desire for instructor interaction, and (e) desire for interpersonal relationships. Analysis and findings from my study will be addressed through the creation of a project discussed in Section 3.

Section 3: The Project

Introduction

This section includes a description of the project, the goals of the project, and the rationale behind the project selection based upon findings in Section 2. A review of the literature related to the project format and content is also included. In addition, this section includes a listing of required resources, a discussion of potential barriers, and identification of roles and responsibilities of those involved in project implementation. Section 3 will conclude with a discussion of methods to evaluate the effectiveness of the project, implications for social change, and the significance of the project in both broad and narrow contexts. Appendix A contains the full project.

Project Description

The results of this study indicated that when students have engaging materials, an elevated level of instructor presence, established social presence, and confirmation of learning, they develop cognitive presence and persist with an online course. The absence of these elements leads to isolation, lack of engagement, diminished course participation, and the potential for course withdrawal. As online instructors at NCCC are both subject-matter experts and designers of their online courses, a professional development workshop is needed to aid them in improving pedagogical practices, designing interactive content, and developing methods to promote student engagement in online courses through an increase in teaching presence, social presence, and cognitive presence.

Based upon the results of this study, I propose a project structured as a five segment, 18-hour professional development workshop series tailored for online

instructors at NCCC. Given the fact that NCCC faculty have class preparations, administrative obligations, and limited time to attend a professional development activity lasting several days, the proposed workshop will be designed and implemented in a hybrid format. The seated sessions will be divided into 2-hour sessions to be presented on Fridays throughout a semester. This schedule is amenable for faculty and coincides with present practices at NCCC, as professional development sessions are often held online, or on Fridays with limited 2-hour segments. In preparation for the seated sessions, instructors will also complete five segments in an online course.

Project Goals

As learning is ever evolving, professional development is a practice that is widely accepted by educators (Beavers, 2009). Professional development offers instructors the opportunity to improve pedagogical skills, provides additional opportunities for life-long learning, and provides a means of collaborative support (Beavers, 2009; Persellin & Goodrick, 2010). To promote faculty growth, the goals of this hybrid professional development are to foster effective teaching practices in online courses through:

- Enriching the understanding of personal learning styles and their influence in online assignment design;
- Creating clear and relevant assignments that appeal to a variety of learning styles;
- Assisting in the development of engaging resources;
- Investigating the use of new technologies, including hands-on application and incorporating new tools in an LMS;

- Promoting timely responsiveness to student requests;
- Providing meaningful feedback to students.

Project Rationale

The goal of the research study was to identify factors within the community of inquiry (COI) framework that enhance student persistence in fully online courses. The findings from the research study revealed that to persist in online courses, learners prefer an online environment comprised of relevant and interactive content, hands-on assignments, quality feedback from peers and instructors, and opportunities to learn more about their peers. The study also revealed that some of the online courses taken by the participants did not meet these criteria, nor their learning needs. Therefore, it is essential to revise the content and structure of online courses to meet learners' needs and promote their satisfaction.

The research study's findings, as well as the literature review, revealed that an effective online environment promotes both teaching and social presence, while fostering cognitive presence (Aykol & Garrison, 2008). Social presence refers to the level of student-to-student interaction (Garrison et al., 2000). Teaching presence is comprised of design and facilitation of the course, also known as pedagogical practices, as well as interactions among teachers and students. Cognitive presence is defined by the knowledge and meaning derived from the learning (Garrison et al., 2000). These three elements comprise the COI framework and are necessary to provide an engaging learning environment for students. To promote such an environment, instructors will need to make a shift in pedagogical practices in online courses. This project will aid instructors, who

are content creators, in enhancing present pedagogical practices through their engagement in the proposed workshops designed to promote peer-based mentoring, provide hands-on learning, examine relevant research, and understand methods necessary to engage online learners.

Additional factors also prompted the rationale to create this project, including increased enrollments in online and hybrid courses at NCCC. Budget cuts, as well as an upsurge in part-time enrollment versus full-time enrollment at NCCC, also supported the need to retain students to remain a viable institution. As noted earlier, the college receives funding contingent upon the number of hours of student enrollment. A focus on ensuring that NCCC is a student-centered institution also prompted the creation of this project.

Review of the Literature

In this literature review, I examine research related to the overall format and content of the proposed project. The sections included in this literature review are: (a) needs assessment; (b) workshops; (c) blended learning; and (d) assessing learner characteristics. I used Walden University's library databases, such as ERIC, Academic Search Complete, Education Research Complete, and Sage Premiere to locate peer-reviewed articles and dissertations. Searches conducted for individual journals also aided in finding literature. The following keywords, with the addition of Boolean search operators, aided in my search: *adult learner characteristics, blended learning, higher education, hybrid courses, learner characteristics, online learning, professional development, teachers, training,* and *workshops*. In accordance with Walden University's requirements, I located recent research materials posted mainly within the past 5 years.

Items dated earlier than 5 years were also used for historical information and/or definitions.

Needs Assessment

Conducting a needs assessment precedes the design of any professional development program, as well as provides the foundation for its contents. It is equally essential to understand that assessing learners also involves differentiating what they want to learn and what they need to learn (Knowles, Holton, & Swanson, 2011). Knowles et al., (2011) defined a learning need as a gap between target competencies and learners' present level of development. All training and its associated learning should begin with an assessment of the needs of learners, including an analysis of their prior learning (Allen & Peneul, 2015; Gupta, 2011).

Prior learning shapes both the desire and the willingness to learn new material (Allen & Peneul, 2015). Conducting a needs assessment aids in determining the gap between desired and actual levels of knowledge and skill, assessing overall needs of learners, and evaluating methods to address the needs (Gupta, 2011). To understand the needs of educators, facilitators of professional development must also understand instructor practices to design learning environments that cultivate these practices (Elliott, Rhodes, Jackson, & Mandernach, 2015; Thorpe & Gordon, 2012). According to Gupta (2011), methods to conduct needs assessments include phone interviews, face-to-face and web-supported interviews, as well as using focus groups with skilled facilitators. My interviews allowed me to identify some of the online students' needs prior to the creation of the proposed project.

Workshops

To remain abreast of emergent learning trends and technology, instructors must complete ongoing professional development (Khan & Chishti, 2012). Training programs are conducted for several primary reasons, including: (a) continuing growth and development of individuals; (b) addressing issues in adult life; (c) preparing for current or future job opportunities; (d) aiding organizations in achieving goals or promoting change, and (e) examining and promoting social change (Caffarella & Daffron, 2013). Workshops, available either internally or externally, are one of the most frequently attended training programs by educators within the North Carolina Community College System (Herman, 2012).

Workshops offer educators the opportunity to share teaching strategies and view innovative teaching approaches across many disciplines (Persellin & Goodrick, 2010). Workshop attendees reported increased confidence in their teaching abilities, admitted willingness to try to new classroom strategies, indicated a better understanding of their roles as educators, and reflected more often on the perspectives of their students (Bauer, Libby, Scharberg, & Reider 2013; Peeraer & Van Petegem, 2012; Persellin & Goodrick, 2010). In addition to increased confidence and expanded perspectives, attendees reported that workshops provided intellectual stimulation and increased their motivation to learn new things (Doherty, 2011). Hands-on application and problem solving opportunities at workshops also increase the likelihood that faculty will implement and incorporate newly learned practices in their classrooms (Felder & Brent, 2010). The aforementioned

research confirms that workshops continue to be perceived as a positive and effective method to deliver new learning experiences.

Blended Learning

As the duties of educators have evolved, the need to diversify their training has also increased (McQuiggan, 2012). Combining face-to-face and online training sessions is known as a blended approach (e.g., Herman, 2012). The addition of online sessions allows faculty the opportunity to have a first-hand experience within an online learning environment (Herman, 2012). Online training is a preferred and accepted method of training by faculty, as it provides ease of access for educators and promotes attendance (Alsofyani, Aris, Eynon, & Majid, 2012; Herman, 2012; Pagliari, Batts, & McFadden, 2009; Thorpe & Gordon, 2012).

In addition to facilitating access and delivery, multiple studies illustrate that the combination of online and face-to-face learning provides a flexible environment for learners, increases interaction among learners, promotes both independent and peer-to-peer learning, accommodates multiple learning styles, and affords the opportunity to incorporate multiple learning resources and pedagogies (Alsofyani et al., 2012; Cowan, Neil, & Winter, 2013; deNoyelles, Cobb & Lowe, 2012; Kyalo & Hopkins, 2013; Roseth, Akcaoglu, & Zellner, 2013). Faculty members who engage in online professional development sessions also have the option to immediately implement what they learned within the context of their own practice (Holmes, 2013; Macdonald, 2010; Thorpe & Gordon, 2012). Inclusion of an online learning component also promotes opportunities for critical reflection and networking, develops mutual support among educators, and

allows content delivery across a wider number of participants (Hauser, Paul, Bradley, & Jeffrey, 2012; Holmes, 2013; Ilin, 2013; Thorpe & Gordon, 2012).

Assessing Learner Characteristics

Creating professional learning opportunities for teachers involves the consideration that their learning is shaped by their current practices and reflection upon these practices (Pitsoe & Maila, 2013). When creating the andragogical model, Knowles (1970) indicated that adults come from a variety of backgrounds. Knowles purported that adult learners: (a) need to understand why they are learning something; (b) take responsibility for their own learning; (c) have experiences that have shaped their learning; (d) are ready to learn new things; and (e) learn best when learning is related to real-life situations (Knowles et al., 2011). In addition, educators also solve problems, challenge students, adapt learning activities to meet students' needs, desire to continuously learn outside of the classroom, take on multiple roles, are sometimes reluctant to change habits, enjoy challenges, and prefer material relevant to their practice (Beavers, 2009; Malone, 2014). Faculty members bring a multitude of life and classroom experiences, unique abilities, varying levels of technological skills, and personal learning preferences, which must be considered when creating new learning opportunities for them (González-Sanmamed, Muñoz-Carril, & Sangrà, 2014; McQuiggan, 2012).

Literature Review Summary

Designing and implementing an effective professional development program begins with an assessment of the needs of learners and the development of an understanding of their differing knowledge and skill levels. Workshops continue to

function as a viable means to conduct professional development sessions, as they offer educators the opportunity to collaborate and network with their peers. Workshops provide the opportunity to demonstrate innovative learning practices and increase instructors' motivation to integrate new technologies in their learning environments.

Incorporating online learning segments alongside seated workshop sessions promotes individual and peer-to-peer learning, provides amenable scheduling options, and affords instructors the opportunity to immediately implement new technologies within their existing online learning environment. Professional learning opportunities for faculty must also consider the unique needs of adult learners, including the correspondence of the lesson to real-life situations. Finally, the personal learning preferences of instructors, as well as their life experiences, must also be taken into account when selecting and creating learning environments for their intended use.

Potential Resources and Support for the Project

Successfully implementing the proposed hybrid professional development project will require numerous resources. First, the administration must provide permission to conduct both the online and face-to-face sessions. The administration must also provide acceptance of this course as professional development credit for faculty. I will discuss this project design with the administration in an effort to encourage them to accept this proposed project as a means to promote retention in online courses at NCCC.

The second required resource includes the creation of a course shell within the current Moodle LMS to add the online content. I will request authorization to create this course once I gain approval by the administration. A third element, the training facilities,

will also be required to implement the face-to-face portion of the course. As in-house organizational facilities are common for use in education and training, I will reserve facilities on campus that are equipped with enough computers and capacity to accommodate attending faculty (Caffarella, 2010). I will also require a projector, a copier for copying instructional guides, and online software supported by Internet access. Faculty will also need access to restrooms and a break area before, during, and after the event (Caffarella, 2010). I must consider each of these elements when I reserve the facility.

Potential Barriers

Understanding the barriers that instructors may face when attempting to participate in a hybrid professional development program is essential to designing a program that meets their needs. Most faculty members cite time constraints as a major challenge for participation in professional development programs (Doherty 2011; McQuiggan, 2012; Merriam, Caffarella, & Baumgartner, 2007). Additional barriers to participation include attitudes toward technology, conflicts in customization due to differing disciplines, lack of interest, assigning a low priority to the course, and personal problems that may hinder participation, such as childcare issues (McQuiggan, 2012; Merriam et al., 2007). Availability of technology may also be a potential barrier for conducting the seated portions of the professional development workshop, as room reservations are required at NCCC.

While these barriers may not be fully eliminated, providing a professional development session that involves online instruction will allow faculty members the

opportunity to complete part of this program at their own pace. Step-by-step guides will aid faculty members in determining whether to adopt new technologies. Room reservations will be made in advance to secure a location that contains all of the required equipment.

Implementation and Timetable

Upon approval from the administration, implementation of the hybrid workshop series will begin in the Fall 2015 semester. Sessions will begin in September 2015 and conclude in December 2015 and will coincide with the internal professional development calendar at NCCC. The project outline presented in Appendix A contains a full list of tentative session dates, including dates for encore sessions in the event of faculty scheduling conflicts. Given the need to ensure the selected meeting areas have sufficient capacity and resources, faculty will need to confirm their attendance at these sessions by first completing any relevant online segments prior to attending the seated session.

Roles and Responsibilities

As the researcher and designer of the project, I will also assume the facilitator role for each workshop. I will also request the assistance of the Distance Learning Division at NCCC to create a course shell in Moodle, the instructional LMS, which will house the online content necessary for the online modules. In addition, I will solicit additional technology experts and expertise from the Computer Services Division at NCCC, to ensure that I will build the capacity to manage the number of attendees at any given workshop. I may also ask these experts to remain available in the event of any unforeseen technical difficulties.

Project Evaluation

Evaluation of a program aids in determining both learner progress and program effectiveness (Lodico et al., 2010). I designed a hybrid workshop series to aid faculty in improving pedagogical practices, designing interactive content in their courses, and developing methods to promote student engagement in online courses. These workshops build on strategies that focus on increasing the elements of teaching presence, social presence, and cognitive presence. Researchers and organizers can evaluate the effectiveness of a program through formative and summative assessments (Lodico et al., 2010). Formative assessments occur during a program and aid in continuous improvement, while summative evaluations are conducted at the end (Gordon & Maxey, 2000; Lodico et al., 2010). Because this project is in the initial development stage, a formative assessment will be used to both provide feedback to the participants and guide my practices (Lodico et al., 2010). The formative assessment, in the form of a short survey, will be provided to faculty after they complete each major segment in the training program (see Appendix A). The survey will be created in Survey Monkey, a free online survey tool. A link to the survey will be provided within each online segment of the workshop.

As I will also need to evaluate the overall effectiveness of the program, I will utilize a summative evaluation geared toward the perceptions and experiences of the attendees (Gordon & Maxey, 2000; Lodico et al., 2010). This survey will also be electronically created through Survey Monkey, with a link housed within the final online segment of the workshop (see Appendix A). The findings from the evaluation will be

utilized to aid in revising the program, or creating new learning outcomes and content, based upon the interests of faculty members. Data gathered from the summative evaluation will also assist in the creation of an effectiveness report for the administration at NCCC. This report will exclude any individual data that may personally identify any participant. Gathering both qualitative and quantitative data will aid in richer information than data collected from a single source or method (Gordon & Maxey, 2000). Both data sets will be collected in a formative evaluation at the end of each training segment, as well as the summative evaluation at the end of the program.

Project Implications

As part of my research study, students at NCCC provided their perceptions of a sense of community in online courses. Their input supported the need to evaluate present teaching practices and assignment content within online courses to promote a greater sense of community, engagement, and persistence in online courses. As a result of the students' feedback, this project proposes a hybrid workshop series to aid faculty in revising pedagogical practices necessary to promote online community. Implementation of this project has both broad and far-reaching implications for social change, as well as benefits for key stakeholders.

Social Change

Implementation of this project may result in positive social change at the local level, as instructors may garner new knowledge on methods to promote community and persistence in online courses, which may result in closing the gap between training and practices. Students may benefit from enhanced analytical skills as a result of increased

engagement and collaboration in their online courses. This workshop may also lead to increased student persistence, which has the potential to contribute to the continued viability of NCCC as an institution. Social change may also be present in the form of long-term economic stability for students who successfully complete online degree programs and attain a college degree.

Finally, this project may also promote farther-reaching social change as faculty at other institutions may wish to participate in the training or adapt the core components to customize the training for their institution. The design of this workshop series will also add to the body of literature on methods for promoting a sense of community in online courses. In addition, the contents of these professional development sessions may be presented at professional conferences throughout the state, which are designed specifically for online instructors.

Benefits for Stakeholders

This project also provides multifaceted benefits for key stakeholders at NCCC, such as faculty, staff, and students. Administration, as well as staff in Student Services, will benefit from a potential increase in online student retention. This workshop series will support NCCC's efforts to increase student persistence and has the potential to increase monetary funding for the college. Faculty members will gain an understanding of the significance of developing a sense of community in online courses and its role in retention and student engagement. Students will benefit from a potential increase in instructor responsiveness, elevated levels of engagement, and increased relevance of assignments given in online courses. All of these elements may also promote student

success in online courses, which may result in fewer repeated courses, foster timely graduation, and increase completion rates. An upsurge in retention and completion rates has the potential to increase funding for higher education at the state level.

Conclusion

I designed this hybrid workshop series as a means to assist faculty in revising present pedagogical practices to promote online community and facilitate student persistence in online courses. The keystones that uncovered the need for a professional development series originated from students' perceptions of community in online courses at NCCC. The findings from this study revealed that online persistence increased when learners were engaged with relevant content, completed real-world assignments, participated in peer-to-peer learning, had increased interactions among peers and the instructor, and received meaningful feedback from classmates and instructors. However, not all of the courses met these criteria. It is my hope that the creation of this workshop will generate increased quality in online courses, promote greater student satisfaction, and encourage persistence in online degree programs at NCCC.

Section 4: Reflections and Conclusions

Introduction

This project study is the result of a case study, shaped by a phenomenological research strategy, designed to gain insight on the experiences of 10 online learners at NCCC. The focus of this study encompassed methods to increase retention in online courses at NCCC while promoting student engagement. My love of teaching and desire to provide engaging online learning environments equivalent to seated classroom opportunities prompted this investigation.

Despite the implementation of methods designed to promote retention at NCCC, such as an early warning system, attrition is still a prevalent problem in online and seated courses. In this final section, I share my reflections regarding the strengths and limitations of this project, examine my personal development as a scholar and practitioner, explore implications for social change that resulted from my study, and extrapolate on potential directions for future research.

Project Strengths and Limitations

I employed a case study approach to focus on individual experiences within a smaller scope and sequence (Lodico et al., 2010). This case study also served as a foundation for designing a project based upon my findings. Focusing on online learner experiences through the use of a case study promoted strengths within my project and study. Consequently, the chosen design also fostered limitations.

Strengths

The strengths of this project lie in the design and focus on retention through the experiences of the online learner. This project included student perceptions, which are not presently a component of representations of retention at NCCC, which are mainly statistical in nature. While attrition is closely tracked at NCCC, the reasons for withdrawing or remaining in a course are not monitored. These experiences are germane to the continuous development of retention policies within the college. The project will also aid in NCCC's initiatives to promote retention by focusing on experiences of successful online learners. The first-hand accounts of learners also provide a new means to enhance present pedagogical practices of instructors within online courses. This project will also promote an increased focus on distance education as part of overall initiatives to increase retention.

In addition to increasing efforts to promote retention, the project also demonstrates additional strengths in the form of a hybrid workshop designed to meet the scheduling needs of faculty. The workshop provides relevant educational resources, which may be immediately implemented within the online learning environment. Instructors will gain an understanding of the importance of designing and facilitating a course that will engage and retain online students, while also enhancing their present pedagogical practices. As this project is scalable and may be applicable to other institutions, the workshop may be adapted for use at other rural community colleges, as well as utilized for presentations at distance learning conferences. Finally, this project

emphasizes the importance of social presence, teaching presence, and cognitive presence within the online environment.

Limitations

As this study was qualitative in nature, the small sample size limits the generalizability of this project to other settings (Lodico et al., 2010). This also means that the project may not be representative of all online students in rural community college settings. In addition to a lack of generalizability, another limitation of the study and project is the fact that interviews served as the only source of data within the study. While the interviews provided rich descriptions, they also provided a one-dimensional view of the problem. Finally, another limitation of the study relates to the gender of the participants in the study, as the sample was overwhelmingly female, with nine out the 10 participants being women. This limitation also affects the transferability of the study to other rural community colleges within NCCC's service area.

Recommendations for Remediation of Limitations

While every study has limitations, a researcher can minimize the limitations through remediation within the study. First, to ensure the transferability and dependability of my study, I provided rich descriptions within the study, including direct quotes from each of the study's participants. These descriptions provided context for the project, illustrated my research processes, and increased the possibility that readers may discover the relevance of the project for their own institutions (Lodico et al., 2010).

The exploratory nature of my study dictated the use of a single method for data collection. However, I also used purposeful sampling to select online learners with

specific experiences applicable to the research topic (Lodico et al., 2010). Gender was not disclosed in my list of participants; therefore, participants were truly randomly selected from among those students who met the specified criteria. The assignment of gender-neutral pseudonyms aided in protecting the identity of the study's participants. The consenting participants shared detailed perceptions and experiences that enhanced the project. Member checks also ensured that I provided an accurate account of participants' experiences. Finally, the collection of demographic data at the time of interviewing also allowed me to describe any discrepant information as, for example, was the case with participants' employment status within the study.

Recommendations for Alternate Approaches

As this research study illustrates, answers to research questions may be ascertained through systematic collection and analysis of data (Lodico et al., 2010). The findings from my research study indicated that students at NCCC were not fully engaged in online courses due to absence of engaging content or lack of interaction with peers and instructors. To address the problem, I created a professional development workshop series to promote engagement and retention by enhancing pedagogical practices and improving online course design. While the research findings suggested the development of a workshop, an alternate approach, in the form of a policy revision, might also address the study's findings. The creation of an addendum to current online course design standards may also address the problem. Ensuring that the required components in online courses coincide with the CoI presences would provide a means for facilitating student engagement and retention.

Just as alternate methods exist for addressing the study's findings, additional methods exist for defining the problem. The problem may also be viewed and defined as a lack of engagement in online courses. Examining the problem from this view may require an investigation as to whether a relationship exists between engagement in online courses and student persistence and success. An alternate method to investigate the issue might include the use of a quantitative approach, such as a correlational study, that would require a larger number of participants (30 or more) to measure self-reported student engagement and course completion (Lodico et al., 2010). Random sampling would be required to generalize the results of the study to other institutions (Lodico et al., 2010). Findings from a correlational study alone are typically considered weak; therefore, the use of a mixed-method approach would strengthen the study (Lodico et al., 2010).

Scholarship

My coursework, doctoral research, and project study at Walden University reshaped my thinking about scholarship and research. Throughout my doctoral journey, I discovered how to critically examine literature sources for credibility, potential bias, relevance, application, the presence or absence of peer-review processes, and adherence to ethical research practices. These collective methods served as the foundation for selecting high-caliber references for my doctoral study, and will equate to a set of required guidelines for my future research endeavors.

While examining research for the aforementioned quality indicators, I also discovered the importance of synthesizing scholarly resources to gain a broader perspective on the research problem. Summarizing a scholarly resource simply provides a

one-dimensional view of the problem. Analyzing and integrating research findings provides a multi-faceted understanding of the problem, proposed solutions, and opportunities that may exist for new research. Scholars who are educators are also responsible for promoting learner understanding while influencing the ever-changing methods within their fields (Shulman, 2012). Becoming a scholar takes practice, diligence, and the desire for inquiry. My professors and colleagues at Walden University contributed to my development as a scholar, promoted my learning as an instructor, and supported my continued growth in this evolving process.

Project Development and Evaluation

Loss of funding due to lack of retention and growth is now a reality for NCCC. According to the President of the college, the college is poised to lose $678,000 due to lack of retention and declining enrollment. In addition, the college system accumulated overall losses of $188,000 due to decreased enrollment. This hybrid professional development series has the potential to equip faculty with tools necessary to promote student engagement and increase connectedness, while aiding in the NCCC's mission to promote retention. The project illustrates the significance of developing assignments congruent to multiple learning styles, providing engaging learning resources, creating clear and relevant assignments, promoting engagement with technology, supplying meaningful feedback, and communicating frequently with students.

This project will be evaluated through the use of formative assessments at the end of each segment (see Appendix A). Formative assessments allow participants the opportunity to provide feedback on their learning, while affording presenters and

stakeholders the opportunity to immediately alter the program (Lodico et al., 2010). The results of the formative assessment will be used to continually revise and adjust the content of each segment in the professional development series. A summative assessment will also be employed at the end of the program to ensure that the project's goals were met (see Appendix A). Summative assessments will also aid the presenter and stakeholders in making program improvements to achieve the intended outcomes (Lodico et al., 2010).

The results of the formative and summative evaluations will be presented to key stakeholders in the form of summaries sent through e-mails. Key stakeholders include faculty, staff, workshop presenters and facilitators, and the administration. A formal evaluation report will be provided to the administration at the end of the program. Their feedback, as well the feedback of participating faculty, will be requested to continually shape the program to align with NCCC's retention goals, as well as accommodate training and learning needs expressed by faculty and students.

Leadership and Change

As a scholar-practitioner, I am now a change agent equipped with knowledge to promote change in my organization (Ginsberg & Bernstein, 2011). To assume a leadership role within my organization, I must have the ability, as a leader, to envision the future, which is a key element of educational improvement (Morrison, 2013). Leadership is a collaborative process that begins with a desire for change, involves many stakeholders, and evolves through attainment of new knowledge.

While a leader has a vision, the leadership equation is not one-sided (Morrison, 2013). Instead, a leader must share his or her vision with the organization and be willing to work with others toward a common goal. Retaining students is a central issue at NCCC, as funding is contingent upon the number of students enrolled. Examining methods to increase retention in online courses will require input from a number of constituents. Key stakeholders at my college are aware of my research topic and are interested in knowing more about my findings. My colleagues are also interested in learning more details about my project. I will meet with the Vice President for Academic Affairs, Vice President of Student Services, as well as the President of NCCC in the upcoming months to discuss my project and its implementation.

Personal Reflections as a Scholar

I began this doctoral journey as an educator, practitioner, and alumna of Walden University. While I had prior knowledge of how to incorporate research to support and strengthen my work, I had not fully developed as a scholar and a researcher. Once I completed my prospectus and began working on my proposal, I began to understand the magnitude of conducting quality research, as well as the ability to discern its relevance to my own work. As this was my first time conducting my own research study, I was noticeably nervous about ensuring that my methods were accurate and followed the strict research protocols that are part of Walden's curriculum and published research studies. Although I am partial to qualitative research studies, I now understand and appreciate the value of quantitative studies, as well as allowing the research problem to guide the research approach.

Prior to the completion of this journey, I was skeptical about my desire to conduct any type of research. After conducting my own study, I have a newfound confidence in my research abilities and welcome the opportunity to publish my present study, as well as conduct future research. Adding to the body of research on methods to engage online students will not only strengthen my research practices, but also will aid future researchers in understanding the importance of the topic and its impact on online learners.

Personal Reflections as a Practitioner

As a 7-year educator at NCCC, I teach courses in face-to-face, blended, and online learning environments. I continually strive to provide all of my students with the same type of learning opportunities, regardless of the learning medium. This often includes the addition of synchronous meetings for my online students. My experience with teaching online courses, as well as my desire to continually improve my practices through professional development and research, equipped me with advanced knowledge of online learning practices. However, my personal experiences as an online doctoral student at Walden University have refined my methods and served to alter my pedagogical procedures. In addition, I now use multiple opportunities to fully explain the importance of sound research methods to my students, and am better equipped to handle their questions relating to citations, formats, and analysis of a scholarly literature.

The CoI model for online learning will also serve as a guide for developing my future courses. I now understand the implications for engaging students through incorporation of the elements of cognitive presence, social presence, and teaching presence to promote retention and enhance critical inquiry. My data collection process

allowed me to gain additional insights on the challenges faced by online students within an online learning environment. My new knowledge fortified my own practices and will aid in my own course design procedures. In addition, I am now equipped to educate my peers on the additional benefits of engaging online students. Lastly, I have the opportunity to aid NCCC in focusing on additional methods to promote retention, while bolstering the quality of online course offerings.

Personal Reflections as a Project Developer

To design an effective and meaningful professional development series, I began with identifying the elements that the research study participants desired in an online course. To incorporate these elements within the program, I included segments on learning styles, learning resources, assignment clarity and relevance, engagement through technology, and engagement through responsiveness and feedback. The challenges in creating the project related to presenting content in an understandable manner; locating content relevant to faculty needs; communicating the significance of social presence, teaching presence, and cognitive presence within an online environment; and illustrating the use of new technologies while considering the unique needs of faculty members.

The importance of this project is multifaceted. Completion of this hybrid professional development series will provide instructors with a greater understanding of methods to engage students in online courses. Student engagement may lead to increased student satisfaction, which could promote persistence in online courses. Developing instructors' confidence to design engaging online courses will also enhance future online courses and may ensure the continued viability of distance education programs at NCCC.

Project's Potential Impact on Social Change

The findings from this doctoral study led to the creation of a hybrid workshop series designed to educate online instructors about online student engagement, as well as enhance their pedagogical practices. The theoretical framework and research from this study illustrate the importance of creating an online environment that promotes retention and cognitive presence through an increase in the elements of teaching presence and social presence. The workshop series incorporates excerpts from this research study's findings to solidify understanding of effective online course design and its role in retention.

The workshop series presents an opportunity to aid in increased retention, which may translate to an upsurge in funding for NCCC. Promoting a sense of community, as well as engagement, in online courses may also result in attracting new students to NCCC. The addition of new students will aid in the continued viability of the institution and will provide local citizens with an avenue in which to complete their education. Given the economic impact of numerous textile plant closings within the area, residents will continue to need an educational institution that is capable of supporting their future learning needs. Educating the community may also insure long term economic growth through attraction of new industries.

This workshop has the potential to impact social change on a broader scale through presentations at distance education conferences. Faculty members frequently attend these workshops to add to their professional development portfolio. I will seek new opportunities to present my research findings at these conference venues to promote

awareness of the significance of providing and promoting an engaging online environment. As with any new policies and practices, the workshop will have to evolve along with the needs of the institution. Key stakeholders must be involved to aid in making these decisions. The input of full time and adjunct instructors will be critical to ensure the continued success of the workshop for its intended purpose.

Implications, Applications, and Directions for Future Research

This study investigated student perceptions of a sense of connectedness in online courses as a means of promoting retention in online courses. Rather than include students who withdrew from online courses, as in prior research, this study requested participation from actively enrolled online students with learning experiences in two or more online courses. The project study focused on perceptions of these experiences to enhance pedagogical practices of online instructors. The project will offer a means for continuous improvement of distance education courses, which may also foster student success and completion. While the sample size was small, the study represented the perceptions of learners from multiple age groups, differing enrollment types, and diverse backgrounds.

As the qualitative nature of the study limits its generalizability, adding a quantitative component would also provide breadth to the study. Future researchers may also wish to examine the unique needs of each gender, which was not addressed in this study. Additional research on instructor perspectives of online course engagement would also add to the field of research. Studying a larger sample within a similar institution may provide additional insight on methods students utilize to connect with other students, as well as persist within online course environments.

Conclusion

The overarching goal of this study was to identify factors within the community of inquiry framework that enhance student persistence in fully online courses. I discovered that persistent students preferred engaging assignments, relevant content, increased levels of instructor responsiveness, peer-to-peer learning opportunities, and meaningful feedback to continue in online courses. Armed with this knowledge, I developed a hybrid workshop series designed to aid educators in altering pedagogical practices to increase retention in online courses. The strengths of this project include a focus on retention, inclusion of student perceptions, flexible design to meet scheduling needs of faculty, and an illustration of the importance of designing an online course to promote meaningful interactions through the use of cognitive presence, teaching presence, and social presence.

My scholarship and leadership abilities continued to evolve while designing and developing this project. I am now equipped with the knowledge to reshape my own pedagogical practices, as well as enhance the practices of other educators. My research abilities will continue to assist me both personally and professionally as I aid students in conducting their own inquiries, as well as pursuing my own research interests to add to the body of literature on connectedness.

This project has the potential to promote social change through increased retention for NCCC, which may also include realization of additional funding. Social change in the form of economic sustainability for local citizens and the community may also occur. The creation of a scalable project may also ensure that the project supports

sustainability, as well the needs of learners, in other communities. Finally, this project provides additional prospects to continue the research and discussion surrounding student engagement, retention, and future success rates. It is my hope that my desire to promote an engaging online environment will ignite the willingness of other educators to do the same.

References

Adobe Systems, Inc. (2015). Adobe Connect Web Conferencing Software. (Version 9) [Computer Software]. Retrieved from http://www.adobe.com/products/adobeconnect.html?promoid=DINSD

Allen, C. D., & Peneul, W. R. (2015). Studying teachers' sensemaking to investigate teachers' responses to professional development focused on new standards. *Journal of Teacher Education, 66*, 136-149. doi: 10.1177/0022487114560646

Allen, I. E., & Seaman, J. (2011). *Going the distance: Online education in the United States, 2011*. Retrieved from http://www.onlinelearningsurvey.com/reports/goingthedistance.pdf

Alsofyani, M. M., Aris, B. B., Eynon, R., & Majid, N. A. (2012). A preliminary evaluation of short blended online training workshop for TPAK development using technology acceptance model. *Turkish Online Journal of Educational Technology, 11*(3), 20-32. Retrieved from http://www.tojet.net/

Aragon, S. R., & Johnson, E. S. (2008). Factors influencing completion and noncompletion of community college online courses. *The American Journal of Distance Education, 22*(3), 146-158. doi: 10.1080/08923640802239962

Arbaugh, J. B. (2008). Does the community of inquiry framework predict outcomes in online MBA courses? *International Review of Research in Open and Distance Learning, 9*(2), 1-21. Retrieved from http://www.irrodl.org/index.php/irrodl

Arbaugh, J. B., & Benbunan-Fich, R. (2007). The importance of participant interaction in online environments. *Decision Support Systems, 43*(3), 853-865, doi: 10.1016/j.dss.2006.12.013

Atchley, W., Wingenbach, G., & Akers, C. (2013). Comparison of course completion and student performance through online and traditional courses. *International Review of Research in Open and Distance Learning*, *14*(4), 104-116. Retrieved from http://www.irrodl.org/index.php/irrodl

Atlas.ti Scientific Software. (2013). Atlas.ti: Qualitative Data Analysis and Research Software (Version 7) [Computer Software]. Retrieved from http://www.atlasti.com

Aud, S., Wilkinson-Flicker, S., Kristapovich, P., Rathbun, A., Wang, X., & Zhang, J. (2013). *The condition of education 2013* (NCES 2013-037). U.S. Department of Education, National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch

Aykol, Z., & Garrison, D. (2008). The development of a community of inquiry over time in an online course: Understanding the progression and integration of social, cognitive and teaching presence. *Journal of Asynchronous Learning Networks*, *12*(3-4), 3-22. Retrieved from http://sloanconsortium.org/publications/jaln_main

Aykol, Z., & Garrison, D.R. (2011). Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology, 42*(2), 233-250. doi:10.1111/j.1467-8535.2009.01029.x

Bambara, C. S., Harbour, C. P., Davies, T., & Athey, S. (2009). Delicate engagement: The lived experience of community college students enrolled in high-risk online courses. *Community College Review, 36*(3), 219-238. Retrieved from http://crw.sagepub.com/

Bauer, C., Libby, R. D., Scharberg, M., & Reider, D. (2013). Transformative research-based pedagogy workshops for chemistry graduate students and postdocs. *Journal of College Science Teaching*, *43*(2), 36-43. Retrieved from http://www.nsta.org

Baum, S., Ma, J., & Payea, K. (2010). *Education pays 2010: The benefits of higher education for individuals and society.* New York: College Board Advocacy and Policy Center. Retrieved from http://advocacy.collegeboard.org/sites/default/files/Education_Pays_2010.pdf

Baxter, J. (2012). Who am I and what keeps me going?: Profiling the distance learning student in higher education. *International Review of Research in Open and Distance Learning*, *13*(4), 107-129. Retrieved from http://www.irrodl.org/index.php/irrodl

Beavers, A. (2009). Teachers as learners: Implications of adult education for professional development. *Journal of College Teaching & Learning, 6*(7), 25-30. Retrieved from http://www.cluteinstitute.com/journals/journal-of-college-teaching-learning-tlc/

Blanchard, A. L. (2007). Developing a sense of virtual community measure. *Cyberpsychology and Behavior*, *10*(6), 827-830. doi:10.1089/cpb.2007.9946

Boston, W., Diaz, S. R., Gibson, A. M., Ice, P., Richardson, J., & Swan, K. (2009). An exploration of the relationship between indicators of the community of inquiry framework and retention in online programs. *Journal of Asynchronous Learning Networks, 13*(3), 67-83. Retrieved from http://sloanconsortium.org/publications/jaln_main

Boston, W., Gibson, A. M., & Ice, P. (2011). Comprehensive assessment of student retention in online learning environments. *Online Journal of Distance Learning Administration, 4*(1), 1593-1599. Retrieved from http://www.westga.edu/~distance/ojdla/

Caffarella, R. (2010). *Designing and assessing learning experiences.* San Francisco, CA: Jossey-Bass.

Caffarella, R., & Daffron, S. (2013). *Planning programs for adult learners: A practical guide*. San Francisco, CA: Jossey-Bass.

Calvin, J., & Freeburg, B. (2010). Exploring adult learners' perceptions of technology competence and retention in web-based courses. *Quarterly Review of Distance Education*, *11*(2), 63-72. Retrieved from http://www.infoagepub.com/quarterly-review-of-distance-education.html

Carroll, D., Ng, E., & Birch, D. (2009). Retention and progression of postgraduate business students: An Australian perspective. *Open Learning, 24*(3), 197-209. doi:10.1080/02680510903201599

Castaño-Muñoz, J., Sancho-Vinuesa, T., & Duart, J. (2013). Online interaction in higher education: Is there evidence of diminishing returns? *International Review of*

Research in Open and Distance Learning, 14(5). Retrieved from http://www.irrodl.org/index.php/irrodl

Clay, M. N., Rowland, S., & Packard, A. (2009). Improving undergraduate online retention through gated advisement and redundant communication. *Journal of College Student Retention: Research, Theory and Practice, 10*(1), 93–102. doi: 10.2190/CS.10.1.g

Cobb, S. C. (2011). Social presence, satisfaction, and perceived Learning of RN-to-BSN students in web-based nursing courses. *Nursing Education Perspectives*, *32*(2), 115-119. doi:10.5480/1536-5026-32.2.115

Cowan, P. P., Neil, P. S., & Winter, E. E. (2013). A connectivist perspective of the transition from face-to-face to online teaching in higher education. *International Journal of Emerging Technologies in Learning*, *8*(1), 10-19. doi:10.3991/ijet.v8i1.2346

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Upper Saddle River, NJ: Pearson Education.

deNoyelles, A., Cobb, C., & Lowe, D. (2012). Influence of reduced seat time on satisfaction and perception of course development goals: A case study in faculty development. *Journal of Asynchronous Learning Networks, 16*(2), 85-98. Retrieved from http://onlinelearningconsortium.org/read/online-learning-journal/

Dixson, M. D. (2010). Creating effective student engagement in online courses: What do students find engaging? *Journal of the Scholarship of Teaching & Learning*,

10(2), 1-13. Retrieved from http://josotl.indiana.edu/

Doherty, I. (2011). Evaluating the impact of educational technology professional development upon adoption of web 2.0 tools in teaching. *Australasian Journal of Educational Technology, 27*(3), 381-396. Retrieved from http://www.ascilite.org.au/ajet

Drouin, M. A. (2008). The relationship between students' perceived sense of community and satisfaction, achievement, and retention in an online course. *Quarterly Review of Distance Education*, *9*(3), 267-284. Retrieved from http://www.infoagepub.com/index.php?id=89&i=2

Drouin, M., & Vartanian, L. (2010). Students' feelings of and desire for sense of community in face-to-face and online courses. *Quarterly Review of Distance Education*, *11*(3), 147-159. Retrieved from http://www.infoagepub.com/quarterly-review-of-distance-education.html

Elliott, M., Rhoades, N., Jackson, C. M., & Mandernach, B. J. (2015). Professional development: Designing initiatives to meet the needs of online faculty. *Journal of Educators Online*, *12*(1), 160-188. Retrieved from http://thejeo.com/

Erichsen, E., & Bolliger, D. (2011). Towards understanding international graduate student isolation in traditional and online environments. *Educational Technology Research & Development*, *59*(3), 309-326. doi:10.1007/s11423-010-9161-6

Felder, R. M., & Brent, R. (2010). The national effective teaching institute: Assessment of impact and implications for faculty development. *Journal of Engineering Education*, *99*(2), 121-134. Retrieved from http://www.asee.org/papers-and-

publications/publications/jee

Fetzner, M. (2013). What do unsuccessful online students want us to know? *Journal of Asynchronous Learning Networks*, *17*(1), 13-27. Retrieved from http://sloanconsortium.org/publications/jaln_main

Fike, D. S., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Review, 36*(2), 68-88. Retrieved from http://crw.sagepub.com/

Finnegan, C., Morris, L. V., & Lee, K. (2009). Differences by course discipline on student behavior, persistence, and achievement in online courses of undergraduate general education. *Journal of College Student Retention: Research, Theory and Practice, 10*(1), 39–54. doi: 10.2190/CS.10.1.d

Gallagher-Lepak, S., Reilly, J., & Killion, C. M. (2009). Nursing student perceptions of community in online learning. *Contemporary Nurse: A Journal for the Australian Nursing Profession, 32*(1/2), 133-146. Retrieved from http://www.contemporarynurse.com/

Garrison, D.R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer-conferencing in higher education. *The Internet and Higher Education, 2*(2-3), 87-105. Retrieved from http://www.journals.elsevier.com/the-internet-and-higher-education/

Garrison, D.R., Cleveland-Innes, M., & Fung, T. (2010). Exploring causal relationships among teaching, cognitive, and social presences: Student perceptions of the

community of inquiry framework. *The Internet and Higher Education, 13*(1-2), 31-36. doi: 10.1016/j.iheduc.2009.10.002

Garrison, R., Cleveland-Innes, M., & Vaughan, N. (n.d.). CoI. CoI model. Retrieved from https://coi.athabascau.ca/coi-model/

Ginsberg, S. M., & Bernstein, J. L. (2011). Growing the scholarship of teaching and learning through institutional culture change. *Journal of the Scholarship of Teaching and Learning*, *11*(1), 1-12. Retrieved from http://josotl.indiana.edu/

Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Boston, MA: Pearson Education.

Gordon, S. P., & Maxey, S. (2000). *How to help beginning teachers succeed.* Alexandria, VA, USA: Association for Supervision & Curriculum Development (ASCD). Retrieved from http://www.ebrary.com

González-Sanmamed, M., Muñoz-Carril, P., & Sangrà, A. (2014). Level of proficiency and professional development needs in peripheral online teaching roles. *International Review of Research in Open and Distance Learning*, *15*(6), 162-187. Retrieved from http://www.irrodl.org/index.php/irrodl

Gupta, K. (2011). *A practical guide to needs assessment.* (2nd ed). San Francisco, CA: John Wiley and Sons.

Hachey, A. C., Wladis, C. W., & Conway, K. M. (2012). Is the second time the charm? Investigating trends in online re-enrollment, retention and success. *Journal of Educators Online*, *9*(1). Retrieved from http://www.thejeo.com/

Harrell, I. L. & Bower, B. L. (2011). Student characteristics that predict persistence in

community college online courses. *American Journal of Distance Education, 25*(3), 178-191. doi: 10.1080/08923647.2011.590107

Hauser, R., Paul, R., Bradley, J., & Jeffrey, L. (2012). Computer self-efficacy, anxiety, and learning in online versus face to face medium. *Journal of Information Technology Education*, *11*(1), 141-154. Retrieved from http://www.informingscience.org/Journals/JITEResearch/Overview

Herman, J. H. (2012). Faculty development programs: The frequency and variety of professional development programs available to online instructors. *Journal of Asynchronous Learning Networks, 16*(5), 87-106. Retrieved from http://onlinelearningconsortium.org/read/online-learning-journal/

Holmes, B. (2013). School teachers' continuous professional development in an online learning community: Lessons from a case study of an e twinning learning event. *European Journal of Education, 48*(1), 97-112. doi:10.1111/ejed.12015

Hyoseon, C., Yekyung, L., Insung, J., & Latchem, C. (2013). The extent of and reasons for non re-enrollment: A case of Korea National Open University. *International Review of Research in Open & Distance Learning*, *14*(4), 19-35. Retrieved from http://www.irrodl.org/index.php/irrodl

Ilin, G. (2013). Moodle: A way for blending VLE and face-to-face instruction in the ELT context? *Turkish Online Journal of Educational Technology, 12*(4), 103-112. Retrieved from http://tojde.anadolu.edu.tr/

Ivankova, N. V., & Stick, S. L. (2007). Students' persistence in a distributed doctoral program in educational leadership in higher education: A mixed methods study. *Research in Higher Education*, *48*(1), 93-135. doi: 10.1007/s11162-006-9025-4

Jaggars, S. (2014). Choosing between online and face-to-face courses: Community college student voices. *American Journal of Distance Education, 28*(1), 27-38. doi:10.1080/08923647.2014.867697

Julian, T. (2012). *Work-life earnings by field of degree and occupations for people with a bachelor's degree: 2011*. American Community Survey Briefs. Washington: U.S. Census Bureau. Retrieved from http://www.census.gov/prod/2012pubs/acsbr11-04.pdf

Khan, S. B., & Chishti, S. (2012). Effects of staff training and development on professional abilities of university teachers in distance learning systems. *Quarterly Review of Distance Education*, *13*(2), 87-94. Retrieved from http://www.infoagepub.com/quarterly-review-of-distance-education.html

Kehrwald, B. (2008). Understanding social presence in text-based online learning environments. *Distance Education, 29*(1), 89-106. doi:10.1080/01587910802004860

Knowles, M. S. (1970). *The modern practice of adult education: Andragogy vs. pedagogy.* New York, NY. Cambridge.

Knowles, M. S., Holton, E. G., & Swanson, R. A. (2011). *The adult learner: The definitive classic in adult education and human resource development* (7th ed.). Burlington, MA: Elsevier, Inc.

Kumar, S., Dawson, K., Black, E. W., Cavanaugh, C., & Sessums, C. D. (2011). Applying the community of inquiry framework to an online professional practice doctoral program. *International Review of Research in Open and Distance Learning*, *12*(6), 126-142. Retrieved from http://www.irrodl.org/index.php/irrodl

Kyalo, I. W., & Hopkins, S. (2013). Exploring the acceptability of online learning for continuous professional development at Kenya medical training colleges. *Electronic Journal of E-Learning, 11*(2), 82-90. Retrieved from http://www.ejel.org/main.html

Kyungbin, K., Daehoon, H., Eun-Jun, B., & Armstrong, S. (2010). Feelings of isolation and coping mechanism in online learning environments: A case study of Asian international students. *International Journal of Learning*, *17*(2), 343-355. Retrieved from http://ijl.cgpublisher.com/

Liu, S. Y., Gomez, J., & Yen, C. (2009). Community college online course retention and final grade: Predictability of social presence. *Journal of Interactive Online Learning, 8*(2), 165-182. Retrieved from www.ncolr.org/jiol

Liu, X., Magjuka, R. J., Bonk, C. J., & Lee, S. (2007). Does sense of community matter? An examination of participants' perceptions of building learning communities in online courses. *Quarterly Review of Distance Education, 8*(1), 9-24. Retrieved from http://www.infoagepub.com/quarterly-review-of-distance-education.html

Lodico, M., Spaulding, T., & Voegtle, K. (2010). *Methods in educational research: From theory to practice*. San Francisco, CA: Jossey-Bass.

Macdonald, J. (2010). Activity design in online professional development for university staff. *European Journal of Open, Distance and E-Learning*, (1), 1-7. Retrieved from http://www.eurodl.org/

Malone, S. (2014). Characteristics of adult learners. *Training & Development, 41*(6), 10-13.

Mayne, L. A., & Qiang, W. (2011). Creating and measuring social presence in online graduate nursing courses. *Nursing Education Perspectives, 32*(2), 110-114. doi:10.5480/1536-5026-32.2.110

McQuiggan, C. A. (2012). Faculty development for online teaching as a catalyst for change. *Journal of Asynchronous Learning Networks, 16*(2), 27-61. Retrieved from http://onlinelearningconsortium.org/read/online-learning-journal/

Merriam, S. (2009). *Qualitative research: A guide to design and implementation.* San Francisco, CA: Jossey-Bass.

Merriam, S.B., Caffarella, R.S., & Baumgartner, L.M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco, California: Jossey-Bass.

Moody, J. (2004). Distance education: Why are the attrition rates so high? *The Quarterly Review of Distance Education, 5*(3), 205-210. Retrieved from http://www.infoagepub.com/quarterly-review-of-distance-education.html

Moloney, J. F., & Oakley II, B. (2010). Scaling online education: Increasing access to higher education. *Journal of Asynchronous Learning Networks, 14*(1), 79-94. Retrieved from http://sloanconsortium.org/publications/jaln_main

Moisey, S., Neu, C., & Cleveland-Innes, M. (2008). Community building and computer-mediated conferencing. *Journal of Distance Education, 22*(2), 15-42. Retrieved from http://www.jofde.ca/index.php/jde

Morris, T. (2011). Exploring community college student perceptions of online learning. *International Journal of Instructional Technology and Distance Learning, 8*(6), 31-44. Retrieved from http://terrymorris.net/ITDLMorrisArticle.pdf

Morrison, A. (2013) Educational leadership and change: Structural challenges in the implementation of a shifting paradigm. *School Leadership & Management: Formerly School Organisation, 33*(4), 412-424, doi: 10.1080/13632434.2013.813462

Moustakas, C. (1994). *Phenomenological research methods.* SAGE Publications, Inc. doi**:** 10.4135/9781412995658

Müller, T. (2008). Persistence of women in online degree-completion programs. *International Review of Research in Open and Distance Learning, 9*(2), 1-18. Retrieved from http://www.irrodl.org/index.php/irrodl

Nagel, L. L., Blignaut, A. S., & Cronje, J. C. (2009). Read-only participants: A case for student communication in online classes. *Interactive Learning Environments*, *17*(1), 37-51. Retrieved from http://www.tandfonline.com/toc/nile20/current

Nichols, M. (2010). Student perceptions of support services and the influence of targeted interventions on retention in distance education. *Distance Education*, *31*(1), 93-113. doi:10.1080/01587911003725048

North Carolina Community College System Critical Success Factors Report. (July 2012). Retrieved from North Carolina Community College System website: http://www.nccommunitycolleges.edu/Publications/docs/Publications/csf2012.pdf

Owens, J., Hardcastle, L., & Richardson, B. (2009). Learning from a distance: The experience of remote students. *Journal of Distance Education*, *23*(3), 53-74. Retrieved from http://www.jofde.ca/index.php/jde

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/ojdla/

Park, J., & Choi, H. (2009). Factors influencing adult learners' decision to drop out or persist in online learning. *Journal of Educational Technology & Society, 12*(4), 207-217. Retrieved from http://www.journals.elsevier.com/technology-in-society/

Peeraer, J., & Van Petegem, P. (2012). The limits of programmed professional development on integration of information and communication technology in education. *Australasian Journal of Educational Technology, 28*(6), 1039-1056. Retrieved from http://www.ascilite.org.au/ajet

Perry, B., Boman, J., Care, W., Edwards, M., & Park, C. (2008). Why do students withdraw from online graduate nursing and health studies education? *Journal of Educators Online, 5*(1). Retrieved from http://www.thejeo.com/

Persellin, D., & Goodrick, T. (2010). Faculty development in higher education: Long-term impact of a summer teaching and learning workshop. *Journal of the*

Scholarship of Teaching and Learning, 10(1), 1-13. Retrieved from http://www.iupui.edu/~josotl

Pittenger, A., & Doering, A. (2010). Influence of motivational design on completion rates in online self-study pharmacy-content courses. *Distance Education*, *31*(3), 275-293. Retrieved from http://www.tandfonline.com/toc/cdie20/current

Pitsoe, V., & Maila, M. (2013). Re-thinking teacher professional development through Schön's reflective practice and situated learning lenses. *Mediterranean Journal of Social Sciences*, *4*(3), 211. Retrieved from http://www.mcser.org/journal/index.php/mjss

Radford, A. W. (2011). *Learning at a distance: Undergraduate enrollment in distance education courses and degree programs* (NCES 2012-154). U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubs2012/2012154.pdf

Robinson, C.C. & Hullinger, H. (2008). New benchmarks in higher education: Student engagement in online learning. *Journal of Education for Business, 84*(2), 1010-109. Retrieved from http://www.tandfonline.com/toc/vjeb20/current

Romero, M., & Barberá, E. (2011). Quality of learners' time and learning performance beyond quantitative time-on-task. *International Review of Research in Open and Distance Learning, 12*(5), 125-137. Retrieved from http://www.irrodl.org/index.php/irrodl

Roseth, C., Akcaoglu, M., & Zellner, A. (2013). Blending synchronous face-to-face and computer-supported cooperative learning in a hybrid doctoral seminar.

Techtrends: Linking Research & Practice to Improve Learning, 57(3), 54-59. doi:10.1007/s11528-013-0663-z

Rovai, A. (2002). Building sense of community at a distance. *International Review of Research in Open and Distance Learning, 3*(1). Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/79/152

Rubin, B., & Fernandes, R. (2013). The teacher as leader: Effect of teaching behaviors on class community and agreement. *International Review of Research in Open and Distance Learning, 14*(5). Retrieved from http://www.irrodl.org/index.php/irrodl

Schneider, M. & Yin, Lu M. (2012). *Completion matters: The high cost of low community college graduation rates*. American Enterprise Institute for Public Policy Research: Education Outlook No. 2. Retrieved from http://www.aei.org/outlook/education/higher-education/community-colleges/completion-matters-the-high-cost-of-community-college-graduation-rates/

Shea, P., & Bidjerano, T. (2008). Measures of quality in online education: An investigation of the community of inquiry model and the net generation. *Journal of Educational Computing Research*, *39*(4), 339-361. doi:10.2190/EC.39.4.b

Shulman, L. (2012). From minsk to pinsk: Why a scholarship of teaching and learning? *Journal of the Scholarship of Teaching and Learning, 1*(1), 48-53. Retrieved from http://josotl.indiana.edu/

Simonds, T. A., & Brock, B. L. (2014). Relationship between age, experience, and student preference for types of learning activities in online courses. *Journal of Educators Online, 11*(1). Retrieved from http://thejeo.com/

Stake, R.E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage.

Swan, K., & Shih, L.F. (2005). On the nature and development of social presence in online course discussions. *Journal of Asynchronous Networks, 10*(3), 45-62. Retrieved from http://sloanconsortium.org/publications/jaln_main

Thorpe, M., & Gordon, J. (2012). Online learning in the workplace: A hybrid model of participation in networked, professional learning. *Australasian Journal of Educational Technology, 28*(8), 1267-1282. Retrieved from http://www.ascilite.org.au/ajet

Tinto, V. (1987, November). *The principles of effective retention.* Paper presented at the Fall Conference of the Maryland College Personnel Association, Largo, MD.

Tucker, S. Y. (2012). Promoting socialization in distance education. *Turkish Online Journal of Distance Education, 13*(1), 174-182. Retrieved from http://tojde.anadolu.edu.tr/

U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, Policies and Program Studies Service. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Retrieved from http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Wang, C., Shannon, D. M., & Ross, M. E. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education, 34*(3), 302-323. Retrieved from http://www.tandfonline.com/toc/cdie20/current#.VE_2iDN0zIU

Willging, P. A., & Johnson, S. D. (2009). Factors that influence students' decision to drop out of online courses. *Journal of Asynchronous Learning Networks*, *13*(3), 115-127. Retrieved from http://sloanconsortium.org/publications/jaln_main

Yang, Y., Cho, Y., Mathew, S., & Worth, S. (2011). College student effort expenditure in online versus face-to-face courses: The role of gender, team learning orientation, and sense of classroom community. *Journal of Advanced Academics, 22*(4), 619-638. doi:10.1177/1932202X11415003

Youngju, L., Jaeho, C., & Taehyun, K. (2013). Discriminating factors between completers of and dropouts from online learning courses. *British Journal of Educational Technology*, *44*(2), 328-337. doi:10.1111/j.1467-8535.2012.01306.x

Yuen, K.S., Lee, S.W., Tsang, E. (2011). Reasons for dropping out in distance learning. *International Journal of Continuing Education & Lifelong Learning, 3*(2), 25-41. Retrieved from http://research.hkuspace.hku.hk/journal/ijcell/

Zembylas, M. (2008). Adult learners' emotions in online learning. *Distance Education, 29*(1), 71-87. doi:10.1080/01587910802004852

Appendix A: Project Study

Project Outline

Note: Seated Sessions = 2 hours (total of 10 hours) – held on Fridays
Online Sessions (Individually paced – 8 hours or greater) – open for 1.5 weeks.

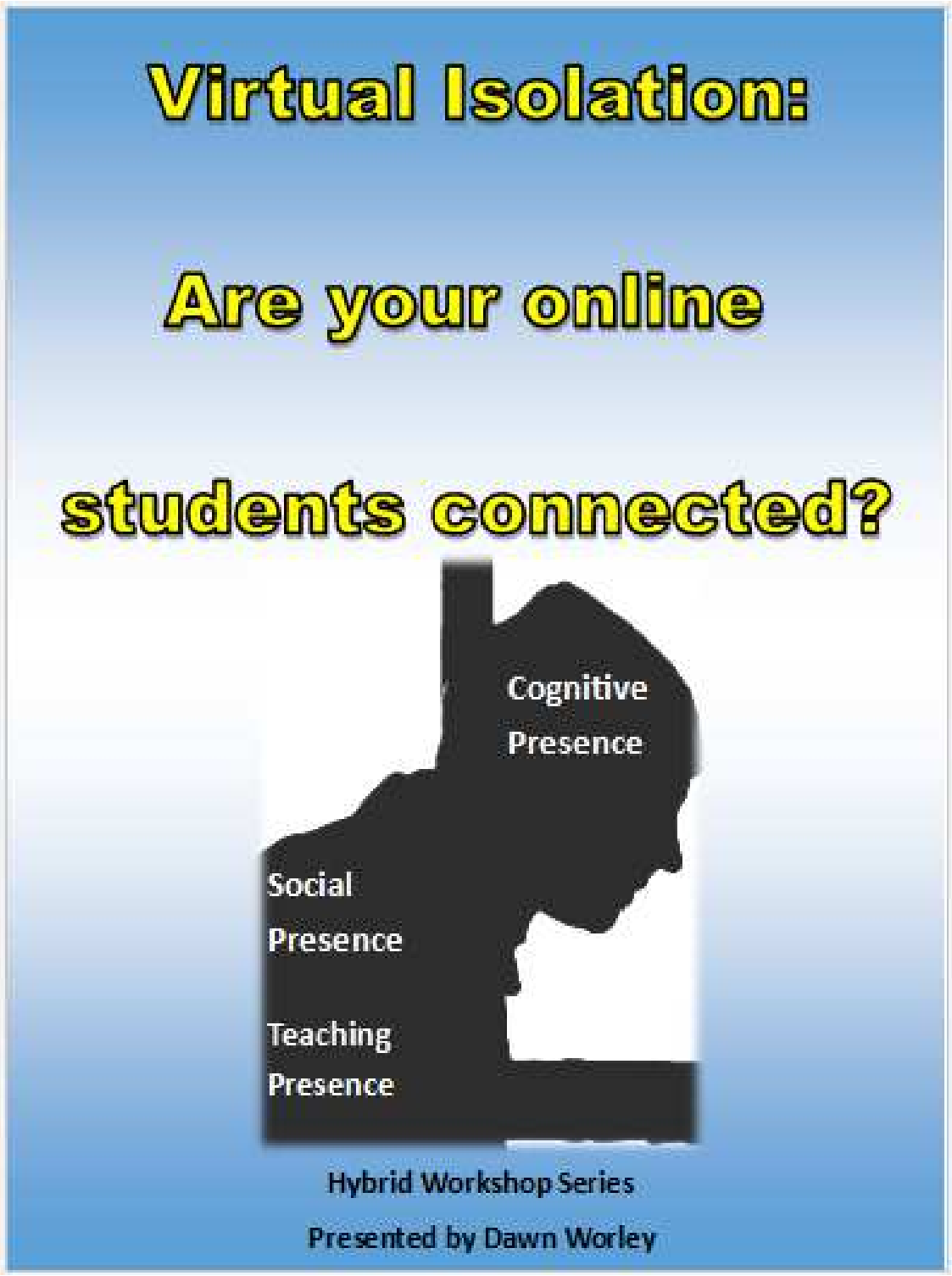
Segment	Activities	Tentative Date(s)
1: Learning Styles	Online Session (Online discussion and quiz) 1. Instructors will be taking an online quiz to determine their individual learning style. **2.** Instructors will also participate in an online discussion regarding the results of the quiz and the implications for their online learning	(September 8-17, 2015)
1: Learning Styles	Seated Session (Developing assignments for learning styles) 1. Hands-on learning: Instructors will bring one of their online assignments to this workshop. Instructors will be placed in groups with individuals who have different learning styles. Each group will work to revise their assignments to appeal to each learning style.	(September 18, 2015) 9:00-11:00 a.m. Encore session: (September 25, 2015) 9:00-11:00 a.m.
2: Learning Resources	Online Session (Idea generation through discussion in discussion forums) 1. Instructors will discuss their use of learning resources, including those they found most and least effective.	(September 21-October 1)

Segment	Activities	Tentative Date(s)
2: Learning Resources	Seated Session (Hands-on creation of learning resources) 1. A short discussion will be conducted involving the significance of engaging resources. 2. Instructors will then use SoftChalk Cloud software (SoftChalk LLC, 2015) to create an interactive learning resource for their online courses.	(October 2, 2015) 9:00-11:00 a.m. Encore session: (October 9, 2015) 9:00-11:00 a.m.
3: Assignment Clarity and Relevance	Online Session (Assignment comparison in a discussion) 1. Instructors will conduct an assignment comparison between two sample assignments, citing the advantages and disadvantages of the clarity and relevance of each assignment.	(October 5-15, 2015)
3: Assignment Clarity and Relevance	Seated Session (Peer exercise—developing clear assignments that are relevant to learning) 1. Instructors will bring in a sample online assignment. Instructors will work with another peer to revise their assignments for clarity and enhanced relevance for students' future careers.	(October 16, 2015) Encore session: (October 23, 2015)

Segment	Activities	Tentative Date(s)
4: Engagement through Technology	Online Session (Exploration of free online tools) 1. Instructors will explore two online technology tools and illustrate how they might use these technologies in their own classrooms. Instructors will post their findings from their investigation in an online collaborative tool known as Padlet (2015).	(October 19-29, 2015)
4: Engagement through Technology	Seated Session (Hands-on use of online tools. These tools will be added to online courses.) 1. Instructors will be introduced to Voki (Odd Cast Inc., 2015), an online audio and avatar tool. Instructors will create their own Voki and add it to an existing online course in Moodle. Step-by-step instructions will be provided.	(October 30, 2015) Encore session: (November 6, 2015)
5: Engagement through Responsiveness and Feedback	Online Session (E-mail exercise on instructor responsiveness, research on quality feedback) 1. Instructors will locate an article on quality feedback and send a short summary to the workshop director. The director will provide e-mail responses with varying levels of response times as an experiment. Response times will be discussed in the seated session.	(November 2-12, 2015)

Segment	Activities	Tentative Date(s)
5: Engagement through Responsiveness and Feedback	Seated Session (Discussion and peer exercise-developing quality feedback) 1. The session will begin with a discussion of the experiment on response times. The role that response time plays in retention and student success will be discussed. 2. Instructors will bring an ungraded assignment from each of their courses. Instructors will work in pairs to discuss the type of feedback a student should receive and how the feedback should be constructed. A sampling of the feedback will be shared with the entire group.	(November 13, 2015) Encore session: (November 20, 2015)

Project Materials:



Segment 1: Part One

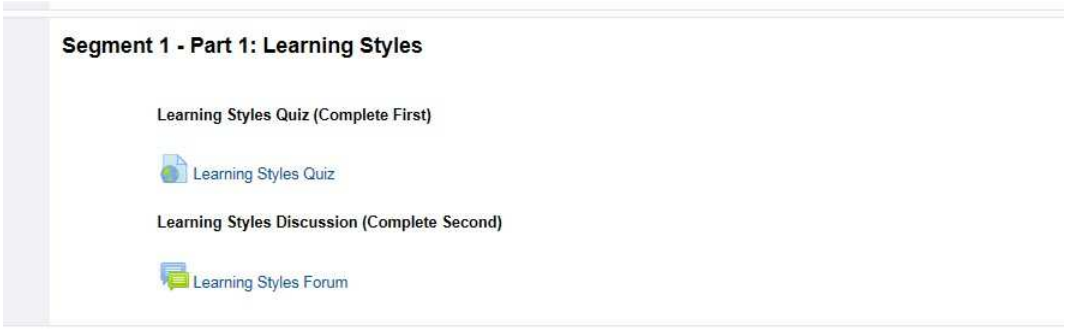
Online session:

Objectives:

Upon completion of this session, instructors will have:

1. Identified their major individual learning styles.
2. Analyzed and discussed their learning styles.

Content in Moodle LMS



Quiz description:

The Learning Styles Quiz is a free online quiz available at:

Pennsylvania Higher Education Assistance Agency (2011). *What's your learning style?: 20 questions.* Retrieved from http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml

Learning Styles Forum Instructions:

Learning Styles Forum

The Prompt

Upon completion of the Learning Styles Quiz, please identify and describe your learning style. Carefully analyze your identified learning style and indicate the learning needs you would require in an online environment. How might an online course designer and/or instructor accommodate your learning needs?

Submission

Provide a detailed paragraph that fully addresses the prompt. Compare and contrast your findings by replying to **at least one** colleague.

Segment 1: Part Two

Seated session: Developing Assignments Congruent with Learning Styles

Objectives:

Upon completion of this session, instructors will have:

1. Demonstrated their understanding of various learning styles.
2. Designed online assignments that appeal to learners with various learning styles.

Presentation slides:

LEARNING STYLES

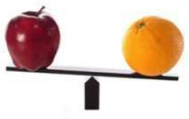
Segment 1: Part 2

ONLINE LEARNING BARRIERS

- Kendall: "In an online class, it is much easier to process audio and visual information, rather than words on a page."

ONLINE LEARNING BARRIERS

- Lack of resources congruent to learning style



DID YOU KNOW?

Learning Styles → Teaching Methods = Efficiency

LEARNING STYLES ACTIVITY

- **Please join your preselected learning styles groups to complete this activity.**
- **Materials:**
  - Provided handouts
  - Your selected online assignment.

- **Instructions:**
  - Please use the provided handout to review and revise your existing assignments to accommodate the learning styles listed.
- **Time Allotted:** One Hour

EXAMPLE ASSIGNMENTS: SHARING

- **Discussion:**

1) Please choose one assignment from your group activity.
2) Share the assignment modifications with the entire session.
3) Be sure to indicate your rationale for the selected edits.

DOMINANT LEARNING STYLES

Visual	Auditory	Kinesthetic
65% of Learners	30% of Learners	5% of Learners

ACCOMMODATING LEARNING STYLES

Visual	Auditory	Kinesthetic
Use: Illustrations (Charts, Bright Colors,	**Add:** Video or Voice Recordings	**Provide:** Analogies Examples

REFERENCES

Michigan State University. (2015). Design for adult learning, teaching and learning theory, feedback. LearnDAT (Learning Design and Technology). Retrieved from http://learndat.tech.msu.edu/teach/teaching_styles

Terregrossa, R. A., Englander, F., Zhaobo, W., & Wielkopolski, T. (2012). How college instructors can enhance student achievement: Testing a learning styles theory. *International Journal of Education Research, 7*(1), 1-15. Retrieved from http://www.journals.elsevier.com/international-journal-of-educational-research/

Handout for Segment 1 – On-site session: Learning styles exercises:

Please use the section below to assist your group in completing this exercise.		
Learning style	**Recommended assignment changes**	**Additional tools required (Technology, Software, Training, etc.)**
Visual		
Auditory		
Kinesthetic		

Segment 2: Part One

Online session:

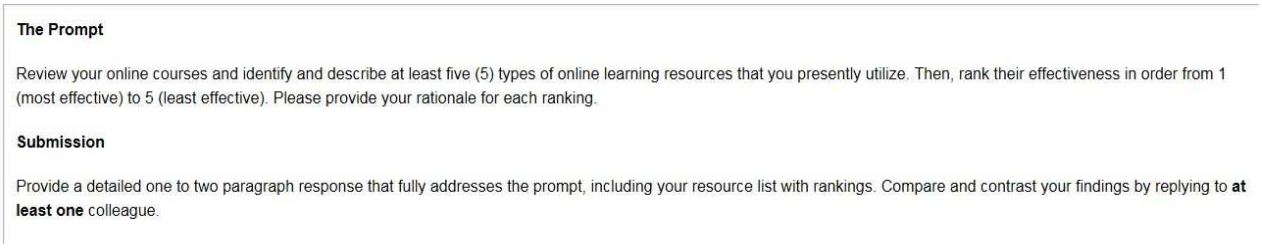
Objectives:

Upon completion of this session, instructors will have:

1. Compared and contrasted online learning resources.
2. Discussed effective online learning resources.

Content in Moodle LMS

Learning Resources forum instructions:



Segment 2: Part Two

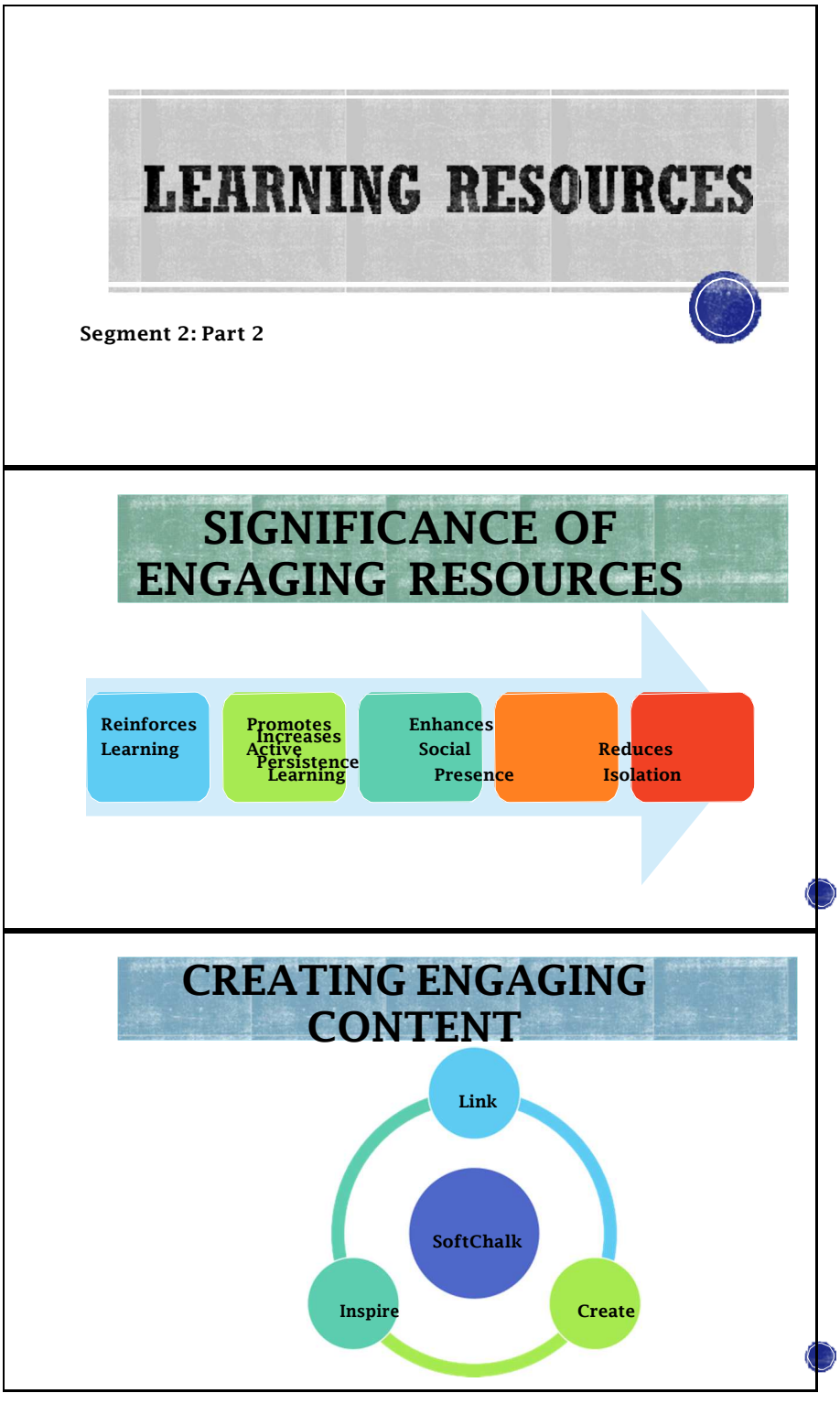
Seated session:

Objectives:

Upon completion of this session, instructors will have:

1. Discussed the importance of engaging online resources.
2. Created an interactive learning resource for an online course.

Presentation slides:



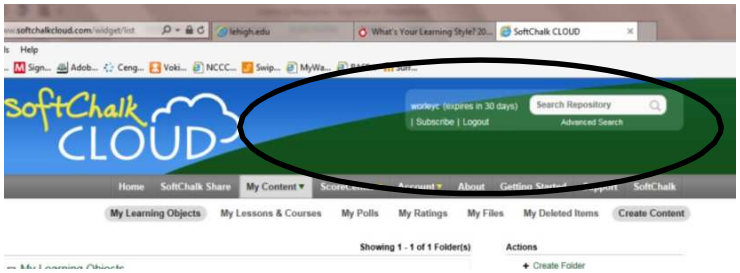
GETTING STARTED

Login to SoftChalk

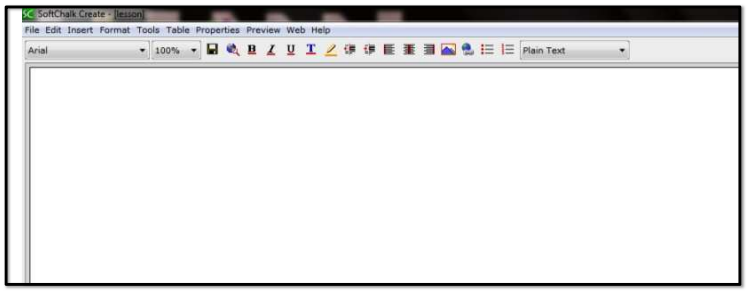
Review Sample Lessons

Create SoftChalk Lesson with Guidance

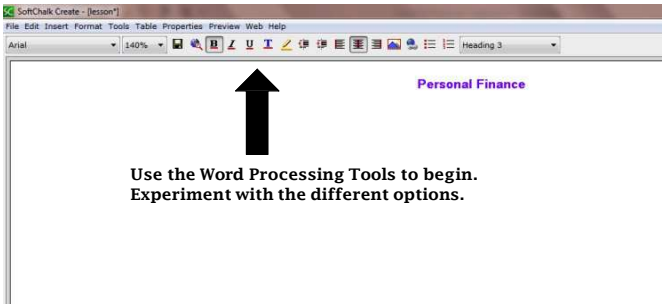
GETTING STARTED



GETTING STARTED

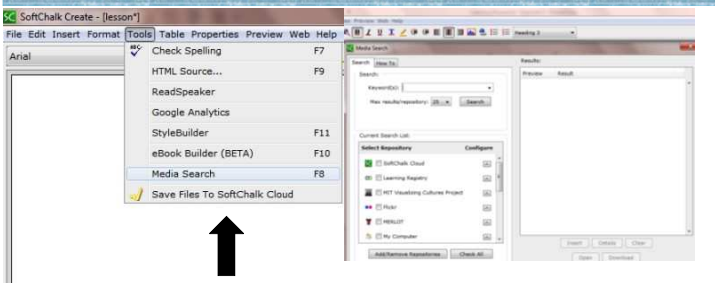


GETTING STARTED



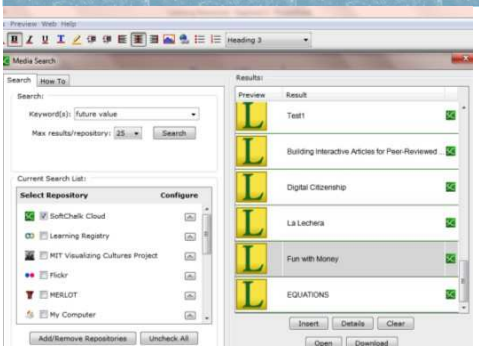
Use the Word Processing Tools to begin.
Experiment with the different options.

GETTING STARTED



Use the Media Search Tool to locate materials. Make sure SoftChalk Cloud is selected.
Hint: You may also insert images from Flickr.

GETTING STARTED

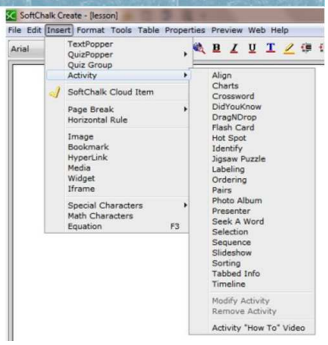


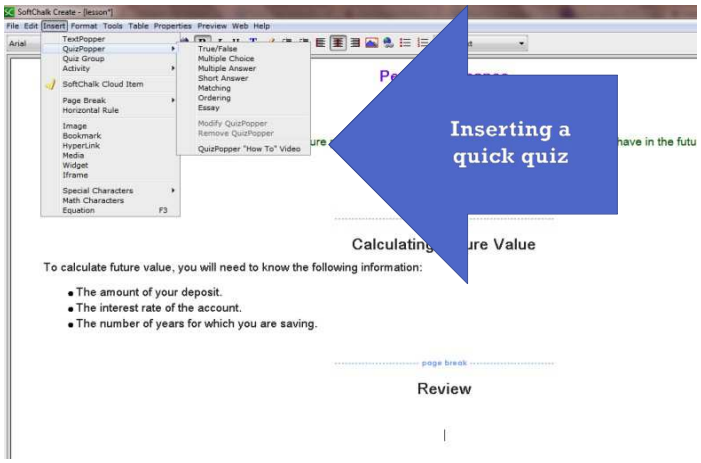
Insert = Adds content (no editing) Open = Content may be edited

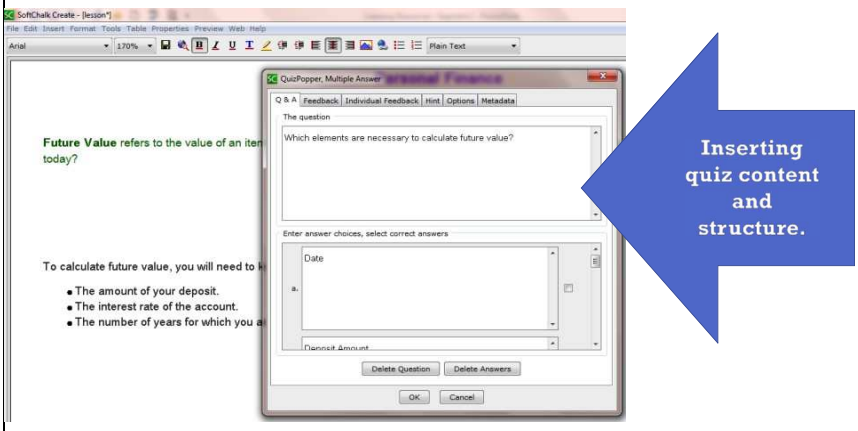
GETTING STARTED

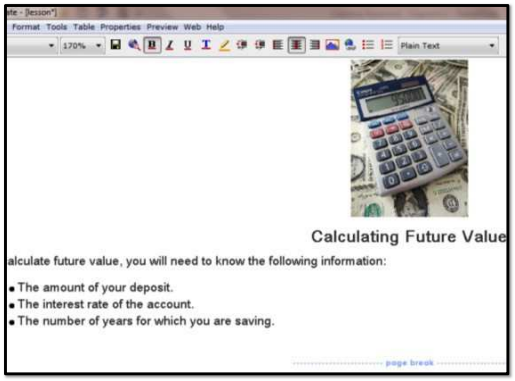
- Create your own content:
- You may add
  - Text
  - Games
  - Quizzes
  - Crossword Puzzles
  - Matching

Let's Experiment!



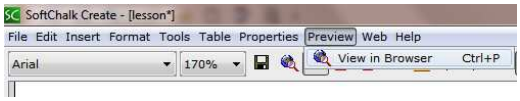






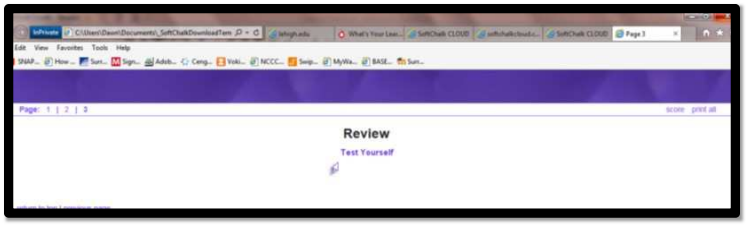
Your quiz is now added.

PREVIEWING YOUR LESSON

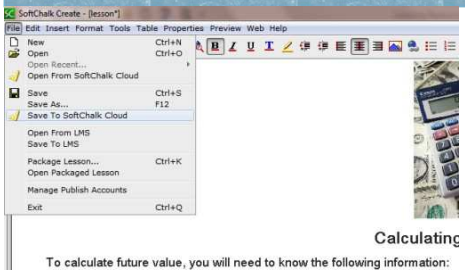


- Preview: Allows you to view the lesson as a student.

PREVIEWING YOUR LESSON



SAVING YOUR LESSON



Save your lesson to the SoftChalk cloud.

Rule: Do not add any spaces to your filename.

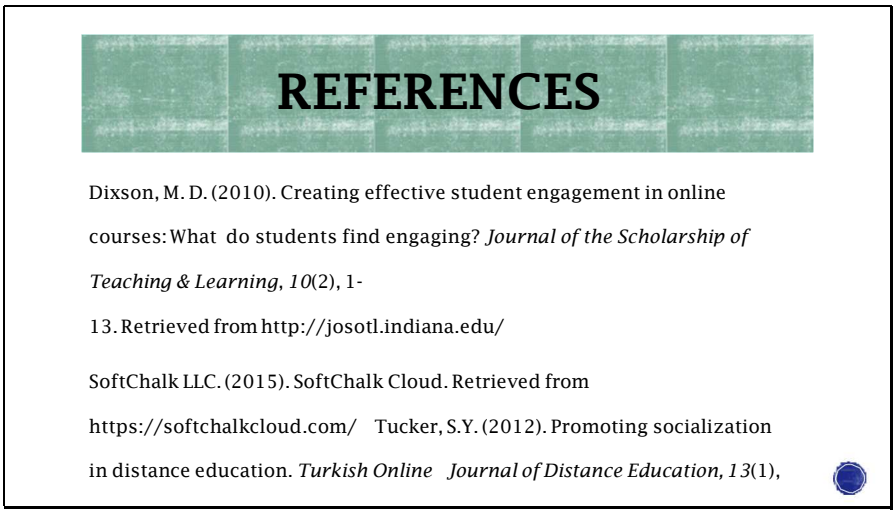
PACKAGING YOUR LESSON

Package your lesson AFTER all items are complete.

You may then add your lesson to your LMS.

ADDITIONAL SUPPORT

- Use Step-by-Step Tutorials in SoftChalk
- Contact the Presenter or Computer Services



Segment 3: Part One

Online session:

Objectives:

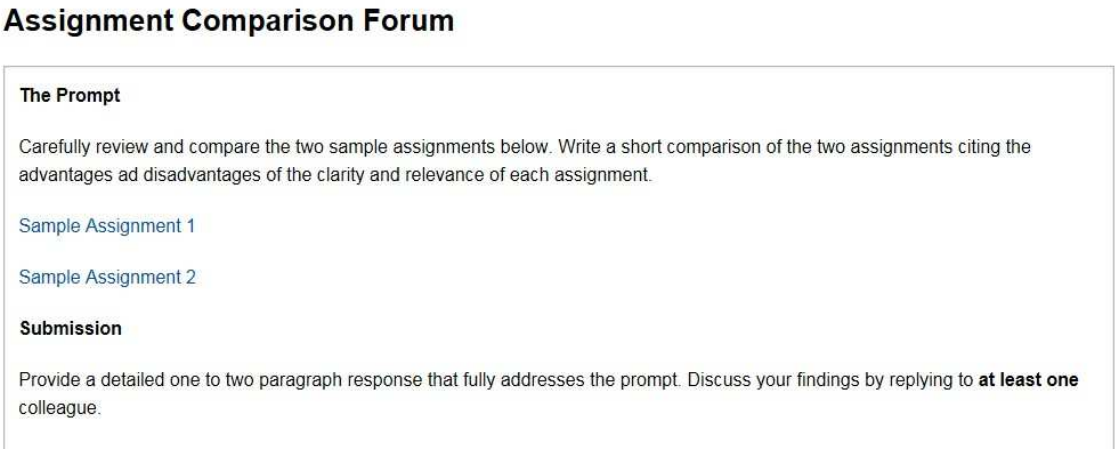
Upon completion of this session, instructors will have:

1. Compared and contrasted sample assignments for clarity and relevance.

Content in Moodle LMS

Assignment Comparison Forum

Instructions:



Assignment Comparison Forum

The Prompt

Carefully review and compare the two sample assignments below. Write a short comparison of the two assignments citing the advantages ad disadvantages of the clarity and relevance of each assignment.

Sample Assignment 1

Sample Assignment 2

Submission

Provide a detailed one to two paragraph response that fully addresses the prompt. Discuss your findings by replying to **at least one** colleague.

Segment 3: Part Two

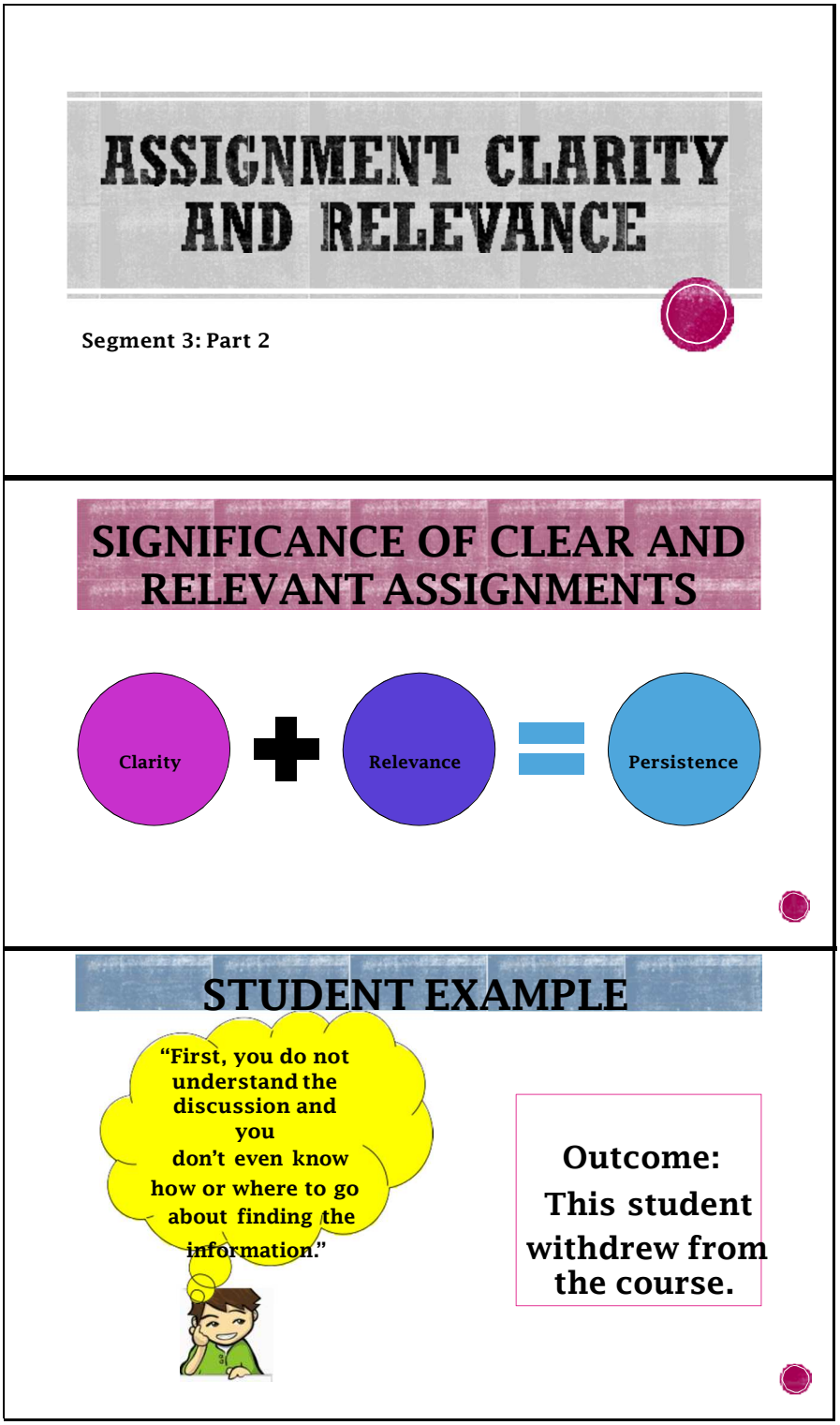
Seated session:

Objectives:

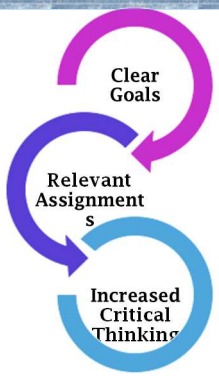
Upon completion of this session, instructors will have:

1. Reviewed and revised online assignments for clarity and relevance.

Presentation slides:



SIGNIFICANCE OF CLEAR AND RELEVANT ASSIGNMENTS



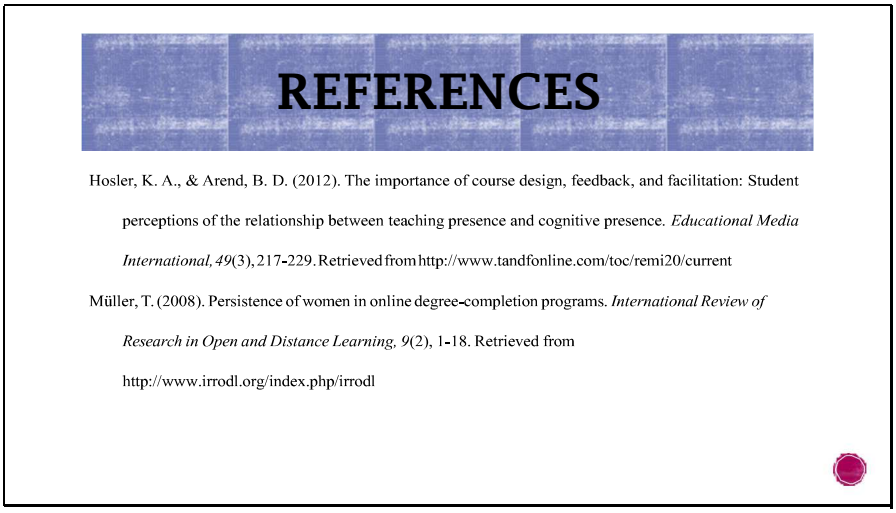
ACTIVITY

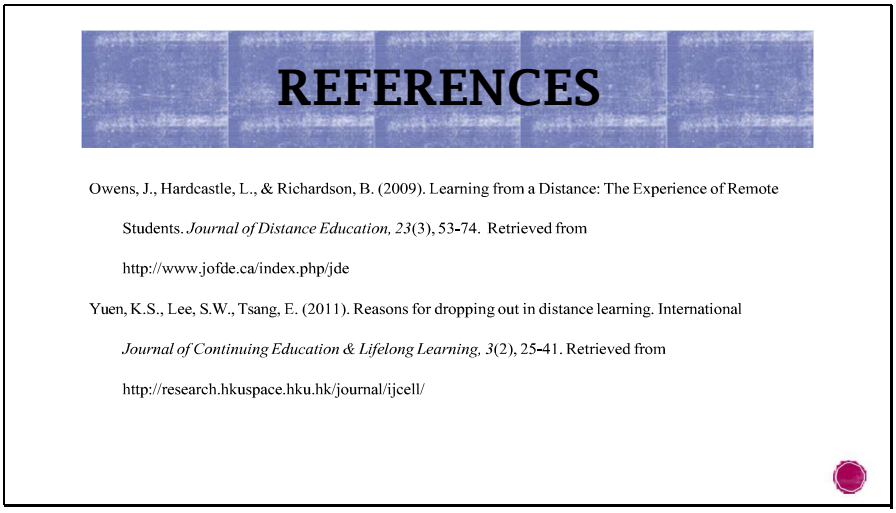
- **Please join your assigned partner to complete this activity.**
- **Materials:**
  - Your selected online assignment
- **Instructions:**
  - Please review and revise your existing assignments for clarity and enhanced relevance for students' future careers.
- **Time Allotted:** One Hour

REFERENCES

Bambara, C. S., Harbour, C. P., Davies, T., & Athey, S. (2009). Delicate engagement: The lived experience of community college students enrolled in high-risk online courses. *Community College Review, 36*(3), 219-238. Retrieved from http://crw.sagepub.com/

Baxter, J. (2012). Who am I and what keeps me going?: Profiling the distance learning student in higher education. *International Review of Research in Open and Distance Learning*, *13*(4), 107-129. Retrieved from http://www.irrodl.org/index.php/irrodl





Segment 4: Part One

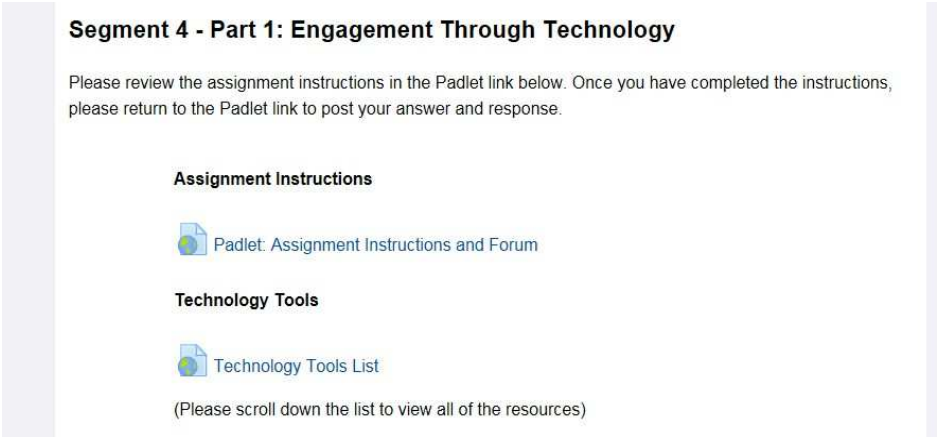
Online session:

Objectives:

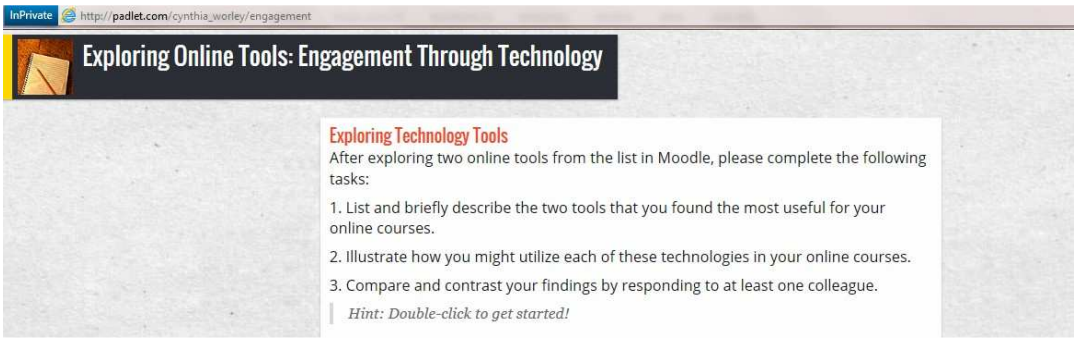
Upon completion of this session, instructors will have:

1. Explored two online technology tools.
2. Suggested uses for two online technology tools within an online course.

Content in Moodle LMS



Padlet:



Technology tools list:

I used a free listing of technology tools, available at:

Pappas, C. (2013, August 26). *321 Free tools for teachers - free educational technology.* E-Learning industry. Retrieved from http://elearningindustry.com/321-free-tools- for-teachers-free-educational-technology

Segment 4: Part Two

Seated session:

Objectives:

Upon completion of this session, instructors will have:

1. Understood the importance of instructor-student interaction.
2. Created an audio avatar for use in online courses.

Presentation slides:

ENGAGEMENT THROUGH TECHNOLOGY

Segment 4: Part 2

SIGNIFICANCE OF INSTRUCTOR INTERACTION

Promote
Course Satisfaction

Increase
Engagement and Effort

Encourage
Higher Levels of Learning

ACTIVITY

- **Please join the presenter in creating an animated avatar for your online courses.**
  - **Materials:**
    - Website: http://www.voki.com/
  - **Instructions:**
    - Please follow the instructions provided in this presentation.
  - **Time Allotted:** One Hour

USING VOICE AND ANIMATION

VOKI

- Create an Avatar with audio

VOKI

- Let's Begin

VOKI

- **Step One: Create a Free Account (limitations apply)**

VOKI

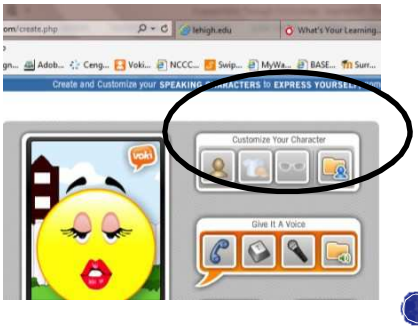
- **Step Two:**

Create and customize a character.

VOKI

- **Step Three:**

Give your character a voice.



VOKI

- **Step Four:**

Publish your Voki to Moodle.

Hint: (We'll do this together)

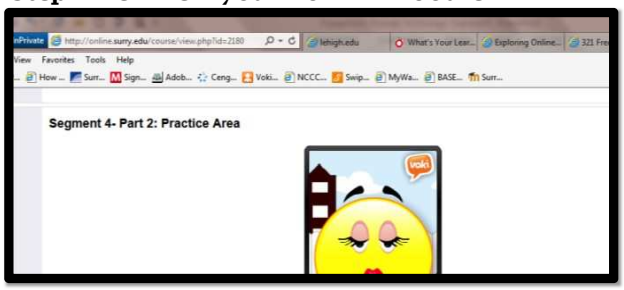
VOKI

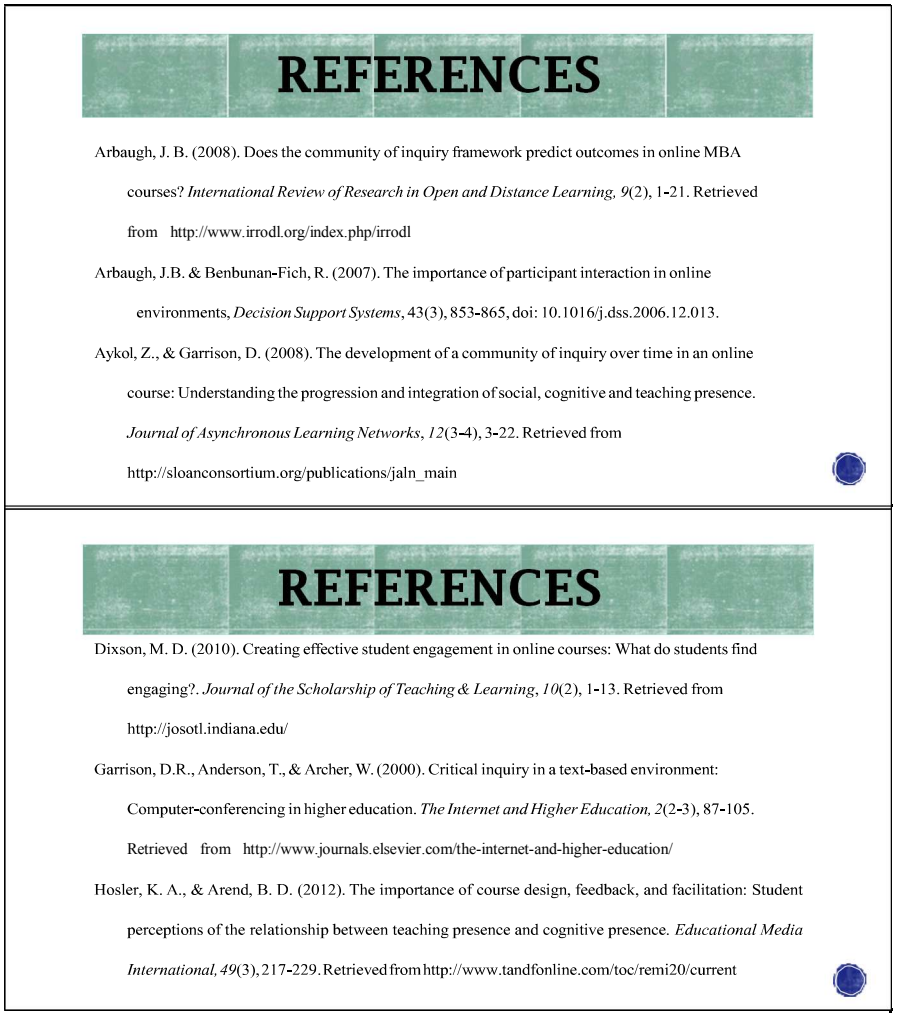
- **Step 4:**

Continued

VOKI

- **Step Five: View your Voki in Moodle.**





Segment 5: Part One

Online session:

Objectives:

Upon completion of this session, instructors will have:

1. Located, summarized, and submitted an article related to providing quality feedback to online students.

Content in Moodle LMS

Quality Feedback Assignment instructions:

Quality Feedback - Assignment Instructions:

1. Locate and review a scholarly article on quality instructor feedback for higher education students.
2. Compose a short summary (one to two paragraphs) of the article.
3. Be sure to cite your article at the end of your summary, using APA format.
4. Send your summary via an e-mail attachment to the workshop director, Dawn Worley.
5. The director will then provide a response, along with additional instructions.

Specifications:

Type your summary using Times New Roman font, size 12.

Use double spacing.

Segment 5: Part Two

Seated session:

Objectives:

Upon completion of this session, instructors will have:

1. Discussed and comprehended the role of instructor response time in retention and student success.
2. Demonstrated the use of quality feedback on a previously ungraded assignment.

Presentation slides:

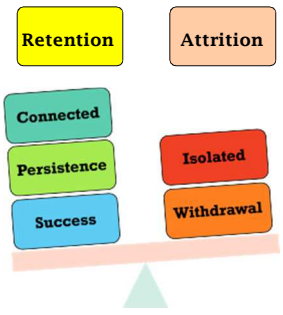
ENGAGEMENT THROUGH RESPONSIVENESS AND FEEDBACK

Segment 5: Part 2

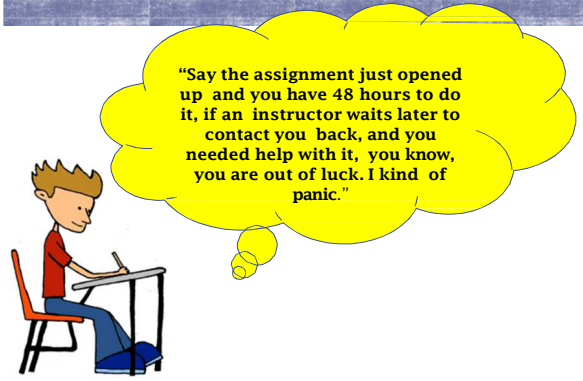
THE EXPERIMENT

- Did you receive a reply from the director regarding your online assignment?
- How long did you wait?
- The Good News:
  - You were not ignored, but were part of an experiment on instructor responsiveness.

SIGNIFICANCE OF INSTRUCTOR RESPONSIVENESS



STUDENT EXAMPLES



ACTIVITY

- **Please join your selected partner to complete this activity.**
- **Materials:**
  - A student's ungraded online assignment submission.
- **Instructions:**
  - Please review your partner's assignment and provide feedback to the student based upon the assignment specifications. Discuss the feedback among your group.
- **Time Allotted:** 45 minutes

DISCUSSION

- **Discussion:**

1) Please choose one assignment from your activity.
2) Share a portion of the feedback with the entire session.
3) Discuss the significance of quality feedback on this assignment.

SIGNIFICANCE OF QUALITY FEEDBACK

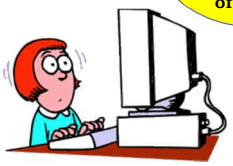
- Promotes Retention
- Provides Clear
- Direction Confirms
- Learning

STUDENT EXAMPLE

"You know some teachers will really make you feel good about yourself and you seem to do better.
Then there are some instructors, I don't know, it seems like they just don't care."

STUDENT EXAMPLE

"Feedback, either positive or negative, makes a big difference. I think for the instructor to communicate with the students, to let us know if we are on track or way off base. It is usually correct to do a modification, you know if we are off base, before we get too far off base."



REFERENCES

Arbaugh, J.B. & Benbunan-Fich, R. (2007). The importance of participant interaction in online environments, *Decision Support Systems, 43*(3), 853-865, doi: 10.1016/j.dss.2006.12.013.

Hyoseon, C., Yekyung, L., Insung, J., & Latchem, C. (2013). The extent of and reasons for non re-enrollment: A case of Korea National Open University. *International Review of Research in Open & Distance Learning, 14*(4), 19-35. Retrieved from http://www.irrodl.org/index.php/irrodl

Ivankova, N. V., & Stick, S. L. (2007). Students' persistence in a distributed doctoral program in educational leadership in higher education: A mixed methods study. *Research in Higher Education*, *48*(1), 93-135. doi: 10.1007/s11162-006-9025-4

REFERENCES

Morris, T. (2011). Exploring community college student perceptions of online learning. *International Journal of Instructional Technology and Distance Learning, 8*(6), 31-44. Retrieved from http://terrymorris.net/ITDLMorrisArticle.pdf

Müller, T. (2008). Persistence of women in online degree-completion programs. *International Review of Research in Open and Distance Learning, 9*(2), 1-18. Retrieved from http://www.irrodl.org/index.php/irrodl

REFERENCES

Owens, J., Hardcastle, L., & Richardson, B. (2009). Learning from a distance: The experience of remote students. *Journal of Distance Education*, *23*(3), 53-74. Retrieved from http://www.jofde.ca/index.php/jde

Project References:

Arbaugh, J. B. (2008). Does the community of inquiry framework predict outcomes in online MBA courses? *International Review of Research in Open and Distance Learning, 9*(2), 1-21. Retrieved from http://www.irrodl.org/index.php/irrodl

Arbaugh, J.B., & Benbunan-Fich, R. (2007). The importance of participant interaction in online environments, *Decision Support Systems, 43*(3), 853-865, doi: 10.1016/j.dss.2006.12.013.

Aykol, Z., & Garrison, D. (2008). The development of a community of inquiry over time in an online course: Understanding the progression and integration of social, cognitive and teaching presence. *Journal of Asynchronous Learning Networks, 12*(3-4), 3-22. Retrieved from http://sloanconsortium.org/publications/jaln_main

Bambara, C. S., Harbour, C. P., Davies, T., & Athey, S. (2009). Delicate engagement: The lived experience of community college students enrolled in high-risk online courses. *Community College Review, 36*(3), 219-238. Retrieved from http://crw.sagepub.com/

Baxter, J. (2012). Who am I and what keeps me going?: Profiling the distance learning student in higher education. *International Review of Research in Open and Distance Learning, 13*(4), 107-129. Retrieved from http://www.irrodl.org/index.php/irrodl

Dixson, M. D. (2010). Creating effective student engagement in online courses: What do students find engaging? *Journal of the Scholarship of Teaching & Learning, 10*(2), 1-13. Retrieved from http://josotl.indiana.edu/

Garrison, D.R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer-conferencing in higher education. *The Internet and Higher Education, 2*(2-3), 87-105. Retrieved from http://www.journals.elsevier.com/the-internet-and-higher-education/

Hosler, K. A., & Arend, B. D. (2012). The importance of course design, feedback, and facilitation: Student perceptions of the relationship between teaching presence and cognitive presence. *Educational Media International, 49*(3), 217-229. Retrieved from http://www.tandfonline.com/toc/remi20/current

Hyoseon, C., Yekyung, L., Insung, J., & Latchem, C. (2013). The extent of and reasons for non re-enrollment: A case of Korea National Open University. *International Review of Research in Open & Distance Learning, 14*(4), 19-35. Retrieved from http://www.irrodl.org/index.php/irrodl

Ivankova, N. V., & Stick, S. L. (2007). Students' persistence in a distributed doctoral program in educational leadership in higher education: A mixed methods study. *Research in Higher Education, 48*(1), 93-135. doi: 10.1007/s11162-006-9025-4

Michigan State University. (2015). *Design for adult learning, teaching and learning theory, feedback.* LearnDAT (Learning Design and Technology). Retrieved from http://learndat.tech.msu.edu/teach/teaching_styles

Morris, T. (2011). Exploring community college student perceptions of online learning. *International Journal of Instructional Technology and Distance Learning, 8*(6), 31-44. Retrieved from http://terrymorris.net/ITDLMorrisArticle.pdf

Müller, T. (2008). Persistence of women in online degree-completion programs. *International Review of Research in Open and Distance Learning, 9*(2), 1-18. Retrieved from http://www.irrodl.org/index.php/irrodl

Odd Cast Inc. (2015). *Voki Home*. Retrieved from http://www.voki.com/

Owens, J., Hardcastle, L., & Richardson, B. (2009). Learning from a distance: The experience of remote students. *Journal of Distance Education, 23*(3), 53-74. Retrieved from http://www.jofde.ca/index.php/jde

Padlet. (2015). *Padlet Home.* Retrieved from http://padlet.com/

Pappas, C. (2013, August 26). *321 Free tools for teachers - free educational technology. E-Learning industry.* Retrieved from http://elearningindustry.com/321-free-tools- for-teachers-free-educational-technology

Pennsylvania Higher Education Assistance Agency (2011). *What's your learning style?: 20 questions.* Retrieved from http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml

SoftChalk LLC. (2015). *SoftChalk Cloud.* Retrieved from https://softchalkcloud.com/

Terregrossa, R. A., Englander, F., Zhaobo, W., & Wielkopolski, T. (2012). How college instructors can enhance student achievement: Testing a learning styles theory. *International Journal of Education Research, 7*(1), 1-15. Retrieved from http://www.journals.elsevier.com/international-journal-of-educational-research/

Tucker, S. Y. (2012). Promoting socialization in distance education. *Turkish Online Journal of Distance Education, 13*(1), 174-182. Retrieved from http://tojde.anadolu.edu.tr/

Yuen, K.S., Lee, S.W., & Tsang, E. (2011). Reasons for dropping out in distance learning. *International Journal of Continuing Education & Lifelong Learning, 3*(2), 25-41. Retrieved from http://research.hkuspace.hku.hk/journal/ijcell/

Training Segment Survey

Please indicate your choice using the rating scale below.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I gained valuable knowledge from this segment.	1	2	3	4	5
I can incorporate my new skills in my online courses.	1	2	3	4	5
The content of the training module met my learning needs.	1	2	3	4	5
The facilitator provided clear guidelines for the session.	1	2	3	4	5
The provided instructional materials enhanced my learning.	1	2	3	4	5

Please provide any suggestions for improvement of this segment:

Please describe the new knowledge you have gained from this segment and how you will implement it in your online courses:

Post Training Survey

Please indicate your gender.
a. Male
b. Female

Please select your present employment status with this institution.
a. Full-time
b. Part-time (adjunct)

Please specify the number of years you have taught at this institution.
a. 1- 5
b. 6-10
c. 11-20
d. More than 20

Please specify the number of years you have taught online courses.
a. 1-2
b. 3-5
c. 7-9
d. 10 or more

Please select your choice using the rating scale below.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I gained valuable knowledge from this program.	1	2	3	4	5
I incorporated my new skills in my online courses.	1	2	3	4	5
The training schedule met my needs.	1	2	3	4	5
The program was well organized.	1	2	3	4	5
The program will enhance my teaching skills.	1	2	3	4	5

Please describe the most beneficial segments of the program:

Please provide any suggestions for future course offerings:

Appendix B: Interview Protocol

Study: Perceptions of Connectedness in Online Courses

Time of Interview:
Date:
Interviewer:
Interviewee:

Script:

My name is Dawn Worley and I am completing this study as a doctoral student at Walden University. Thank you again for your willingness to participate in my study. The purpose of this interview is to gain insight on your experiences and success as an online student. To protect your identity, please refrain from using your name at any point in this interview. I will be recording this interview to obtain a permanent record. Is it okay with you if I begin recording now? (Action: Record the meeting)

Questions:

1. Based on your experiences, please describe the relationships you have formed with other students in online courses. [social presence]
   Probe: Can you provide more details?

2. Please describe the tools and strategies that you utilized to promote your successful completion of online courses at this point in your college career. [methods for persistence]
   Probe: Can you elaborate on a particular strategy that you find the most effective?

3. Based on your experience, please describe techniques that instructors have used in online courses that have helped you to learn or be successful. [teaching presence]
   Probe: Can you please provide an example?

4. After reflecting upon the techniques instructors utilized to help you learn, please describe what techniques that you found least effective, if any. [teaching presence]
   Probe: I want to make sure I understand, can you give me some additional information?

5. Based on your experiences, please describe the types of learning activities and tasks that helped you learn the most in an online course. [cognitive presence]
   Probe: Can you provide more details on this particular activity?

6. When reflecting upon your experience with learning activities, please describe your experiences with the activities and tasks that you found least effective, if any. [cognitive presence]
   Probe: Could you tell me a bit more about your thinking here?

7. Please describe the methods you found useful in getting to know others in online courses. [social presence]
   Probe: What stands out in your mind about your methods for getting to know others in online courses?

8. Please explain how knowing and working online with your peers was useful to your learning. [social presence]
   Probe: What makes you feel this way?

I greatly appreciate your cooperation in this study. Is there anything you would like to add before the interview concludes? Again, thank you for taking the time to participate in my study. Your responses will remain confidential.

Appendix C: Demographic Questions

1. What is your current age range?
a. 18-24
b. 25-34
c. 35-44
d. 45-54
e. 55-64
f. 75 or older

2. What is your gender?
a. Female
b. Male

3. How many online courses have you taken at this college?
a. Two
b. Three
c. Four or more

4. What is your present enrollment status at the college?
a. Full-Time
b. Part-Time

5. What is your present employment status?
a. Full-Time
b. Part-Time
c. Retired
d. I am not presently employed

6. Do you have any experience with online learning outside of this college?
a. Yes
b. No

7. If you answered "yes" to question 6, please provide a brief description of your prior online learning experience.

Appendix D: Initial Invitation E-mail

Dear Student:

As an online student who has successfully completed two or more online courses, you are invited to take part in a research study in order to examine student perceptions of a sense of belonging in an online community. The study consists of one (1) online interview session and a review of your interview transcript. You will receive a $10 gift card for your participation in the interview. Please note that you must be 18 years of age to participate in this study. Please reply to this e-mail if you want to participate and learn more about this study. I look forward to your response!

Sincerely,
Dawn Worley

Appendix E: E-mail with Informed Consent

Dear Student:

Thank you for expressing your interest in learning more about my study. I included the consent form, which outlines the purpose of my study, illustrates the procedures, and provides sample interview questions. If you agree to the terms outlined, please reply to this e-mail with the words "I consent." I look forward to your potential participation!

Sincerely,
Dawn Worley

Consent Form

You are invited to take part in a research study of student perceptions of success in online courses. The researcher is inviting fully online students who have successfully completed two or more online courses and are at least 18 years old to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Dawn Worley, who is a doctoral student at Walden University. You may already know the researcher as an instructor on campus, but this study is separate from that role.

Background Information:
The purpose of this study is to examine student perceptions of a sense of belonging in an online community.

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

- Complete one 20-40 minute interview online. Interviews will be audio recorded. (The use of a microphone will be required).
- Review a transcript of your interview session to ensure accurate researcher interpretations.

Here are some sample questions:

- Based on your experiences, please describe the relationships you have formed with other students in online courses.
- Please describe the tools and strategies that you utilized to promote your successful completion of online courses at this point in your college career.

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at the college will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time. Declining or discontinuing this study will not negatively impact the participant's relationship with the researcher or the participant's access to services.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress, or the potential to become upset after describing an experience. Being in this study would not pose risk to your safety or well-being. The benefits of this study include the potential to enhance the design of online courses in order to foster greater interaction among students and instructors, provide engaging content, and promote retention.

Payment:
Reciprocity, in the form of a $10 gift card will be presented to study participants for their participation in the study. This gift will be mailed to participants once their consent form is electronically signed and an interview is scheduled.

Privacy:
Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure and placed in a locked facility accessible only by the researcher. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via e-mail at [redacted] or phone at [redacted]. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is [redacted]. Walden University's approval number for this study is **06-17-14-0108849** and it expires on **June 16, 2015.**

Please print or save this consent form for your records.

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. I also certify that I am at least 18 years of age. **By replying to this email with the words, "I consent",** I understand that I am agreeing to the terms described above.

Appendix F: Follow-Up E-mail

Dear Student:

I recently sent you a formal invitation to participate in an important study involving online students at [redacted]. Did you receive this e-mail? If so, do you have any additional questions or require any additional information that may assist you in making your decision regarding participation in the study? I look forward to hearing from you soon!

Sincerely,
Dawn Worley

Appendix G: Coding Organization

Codes	Theme	RQ	Social	Cognitive	Teaching
Clarity in assignments	C	2		X	X
Confirmation of learning from peers	E	1,2,3	X	X	
Continuing relationships	E	1,2,3	X	X	
Desire to learn	A	2		X	
Familiarity with classmates	E	1,2,3	X	X	
Discussion boards	E	1,2,3	X	X	X
Hands-on assignments	B	2		X	X
Instructor availability	D	1,2	X	X	X
Instructor feedback	D	1,2	X	X	X
Instructor flexibility	D	1,2	X	X	X
Instructor involvement	D	1,2	X	X	X
Interactive content	B	2		X	X
Lack of materials	C	2		X	X
Learning style	C	2		X	X
Online vs. seated	C	2		X	X
Organization	A	2		X	
Real-world assignments	B	2		X	X

(table continues)

Codes	Theme	RQ	Social	Cognitive	Teaching
Relevant course material	B	2		X	X
Seeking outside sources	B	2		X	X
Sense of connectedness	E	1,2,3	X	X	X
Teaching self	C	2		X	X
Working with peers	E	1,2,3	X	X	X

Note. RQ = Research question.