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Community College Instructional Support of Nontraditional Students Using Technology

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This is to certify that the doctoral study by

Charlotte Graham

has been found to be complete and satisfactory in all respects,
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Walden University
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Abstract

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MA, University of Southern Mississippi, 2009

BS, Jackson State University, 1979

Project Study Submitted in Partial Fulfillment

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Abstract

Nontraditional students often enroll at institutions of higher learning without the technology skills needed to complete coursework and achieve academic success. The problem at a small community college in the Southern United States is that instructors are providing limited support for nontraditional students using technology, which may leave students ill-prepared to complete coursework. The purpose of this qualitative study was to examine instructional support of nontraditional students using technology to complete coursework and to make recommendations to improve instructional support of students. Knowles's adult learning theory, Daloz's mentoring theory, and Siemens's connectivist theory provided the framework for the study. Research questions addressed how community college instructors support nontraditional students using technology in coursework and how such support aids academic success. Semistructured interviews with nine purposively selected instructors, the *Policy and Procedure Manual for Distance and Electronic Learning*, and Student Success Center documents were examined through coding and thematic analysis. Participants indicated nontraditional students lacked basic computer skills and internet access and were unfamiliar with the college's learning management system. Document analysis revealed the college has a support system for both nontraditional students and instructors using technology. Participants recommended providing resources, individual help, and guidance to nontraditional students using technology, while documents suggested that students and instructors utilize the support system at the college. Study results presented in a position paper afforded an opportunity for social change by improving instructional support of nontraditional students in using technology to complete coursework and achieve academic success.

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Dedication

To my mother who has always been an inspiration in my life. You have taught me never to give up on my dreams. Your motivation and constant encouragement have helped me reach this milestone in my life. You have helped make another dream a reality. Also, to my deceased father who I wish were here to help me celebrate this accomplishment. Last, but not least, to my sister, Sylvia Regina Graham, who served as one of the proofreaders of my study until her untimely death, and my niece and transcriber, Sylvia Katonya-Deltrice Graham, who also died unexpectedly. You started this journey with me, I am heartbroken that you are not here to see me complete the journey.

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Section 1: The Problem

In Section 1 of this qualitative project study, I identify the local problem that represents a national problem. I also present a rationale for the study topic, define terms, and describe the significance of the study. Five overarching research questions that address the problem are introduced, followed by a review of the literature related to the topic and explanation of the conceptual framework. The section ends with a summary of the study.

The Local Problem

Many nontraditional students are enrolling in institutions of higher learning without adequate technology skills to complete coursework and achieve academic success. Many of these nontraditional students are adults who attended school when there was little or no technology in the classroom; therefore, current college courses that integrate technology into the core curriculum may be overwhelming (Lowell & Morris, 2019; Robinson, 2019). Lowell and Morris (2019) remarked that nontraditional students who lack experience using technology in the classroom may be at a disadvantage in learning because of insufficient technology knowledge and limited skills. If nontraditional students are to be successful in the use of technology, instructor support is important because it is imperative that nontraditional students learn to use the technology required to complete coursework.

The problem at a small community college in the southern United States is that instructors are providing limited support for nontraditional students using technology, which may leave students ill-prepared to complete coursework. Instructors at the study

site, as well as those at other colleges and universities, expect nontraditional students to possess the same technology skills as traditional students (Stafford & Stinton, 2016). However, York et al. (2016) pointed out that nontraditional students encounter challenges as college and university students "when their previous learning experiences have been primarily traditional face-to-face experiences" (p. 40). Institutions of higher education cannot assume that all students arrive at colleges and universities with the technology skills needed to be effective e-learners (Stafford & Stinton, 2016). According to Zerquera et al. (2018), since the learning experiences and levels of student understanding varies, the role of instructors in educating nontraditional students and supporting the students in using technology to complete coursework is worthy of examining.

My examination of instructional support of nontraditional students using technology to complete coursework occurred during the 2018-2019 academic session. At that time, college officials reported that 662 or 14.10% of the school's more than 4,417 students were nontraditional students. Many of these nontraditional students, ages 25 and older, experienced challenges when using the technology required to complete coursework. The focus of this study was on college instructors' efforts to help these nontraditional students overcome the challenges of using technology. Only instructors who have taught nontraditional students or those who are currently teaching nontraditional students were asked to participate in the study. Instructors were selected to participate in the study because of their knowledge and experiences with nontraditional students. New or improved support strategies by instructors at the study site could help improve nontraditional students' technology skills.

Kuo (2018), Lowell and Morris (2019), and Singh (2019) stated that instructional support plays a pivotal role in the learning and academic achievement of nontraditional students entering college with limited or no technology skills. In community colleges and universities across the globe, completion of assignments and coursework is required to obtain passing grades. Because integration of technology usage is an integral part of curricula at colleges and universities, instructional support is vital to nontraditional students who are novice technology users. Interviews of instructors and information from the college's Student Success Center and *Policy and Procedure Manual for Distance and Electronic Learning* were used to examine instructional support of nontraditional students using technology to complete coursework. Not all instructors at the study site provided support for nontraditional students using technology to complete coursework. Also, although the study site had a support system in place for both students and instructors, neither took full advantage of the available resources.

The college's support system included a *Policy and Procedure Manual for Distance and Electronic Learning*, which provided tips and guidelines for instructional support of students using technology and services to support students using technology. Additional support services for nontraditional students using technology included tutors, technical assistance and support, and written tips and guidelines from the Student Success Center. There is a perceived gap in practice between the need of nontraditional students to use technology for their academic success and community college instructors' support of nontraditional students in using technology at a small community college in the Southern United States. Current research, information from the Student Success Center

and *Policy and Procedure Manual for Distance and Electronic Learning*, and personal communication with community college instructors suggested there was a need to reduce the gap in practice between the need of nontraditional students to use technology and instructor support. All instructors did not adequately support students in the use of technology.

The problem is that the instructors are providing limited support for nontraditional students using technology, which may leave students ill-prepared to complete coursework port (Buckenmeyer et al., 2016; Cherrstrom et al., 2019; De Bruyckere et al., 2016; Hixon et al., 2016; Islim & Cirak, 2017; Tynan et al., 2015). This is a problem that exists at the study site, as well as at other colleges and universities (Crawford et al., 2014; Skidmore et al., 2014; Thota & Negreiros, 2015; Xu & Chen, 2016). The choices these instructors make are often guided by their personal beliefs and attitudes toward technology, according to an instructor at the study site (see also Aubusson et al., 2014). With an increasing number of nontraditional students enrolling in colleges and universities without the knowledge to use technology, instructors need to initiate a support system for them to achieve academic success (Chen, 2014). This examination of instructional support of nontraditional students using technology to complete coursework, as well as the resulting recommendations for the improvement of such support, may lead to improved instructor support of nontraditional students using technology.

Rationale

Evidence of the Problem at the Local Level

There were several reasons for exploring this problem, including the prevalence of nontraditional students. The nontraditional student population continues to increase at community colleges and universities across the globe (Remenick, 2019; Woods & Frogge, 2018; Zack. 2020). Since many of these nontraditional students are adults who attended school when there was little or no technology in the classroom, current college courses that integrate technology into the core curriculum may be overwhelming (Lowell & Morris, 2019; Robinson, 2019). Most nontraditional students at the site of this study were adults using technology in education for the first time. According to Lowell and Morris (2019), nontraditional students who lack experience using technology in the classroom may be at a disadvantage in learning because of insufficient technology knowledge and limited skills. If nontraditional students are to be successful in the use of technology, instructors are called upon to effectively integrate technology into their courses and mentor these students in the use of technology.

Therefore, another reason for this problem choice is the necessity to look at instructors. At this small community college in the Southern United States, local instructors take on the role of information technology support staff for nontraditional students because, unlike large universities, community colleges do not have adequate funding to hire extra information technology support staff to help nontraditional students learn to use technology (Fletcher & Friedel, 2018; Kolbe & Baker, 2019; McKinney & Hagedorn, 2017; Melguizo et al., 2018). In the state where the study site is located, three

newspaper articles reported that larger colleges and universities received much of the state funds allocated for higher education. Thus, colleges and universities that offer bachelor's degrees, usually completed in four years of full-time study, have more funds to hire adequate staff than community colleges that offer associate degrees, which are generally completed in two years. Community colleges often have limited staff, resulting in increased workloads for instructors. In addition to serving as teachers, instructors assume the roles of advisor, counselor, and information technology support staff, among other things (Gregory & Lodge, 2015; Salley & Shaw, 2015). The multiplicity of tasks undertaken by community college instructors could limit the instructors' support of nontraditional students.

To address what is expected of instructors who teach courses that require the use of technology, the local community college established the *Policy and Procedure Manual for Distance and Electronic Learning*. According to the manual, students have the ultimate responsibility for achieving academic success. In addition to teaching students, the instructors' role includes advising students, assisting in planning class schedules, and providing current information about career possibilities. Instructors at the local college stated that they also refer students to the proper sources for assistance, encourage students in their quest for academic success, and approve academic programs for graduation.

Adequate funding is imperative if instructors are to continue efforts to support nontraditional students in the use of technology-assisted instruction. Community college presidents and chancellors have worked to acquire additional funding from state legislators to address staffing gaps that result in an increased workload for community

college instructors but to no avail (Fletcher & Friedel, 2018; Kolbe & Baker, 2019; McKinney & Hagedorn, 2017; Melguizo, et al., 2018). Instead, legislators continue to cut funds allocated to community colleges despite a steady increase in student enrollment. A newspaper article in the state of this study, showed that administrators at the state's 15 community colleges requested an $82.7 million increase in state funding for the 2017 fiscal year. Additionally, budget cuts forced nine out of 15 community colleges in the state to increase tuition fees by an average of 4%. Although state legislators increased funding to community colleges by $11 million in the 2016 budget and pushed the state's funding above $260 million, the amount falls below the funding amount specified by state law.

Evidence that this problem exists comes from the community college practices. Despite inadequate funding, local community college instructors have sought ways to improve their support of nontraditional students in using technology. These instructors taught students of varying ages and backgrounds. These nontraditional students also had different skill levels and different learning styles than traditional students (Allen et al., 2016; Buckenmeyer et al., 2016; Davidson & Blankenship, 2016; Johnson et al., 2016; Remenick, 2019; Robinson, 2019; Zawacki-Richter et al., 2015; Zerquera et al., 2018). The instructors made daily decisions about what technologies they use to teach students and how to use these technologies to support student learning. The choices made by the instructors were often guided by the instructors' personal beliefs and attitudes toward technology (Jääskelä et al., 2017; Motshegwe & Batane, 2015; Shifflet & Weilbacher,

2015). Thus, some instructors provided support for nontraditional students using technology to complete coursework, while others did not.

Researchers have concluded that the lack of instructor support of nontraditional students using technology to complete courses increases the possibility of academic failure. Technology constitutes technological tools such as computers, smartphones, the internet, digital recorders, learning management systems, or other tools people may use in their everyday lives to enhance their learning experience (Goral, 2018; Greener & Wakefield, 2015; Kania-Lundholm, & Torres, 2017; Müller & Wulf, 2020). In this study, technology referred to computers, computer programs, and learning management systems. Learning management systems are web-based software applications "designed to handle learning content, student interaction, assessment tools and reports of learning progress and student activities" (Kasim & Khalid, 2016, p. 55). Students and instructors accessed course material online using the college's learning management system which allowed them to see and interact with learning tools via web browsers using operating systems such as computers, laptops, iPads, smart phones, or other mobile devices.

One area where the problem presents itself is in campus software. Canvas is the learning management system used at the site of this study. According to the Canvas website (https://www.instructure.com), this platform provides an online space for students to access course materials, communicate, and submit coursework. If nontraditional students do not know how to use the learning management center, they are at risk of failing their courses. However, when nontraditional community college students have the support of instructors, perhaps the stress encountered from not knowing how to

complete assignments or use technology will decrease and a possible increase in academic success will occur.

The purpose of this qualitative case study was to increase understanding of how instructors' support of nontraditional students in using technology to complete coursework was intended to help nontraditional students in achieving academic success. I analyzed data collected from semistructured interviews with a purposeful sample of nine community college instructors, guidelines from the *Policy and Procedure Manual for Distance and Electronic Learning*, and literature from the student success center to help increase understanding of the need for instructors' support of nontraditional students in using technology to complete coursework.

Evidence of the Problem From the Professional Literature

Evidence also comes from the literature regarding instructors' support of nontraditional students are key elements in students' ability to achieve academic success. With an increasing number of nontraditional students enrolling in community colleges without sufficient knowledge of how to use technology, instructors are expected to initiate a support system for these students to achieve academic success (Atun & Usta, 2019; Ghasemizad, 2015; Glowacki-Dudka, 2019; Remenick, 2019; Wong, 2018). According to a data analyst at the local community college in this study, instructors have not provided a viable support system for nontraditional students who have difficulty using the technology required to complete coursework. Researchers have reported that the academic motivation and achievement of students in community colleges and other institutions of higher education are enhanced when instructors support students' efforts

(Allen et al., 2016; Fryer & Bovee, 2016; Glowacki-Dudka, 2019; Remenick, 2019; Zerquera, et al., 2018). Thus, students tend to do their best when they have a support system to guide and encourage them in their academic endeavors (Remenick, 2019). Investigating instructors' support of nontraditional students in using technology to complete coursework at this small community college in the Southern United States may result in a better understanding for community college instructors and college administrators of the importance of instructor support of nontraditional students in using technology and its impact on students' academic success. Knowledge of the significance of student support may lead to improved instructors' support of nontraditional students in using technology to complete coursework.

Literature has varied views of instructor support. Instructors at the study site all emphasized the value of instructor support if students are to achieve academic success. However, the concept of what constitutes instructor support varies among researchers (Buckenmeyer et al., 2016; Cherrstrom et al., 2019; Ghasemizad, 2015; Glowacki-Dudka, 2019; Thota & Negreiros, 2015; Wong, 2018; Xu & Chen, 2016). For this study, instructor support is defined as providing positive feedback and motivation when students face difficulties completing coursework, providing advice and assistance to students on dealing with issues related to the course study, and offering to meet with students to discuss academic challenges they encounter during the course (Nielsen et al., 2017). According to Milman (2017), instructor support also involves corresponding with and motivating students on a regular basis via direct email, phone conference calls, or casual videos. Some instructors at the local community college did not want to spend much time

or make special efforts to support nontraditional students in using technology to complete coursework even though the inability to use the technology could lead to academic failure of nontraditional students.

Instructors busy themselves in seeking effective teaching strategies to help nontraditional students achieve academic success. However, to achieve academic success, nontraditional students need help not only in learning course material, but also in learning to use technology (Cydis, 2015; Englund et al., 2017; Lowell & Morris Jr., 2019; Mitchell et al., 2015; Washington et al., 2020). Washington et al. (2020) suggested that community college instructors must present the use of technology in such a way that it guides nontraditional students on their educational journey. Although community college instructors have intensive workloads that include multiple tasks, their support of nontraditional students' efforts in using technology could enhance students' academic progress (Gregory & Lodge, 2015). The multiplicity of tasks performed by community college teachers is evidence of the vital role teachers play in ensuring the academic success of nontraditional students. However, these multiple tasks could limit the support instructors give students in the use of educational technology (AlMutlaq et al., 2017; Gregory & Lodge, 2015). Accordingly, evidence of the problem of inadequate support for nontraditional students in using technology in coursework exists at the local community college.

Researchers used several descriptors to identify nontraditional students. Nontraditional students are characterized as students who did not complete high school, have a general education diploma (GED) instead of a high school diploma, delayed

college entry, have a semester or less of college-level coursework, have part-time enrollment status, are financially independent, are military veterans, are single parents, have dependents, and are full-time employees (Alshebou, 2019; Cherrstrom et al., 2019; Cho, 2019; Garzón-Umerenkova & Gil-Flores, 2017; Johnson et al., 2016; Peet, 2019; Remenick, 2019; Robinson, 2019; Smith, 2015; Woods & Frogge, 2017). In this study, nontraditional students are defined as students 18 to 60 years old and beyond, high school dropouts who receive general education diplomas, returning students from the workforce and family life, students working full-time jobs, individuals returning to school following life changing events, and veterans returning from war (Robinson, 2019; Woods & Frogge, 2017; Zerquera et al., 2018). The need for instructor support of nontraditional students in using technology at a local community college in the Southern United States was identified in this study. The local college is an active participant in the state's virtual community college, which is a cooperative of 15 community/junior college districts and the state community college board that offers internet-based courses. The 15 institutions share resources that allow students of any one of the institutions to take internet-based courses from any member of the consortium while receiving support services from their local college. Since the college does not have full-time information technology support staff dedicated to supporting nontraditional students in the use of technology, instructors are expected to address this need.

Local community college instructors take on the role of information technology support staff for nontraditional students because unlike large universities that have larger operating budgets, community colleges cannot afford extra information technology

support staff to help nontraditional students learn to use technology (Abdul-Alim, 2020; Guth, 2018; Koh et al., 2019; Melguizo et al., 2018). The multiplicity of tasks employed by community college instructors could limit the instructors' support of nontraditional students. Tynan et al. (2015) stressed that using technology in classes usually involves increasing teaching tasks and teaching hours. The increase in tasks and hours include "time responding to emails, hosting chat sessions and moderating bulletin boards" (p. 10). These researchers also contend that at times instructors are not sure if the time they allocate or over allocate for online courses is enough to support quality learning outcomes for their students. Some instructors expressed not having time to update course material, develop innovative learning plans, or enroll in professional development workshops and programs. The inability to provide quality learning experiences for students and the adequate support may result in academic failure. These and other factors make instructors' support of nontraditional students in using technology a difficult task.

Definition of Terms

The terms below will be used throughout this study and are terms commonly used in academia:

Academic success: Acquiring specific knowledge and skills validated through completion of courses (York et al., 2015).

Community colleges: Generally, 2-year colleges that are supported by local, regional, national, or global communities. These 2-year career and technical colleges offer low

-cost pathways to higher education and provide academic coursework and vocational training, and continuing education courses (Ireland, 2015; Shurts, 2016; Travers, 2016).

Digital immigrants: Individuals who grew up in a world without technology and learned to use it later in life. They lack confidence and are not familiar with using technology (Chaves et al., 2016; Kirk et al., 2015).

e-learning: Also called online learning. Includes the use of the internet to access learning materials, interact with learning content, instructors, and students for support during the learning process and gain knowledge and personal meaning to achieve academic growth (Aldiab et al., 2017; Singh & Thurman, 2019).

Faculty workload: The number of hours spent in the classroom each week times the number of students enrolled. Time spent developing online lectures, time needed developing new content, time spent developing class plan, time spent collaborate with the technology design experts, time spent supporting students (AlMutlaq et al., 2017; O'Meara et al., 2019).

General Educational Development or General Education Diploma (GED) Program: A high school completion credential for those who dropped out of high school and those who are too old to enroll in public schools. Recognized and accepted in the United States as the equivalent to high school completion (Hart, 2015; McDermott et al., 2019).

Hybrid classes: A combination of online and face-to-face instruction (O'Byrne & Pytash, 2015).

Information literacy: The ability to use information resources and technology to work and learn relevant skills to complete assignments and solve problems (Xu & Chen, 2016).

Instructional support: Skills or techniques teachers use to help students feel positive about themselves and in control of their learning experience (Fryer & Bovee, 2016; Milman, 2017).

Learning management system: Media technology that manages online learning systems, distributes learning materials, and enables interaction between instructors and students. The supports teaching and learning activities, helps to organize e-learning content on storage systems, provides access to e-learning materials to track students' progress (Mersand, 2015; Ohliati & Abbas, 2019).

Nontraditional students: Students from 18 to 60 years old and beyond, high school dropouts who receive GED certificates, returning students from the workforce and family life, students working full-time jobs, individuals returning to school following life changing events, and veterans returning from war (Robinson, 2019; Woods & Frogge, 2017; Zerquera et al., 2018).

Technology: Technological tools such as computers, mobile devices, the internet, digital recorders, and learning management systems people use to enhance their learning experience (De Bruyckere et al., 2016; Hashim, 2015).

Technology-assisted instruction: The use of information and communication technology to teach and learn. Various kinds of computer-based instruction, internet-

based education, and interactive multimedia board instruction (Souzanzan & Bagheri, 2017).

Traditional students: College students who are teenagers and attend college directly after graduating from high school. The average age range of traditional students is from 18 to 23-years-old, and they typically have never been married. (Smith, 2015).

Significance of the Study

A small Southern community that has a major community college, which has an annual enrollment of hundreds of nontraditional students should benefit from this study. The results of this study could assist local community college instructors in evaluating their support techniques for nontraditional students who do not possess enough skills in the use of technology. Instructor support involves instilling positive attitudes in students, motivating students to learn, responding swiftly to the needs of students, providing positive and caring communication with students, providing tutelage in coursework; validating students' worth, actions, or feelings; and helping students manage or cope with stress through information, assistance, or other resources (Fryer & Bovee, 2016; Martin et al., 2018; Milman, 2017). Instructors also show support through communicating course expectations and assisting students in mastering the subject matter required for the completion of specific courses (Wong, 2018). Although instructor support was demonstrated in numerous ways in this study, its overall objective was to motivate and enhance the learning experience of students.

Integration of technology support can be a significant addition to the community college instructors' goals to motivate and enhance the students' learning skills by creating

personalized and flexible learning experiences for nontraditional students. Glowacki-Dudka (2019) noted that each community college instructor makes tactical decisions about how and what to teach, contingent on institutional requirements, discipline-specific content area, and their personal philosophy of teaching and learning. These strategic teaching decisions are not always conscious ones, as instructors often teach as they are taught. Nevertheless, each decision affects how students respond and how successful they are in integrating or applying the new knowledge. Each decision underscores if instructors utilized procedures and methods of support that best align with the nontraditional students' life situations, learning pace, and other unique characteristics of nontraditional students (Cherrstrom et al., 2019; Glowacki-Dudka, 2019; Remenick, 2019; Robinson, 2019; Woods & Frogge, 2017; Zerquera et al., 2018). If instructors make decisions to address the gap in practice between the need of nontraditional students to use technology for their academic success and the lack of instructor support, such decisions could benefit the local community college and the 14 other community colleges in the state's community college system.

This study could influence social change by providing data related to supporting nontraditional students in the use of technology. Regier (2014) explained that by providing high levels of support and engagement to nontraditional students, instructors could assist nontraditional students in using the technology needed to complete coursework. Regier claimed that the more emotional and academic support nontraditional students receive from instructors, the more success they will have in their coursework. Additionally, the community college in this study is one of 15 small state-operated

colleges that serve both traditional and nontraditional students. The findings in this study could provide guidelines for instructors to improve support of nontraditional students in the use of technology and help community college administrators justify the need for more state funding to help the community college meet the needs of its nontraditional student population. In addition, data collected from interviews could identify barriers that prevent instructors from supporting nontraditional students in efforts to learn to use technology and potentially identify ways instructors can provide much-needed support.

The study is significant because although researchers have examined how college instructors use technology in the classroom and the impact the use of educational technology has on students, there is limited research on community college instructional support of nontraditional students using technology. The study has the potential to contribute to social change in supporting nontraditional students in the use of educational technology. This study contributed to social change by providing valuable suggestions of how instructors can best support nontraditional students using technology.

Research Questions

A small community college in the Southern United States faces a substantial gap in practice between the need of nontraditional students to use technology for their academic success and the lack of instructor support. Past research revealed that colleges and universities are integrating technology into their curricula (Cheng et al., 2020; Cydis, 2015; Dewi et al., 2019; Dunn & Kennedy, 2019; Englund et al., 2017; Ismajli et al., 2020; Lowell & Morris Jr., 2019; Mitchell et al., 2015; Nelson et al., 2019; Petko et al., 2018; Robinson, 2019; Shinas & Steckel, 2017; Washington et al., 2020; Woodward &

Hutchinson, 2018). Nontraditional students enrolling in these institutions of higher learning must be knowledgeable in the use of the technology if they are to succeed. A counselor at the community college's student success center stated that some nontraditional students might lack the skills needed to use the college's learning management system.

To address the problem, I conducted a qualitative case study, guided by the following five research questions (RQs):

RQ1: What problems do community college instructors observe that nontraditional students are encountering when using technology in coursework?

RQ2: What support do instructors provide to nontraditional students in using technology?

RQ3: How does the *Policy and Procedure Manual for Distance and Electronic Learning* inform community college instructors' support of nontraditional students in using technology?

RQ4: How do community college instructors collaborate with the Nontraditional Student Success Center to support nontraditional students in using technology?

RQ5: What strategies would community college instructors recommend to better support nontraditional students in using technology in their coursework?

These research questions guided the data collection and analysis to (a) investigate the problems community college instructors observe that nontraditional students are encountering when using technology in coursework, (b) discover how community college instructors support nontraditional students using technology in coursework, (c) identify

how instructors are guided by the *Policy and Procedure Manual for Distance and Electronic Learning* and supported through the Student Success Center, and (d) report recommendations suggested by community college instructors to better support nontraditional students in using technology for their coursework.

Review of the Literature

Conceptual Framework

The conceptual framework for this qualitative study draws from Knowles's (1984) adult learning theory, Daloz's (1999) mentoring theory, and Siemens's (2005) connectivist theory. I selected these three theories to frame the study because they address the problem stated in this study. Because most of the nontraditional students at the study site are adult learners, Knowles's adult learning theory was selected to gain an understanding of best practice for teaching adult learners that are categorized as nontraditional students. Daloz's mentoring theory was selected to gain an understanding of how college teaching and learning has moved away from traditional lectures to a new way of teaching and learning that involves technology. Learning that involves technology is a major component of this study. The connectivist theory was selected to gain an understanding of how academic instruction that was once predominantly done by humans can now be delivered by technology. All three theories can help address community college instructors' support of nontraditional students in using technology.

Knowles's Adult Learning Theory

In supporting adult students, instructors acknowledge that adults learn differently than children (Allen & Zhang, 2016; Bair et al., 2019; Barry & Egan, 2018; Franco,

2019; Glowacki-Dudka, 2019; Halpern & Tucker, 2015; Knowles, 1984). Knowles (1984) used the term "andragogy" to define methods or techniques used to teach adults. Knowles suggested that instructors should recognize 6 assumptions when teaching adult learners. These assumptions are self-concept, learner experience, readiness to learn, orientation to learn, motivation to learn, and the need to know (Knowles et al., 1998). These assumptions are described in the following subsections.

Self-Concept

Although adult students may not be knowledgeable in the subject of study or may not know how to use required technology, for many of them previous education makes them independent learners. Knowles (1990) asserted that adults could be stubborn if learning new things requires changing their way of doing things. Knowles advised instructors to be there to guide and assist students when problems occur, or mistakes are made. Knowles et al. (1998) added that instructors should not be overbearing. Adult students tend to "resent and resist situations in which they feel others are imposing their wills on them" (Knowles et al., 1998, p. 65). Students often want to continue their old ways of doing things. The instructor's task is to get students to leave old habits and ways of thinking and move to a new way of learning. Students become self-directed and take on the responsibility of their own learning, determining the path that best meets their educational needs (Knowles et al., 1998). Even though self-directedness is an essential part of the adult learning experience, instructors are encouraged to do whatever they can to teach and support students in their quest for academic success.

Learner Experiences

Adult learners often feel they must also do whatever they can to achieve academic success. Sometimes this means adults rely on experiences to help them learn. Knowles (1984) described the assumption of the role of experiences as the belief that as students mature, they gain experience that allows them to become valuable learning resources for others. Knowles reported that if instructors devalue or ignore the experiences of the adult student, students view the instructors as rejecting them as individuals. The author also suggested that instructors demonstrate their support of students by considering the students' previous computer experience and knowledge of using the computer when developing course material.

Readiness to Learn

Adult students are eager to learn course material because of the ever-changing roles occurring in their lives (Knowles, 1984). Researchers reported that adults are ready to learn the things they need to know to deal with situations that occur in their lives (Allen & Zhang, 2016; Knowles, 1984; Knowles et al., 1998; Pescaru, 2019). Although adult learners are ready to learn when various changes are occurring in their lives (Knowles et al., 1998), this does not mean adults must sit by and wait for readiness to develop (Knowles, 1984). Adult students can find motivational tools to stimulate their desire to learn. Instructors who are interested in the academic success of students can also stimulate students.

Orientation to Learn

Instructors also stimulate adult students by applying life situations to the students' learning experience. Knowles (1984) stated that adults enroll in college after having trouble dealing with current life problems. Additionally, Knowles suggested that adult students possess a problem-centered orientation to learning because they want to see how what they learn applies to their life, daily tasks or solve everyday problems. Adult learners want to use what they learn today in some part of daily activities the following day (Knowles, 1984). Considering Knowles's assumption of adults' orientation to learn, instructors should acknowledge that adult learners do not want to spend valuable time learning material they do not consider relevant or beneficial to their daily lives.

Motivation to Learn

A desire to learn new and exciting things that will help them better themselves and their lives is a key motivation for adult college enrollment (Moore & Richards, 2019; Vandergoot, et al., 2018; Wlodkowski & Ginsberg, 2017). Knowles et al. (1998) added that adults are not forced to learn. Adults learn because they desire to do so. Learning helps adults achieve such things as improved job skills, personal growth and enhancement, and increased knowledge in the use of technology. The teaching methods of instructors can either motivate students to achieve academic success or deter their academic achievement (Allen et al., 2016; Moore & Richards, 2019; Wlodkowski & Ginsberg, 2017). Instructors play a vital role in keeping adult students motivated.

The Need to Know

In addition to motivating students to learn, Knowles (1990) advised instructors to stress the importance of learning the subject matter. Knowles suggested that adults do not enroll in classes simply for the sake of learning. Adults enroll in classes after gaining a clear understanding of why they are learning something and how learning will benefit them personally.

Theory's Connection to Study

Knowledge of how adult students learn is beneficial for the instructors as they support nontraditional students in using technology. Since the nontraditional students in this study are adults, Knowles's adult learning theory was ideal for building the study's framework. The theory focuses on understanding the unique learning style of adult students. The study emphasizes how adults learn and what instructors can do to support students using technology. Additionally, Knowles (1990) pointed out that adult students are eager to learn the things they need to know to deal with the situation they are faced with; I developed a research question to ask instructors what strategies they recommend to better support nontraditional students in using technology in their coursework. This question was composed because in this study, the adult students are eager to learn about technology. In addition, Knowles's theory is relevant for this study because it provides tips and guideline for instructors to develop support techniques that engage adult learners in learning to use technology. I kept this in mind as I analyzed data, which proved helpful during the writing stage of my study.

Daloz's Mentorship Theory

Many adults classified as nontraditional students are not accustomed to using much of the newer technology (Gallardo-Echenique et al., 2015). Often these nontraditional students need someone to guide them in the use of the technology. I selected Daloz's (1999) theory to help frame this project study because it addresses moving away from old ways of thinking and accepting a new way of thinking and learning. For nontraditional students, using the technology that is a requirement in course curriculums require a new way of thinking and learning.

Nontraditional students need guidance from people or instructors they have confidence in when they are introduced to new and innovative ways of thinking and learning. Daloz (1999) suggested that since instructors transfer knowledge to students, they could serve as perfect mentors for nontraditional students by teaching them to use technology where students can apply it to their lives. In Daloz's theory, mentors are placed in people's lives because of certain demands their lives make on them. For nontraditional students who are entering community college after a lengthy absence from school, the demand is to learn how to use technology that governs whether they will be able to complete the required college coursework.

The use of technology is integrated into the curriculum of colleges and universities across the country (Englund et al., 2017; Lowell & Morris, Jr., 2019; Mitchell et al., 2015). Researchers contend that nontraditional students must be able to effectively use the community college's technology, or they will not be able to complete

coursework (De Bruyckere et al., 2016; Kuo, 2018; Travers, 2016). The ultimate result could be academic failure.

Academic failure is not solely the fault of students. Instructors play a major role in the success or failure of students (Cooper et al., 2015; Jimerson & Haddock, 2015; Travers, 2016). Jimerson and Haddock (2015) argued that instructors "have administrative responsibilities that require them to supervise a student's overall progress and academic program" (p. 2). When instructors do their job well, they help students see the tasks before them and the context that gives those tasks meaning (Daloz, 1999). One of the tasks before nontraditional students at the local community college is learning to use technology, and it has great meaning because it is vital for the completion of their degree program as well as important to most modern work environments.

Theory's Connection to Study

Local community college instructors expressed concern about integrating technology into their lesson plans because it is a new concept. The instructors emphasized that they were from the "old school" where textbooks, notebooks, pencil, pens, and blackboards were the norm. Additionally, some instructors were not as adept at using technology as others and expressed fear of using technology, specifically the school's learning management system. Since integrating the use of technology in their classes was a new teaching principle for instructors, I chose Daloz's theory as a companion to Knowles's theory to frame this study. For nontraditional students, using the technology that is a requirement in course curriculums require a new way of thinking and learning, as well. Principles found in Daloz's theory led to address how instructors

moved away from their old way of teaching to include technology such as YouTube as a teaching resource in the study. Also, Daloz's theory inspired me to address instructors' technophobia in the text of the study.

Siemens's Connectivist Theory

For some community college instructors, teaching nontraditional students to use technology is a new venture. This new venture requires knowledge of the subject matter and the ability to teach basic skills to students. Siemens's (2005) connectivist theory is ideal for framing this project study because connectivism addresses teaching nontraditional students to use technology. Siemens lauded connectivism as "a learning theory for the digital age" (p. 1). In the connectivist theory, Siemens focused on learning skills and tasks students need to flourish in the digital era. Siemens suggested that to flourish in the digital era students must be able to recognize when new information alters the traditional way of teaching and learning. Students should then find ways of adapting to the change. Siemens stated that new information continues to be taught and learned. Siemens argued that technology is altering or rewiring our brains and posited that the tools we use define and shape our thinking. The author also stressed that learning involves connecting specialized information sets that enable people to learn more about the sets than they currently know. The objective in this study is to get instructors to equip nontraditional students with information that enables them to learn more about using technology in their coursework. Using technology allows students to experience new and improved learning experiences. Technology assisted instruction moves them away from the lecture-only learning experience to a more interactive experience.

Tools used in the digital age include computers, the internet, and social media. These tools are listed among the technology that has been integrated into the class curriculum (Gallardo-Echenique et al., 2015; Safar & AlKhezzi, 2013; Thota & Negreiros, 2015). Siemens (2005) suggested that academic instruction that was once predominantly done by humans can now be delivered via technology, which he described as "non-human appliances" (p. 5). Also, networked technologies can be used to distribute coursework to the learner as well as to personal learning communities and various social networks (Siemens, 2005). Siemens stated that knowledge from databases needs to relate to the right people in the right setting for learning to take place. Nontraditional students and community college instructors can work together in a classroom environment for the nontraditional student to learn how to use the required technology in the college's educational network.

Theory's Connection to Study

To help frame this study, I added this educational theory because it focuses on teaching nontraditional students to use technology. Although it is customary for researchers to choose a single theory in the theological framework, I decided to use three to highlight the significance of instructors' support of nontraditional students using technology. Siemens's theory involves connectivism, which is defined as a theory for the digital age (Siemens, 2005, p. 1). The connectivist theory stresses learning skills and tasks students need to flourish in the digital era, and this study stresses learning skills and tasks nontraditional students need in using technology. Instructors were given an opportunity to discuss how they addressed the skills and tasks nontraditional students

need in using technology. In addition, I developed a research question that asked instructors to discuss problems they observed nontraditional students were encountering when using technology in coursework. Responses to the question were included in the study and used to develop themes to address instructors' support of nontraditional students in using technology.

Review of Broader Problem and Current Literature

The review of literature consists of prior studies, articles, and research that addressed nontraditional students and their use of technology, as well as information about the support of nontraditional students in using technology. I present evidence for the need to improve the instructional support for nontraditional students using technology to complete coursework. I used the Walden University Library to conduct most of the research for my study. I also used the public library in my community and the library at a local community college. Databases used to locate articles and relevant information for this study were ERIC, Education Research Complete, ProQuest Central, and SAGE Premier. I also used the Walden University online library, the public library, assorted educational journals, websites, and books to collect information for the proposed study. In searching for articles, I used the computer to type words or phrases I thought would lead to articles to inform my study. The keywords and phrases used to search the databases were *nontraditional students and technology*, *nontraditional students and community colleges*, *teaching technology to nontraditional students*, *teaching nontraditional students*, *nontraditional students*, *technology in education*, *community colleges and technology*, and *technology used for learning and teaching*. A review of the

literature and an analysis of the authors' reference pages provided leads to other resources that helped me better understand the problem.

Literature pertaining to teaching technology to nontraditional students was substantial, but a limited number of articles focused on community college instructors' support of nontraditional students in using technology. Although the bulk of literature did not focus solely on community college instructional support of nontraditional students in using technology, an ample amount of research addressed the gap in practice between the need of nontraditional students to use technology for their academic success and instructor support of students. The literature selected to address the problem identified nontraditional students and the impact of their enrollment in higher education, focused on teaching nontraditional students to use technology, teaching college students to use technology, and instructor support of students.

I organized the literature review into several themes: definitions of nontraditional students, nontraditional students and the use of technology, coping with educational technology, instructor's support to use technology, and focusing on student needs. Each theme is discussed below.

Definitions of Nontraditional Students

The definition of nontraditional students has changed over the years. During the past 5 years, researchers have defined nontraditional students as (a) adults who recently completed their general education diploma, (b) returning students from the workforce and family life, (c) students working full-time jobs, (d) individuals returning to school following life changing events, and (e) veterans returning from war (Brändle, 2017; Peet,

2019; Woods & Frogge, 2017). Recently, the classification of the nontraditional student has grown to include students with different cultural backgrounds; students of a different class, gender, sexual orientation, and other group identities (Levinger & Segev, 2016; Lyon & Guppy, 2016). Additions to the list of nontraditional students are expected in the future, as new societal trends are adapted.

Regardless of who is categorized as nontraditional students, from the literature, it was determined that instructors should use teaching strategies that accommodate the learning needs of all nontraditional students (Allen et al., 2016; Cherrstrom et al., 2019; Hixon et al., 2016; Lowell & Morris Jr., 2019; Panacci, 2015; Remenick, 2019). Because nontraditional students and traditional students are enrolled in the same classes, instructors should learn the strategies for traditional students and the different strategies for nontraditional students.

Researchers have argued that not all students learn in the same manner. McDougall (2015) posited that the principles of adult learning must include a positive, supportive learning environment. McDougall added that adults also want authenticity in their learning experience. Adult students "need to feel that the prior experience and knowledge they bring to the learning environment are recognized and valued" (McDougall, 2015, p. 96). People are more apt to learn when they feel their interests, concerns, and ideas are valued. In addition, Rothes et al. (2014) suggested that motivation is a key element in students' engagement, satisfaction, and level of achievement in learning. Rothes et al. contended that students who receive motivation from instructors develop positive attitudes about education and have successful academic outcomes. It

seems that when nontraditional students receive motivation and support from instructors in the use of technology in college coursework, academic success could become the result.

Nontraditional Students and the Use of Technology

In many college classrooms, nontraditional students are older adults with limited knowledge of technology who may require more time to learn basic computer skills than other students may. Jones-Reed (2013) discussed the role age played in nontraditional students' lack of confidence in using technology in coursework, whereas Yau and Cheng (2012) posited that older students have more confidence in computer use than their younger colleagues. According to Jones-Reed, there continues to be many nontraditional students enrolling in community college who do not possess adequate skills in technology to successfully complete assignments and achieve academic success. For this reason, instructors, advisors, and others in the local community college would be called upon to provide the support needed to assure academic success. Because the needs of nontraditional students are considerably different, yet as important, as those of traditional students, Jones-Reed emphasized that "a commitment must be made to support diversity among student groups" (p. 35). Sivakumaran and Lux (2011) advised that since local community college instructors stated that the lack of funding prevented the provision of an adequate support system for students, dedicated instructors are often requested to spend one-on-one time with students in need of computer assistance. Sivakumaran and Lux also stated that to show their support of nontraditional students in the use of

technology, instructors must make themselves available outside of class time to answer questions students may have about technology or other subject matters.

Although Yau and Cheng (2012) agreed that instructors should take special steps to make sure the educational needs of nontraditional students are met, these authors had different opinions about nontraditional students' technology skills. In their quantitative study, focused on questionnaires received from 211 out of 350 possible participants, Yau and Cheng found that older students have more confidence in using technology for learning than younger students. The research was conducted at a university in Hong Kong, but the information presented appeared to be relevant to nontraditional students worldwide. Yau and Cheng reported that because older students may not adapt to changes in technology, their motivation to use technology for learning may deteriorate.

Based on the study's findings, researchers gained better understanding of both younger and older student's perception of confidence in using technology for learning. The results showed that older students had more confidence in using technology for learning than their younger counterparts. For the most part, older adults were part-time students and younger students studied full time. Since older students used technology frequently on their jobs, they were familiar with new technologies and could build their confidence in using different technology through their place of employment (Yau & Cheng, 2012). Younger students had less opportunity to use technology in the learning environment and were "encouraged to access different software or another course related technology in school only" (Yau & Cheng, 2012, p. 310). The researchers concluded that

the younger students had less practice in using the new technology, and as a result, were less confident in using technology for learning.

If instructors are to be effective teachers, they must meet the educational needs of all students, regardless of age. Lowell and Morris (2019) stated that to assist with the needs of the changing student population, instructors must consider learning characteristics of different age groups to ensure equity in learning opportunity. Specifically, instructors need to provide instruction that meets the needs of learners of multiple generations situated within one classroom. To ensure all learners can be successful, educators should strive to provide equality in learning opportunities when designing instruction including technology. Nontraditional students experience easier success as they are willing to adapt to the use of technology in academic coursework. Jenkins (2012) argued instructors should acknowledge that nontraditional students learn differently from traditional students. But although nontraditional students learn differently, it is imperative for instructors to play a role in helping them achieve their academic goals.

This qualitative study was based on community college instructors' understanding that nontraditional students may need help in learning to use technology. Community college instructors teach students of varying ages and backgrounds, but nontraditional students have different skill levels and different learning styles (Aubusson et al., 2014; Brinthaupt & Eady, 2014; Chen, 2014; Davidson & Blankenship, 2016; Gordon, 2014; Johnson et al., 2016; Panacci, 2015; Zawacki-Richter et al., 2015). Community college instructors also make daily decisions about what technologies they will use to teach

students and about how to use these technologies to support student learning. The choices these instructors make are often guided by their personal beliefs and their attitudes toward technology (Aubusson et al., 2014). With an increasing number of nontraditional students enrolling in community colleges without the knowledge to use technology, instructors also need to initiate a support system for them to achieve academic.

To show their support of nontraditional students, instructors are called upon to effectively integrate technology into their courses and mentor these students in the use of technology. A quantitative study conducted by Knott et al. (2013) revealed that the integration of technology into curricula changes the way instructors teach. The research question addressed in Knott et al.'s study focused on the relationship between the use of technology in the classroom and sustainability in higher education.

Data collected from the questionnaires revealed that instructors who taught technology based programs did not see the use of technology differently from instructors in other schools (Knott et al., 2013). Yet, there was a significant difference in instructor affiliations and the instructor member's view of the importance of technology to learning in the classroom. Knott et al. concluded that technology also alters the relationship between students and instructors. Knott et al. also maintained that the effective integration of technology into curricula "moves instructors into the roles of adviser, content expert, and coach" (p. 10). The increased workload of instructors makes it difficult to teach technology skills to nontraditional students in need of help in completing technology-based assignments (Salley & Shaw, 2015). Salley and Shaw (2015) discussed the workload of instructors and the impact it has on teaching. A

descriptive, quantitative study was used to address the need for community college administrators to develop and implement strategies to ensure adequate staffing to meet the demand for online courses and promote student success. In this study, instructors were divided into two categories based on their employment status: full-time instructors teaching online courses as part of their regular workload or voluntary overloads and adjunct instructors teaching online courses.

Salley and Shaw (2015) used comparative and correlational research designs to address four research questions developed to assist in analyzing the relationship between online instructor employment status, instructor teaching load, and the performance of students in online courses at a community college in the Midwest United States. The analysis was conducted using a 2010 database to compare student performance. The selected student performance for the study was based on those of the National Community College Benchmark Project. Representatives of the National Community College Benchmark Project collect and compare student performance data annually using the standard collegiate grading scale of "A = excellent or outstanding, B = above average, C = average, D = passing, F = failing, and W = withdrawal", (Salley & Shaw, 2015, p. 5/14). Recently, in the United States, more than 260 community colleges participated in this process, which contributed to the validity and reliability of the study. The results of the study revealed that instructors play a central role in student success in online courses offered at the community college.

Because instructors play such an important role in student success, Daher and Lazarevic (2014) stressed that instructors who teach online courses should have adequate

knowledge of the use of technology in learning. In the Daher and Lazarevic study, a random sampling of all instructors employed at a large Midwestern community college in the United States was used to select study participants. The sample consisted of 202 instructors from the college's multiple campuses. The sample was 48% female and 52% male. Also, 26.7% participants reported being age 45 or younger, with the remaining 16.7% being over the age of 45. In addition, 40.1% of the instructors had masters or doctoral degrees, while the remaining instructors attained a bachelor's degree. The instrument of choice for this study was a traditional hard copy survey which consisted of 11 items. A hard copy survey was selected to avoid a low response rate (Daher & Lazarevic, 2014). The researchers reported that the survey was easy to conduct, effective, and produced a 91% response rate.

Once data were analyzed, Daher and Lazarevic (2014) maintained that the level of education and the use of technology in instruction are major determinants of the instructors' preferences toward different groups of e-learning tools. Daher and Lazarevic determined that the lack of training opportunities was the main barrier for the instructor's use of technology. The authors suggested that the instructors' attitudes about teaching technology skills could be prejudiced by existing job demands that require much of their time. Daher and Lazarevic (2014) also posited that time restraints could also determine whether instructors would even consider integrating technology into their curriculum. The literature review will include these issues related to instructor support of nontraditional student technology needs.

The challenge then was to find ways to motivate older adults to use technology for learning. A qualitative case study conducted by Wyatt (2017) suggested the steps college and university officials can take to help nontraditional students achieve academic success. According to Wyatt, colleges and universities must focus on the needs of nontraditional students during various stages of their academic career. Steps that could be taken to help nontraditional students achieve academic success include:

1. Providing tutoring labs and services specifically for students 25 years of age and older,
2. Encouraging instructors to understand and adopt teaching methods and delivery systems to integrate the learning styles of nontraditional students,
3. Hiring and training counselors and advisors who understand the issues and needs of nontraditional students,
4. Developing programs and events that appeal to nontraditional students and include their families,
5. Increasing campus communication to include improved marketing strategies targeting nontraditional students, increasing online coursework with tutorials,
6. Restructuring general education courses in shorter blocks of time, and
7. Reducing duplication in coursework.

The qualitative study involved the use of existing research and literature on student engagement on college and university campuses. Although the research primarily dealt with the general population of college students, Wyatt (2017) found that nontraditional students were more likely to be grouped into categories that did not

specifically identify them as nontraditional students. The research method required the researcher to have the skills and ability to systematically see what was happening in the case study, collect and analyze data, and accurately report the results.

An online quantitative survey was used to collect information about the campus experiences of nontraditional students at the University of Memphis. Campus experiences were grouped in six categories: students, faculty, campus environment, campus community, membership in student organizations, and the University College. The last segment of the survey consisted of general questions designed to solicit advice and recommendations for future nontraditional students in their pursuit of an academic degree. Participants discussed student engagement, collegiate experiences, and what they expected and needed to be successful in college. Findings from participants' personal stories, life experiences, and plans for their future after graduation were documented through journal entries. Wyatt (2017) posited that engagement on college and university campuses "begins with institutional commitment and includes various other campus support systems to reach the goal of integrating nontraditional students into the campus environment" (p. 15). The findings in this research confirmed that nontraditional undergraduate students' decisions about engagement and its importance are based on their college experience and how it affects them.

In a research article focusing on what was defined as the new traditional student, Jenkins (2012) suggested if instructors want to engage nontraditional students, they should consider the educational needs of nontraditional students as they design their courses and lesson plans. Jenkins stated instructors should also consider their teaching

approach when nontraditional students are enrolled in their classes. Nontraditional students may not be as adept in using technology as their traditional counterparts. Although nontraditional students may use technology in their everyday lives because of technology's prevalence in society, they are classified as digital immigrants since they do not readily accept change and are often uncomfortable using technology (Hixon et al., 2016; Kuo, 2018; Lansing, 2017; Panacci, 2015; Roberts & Rees, 2014; Singh, 2019). While nontraditional students may be familiar with some technology and have used it occasionally, they may not be skilled in using technology as an educational tool (Cherrstrom et al., 2019; Jääskelä et al., 2017; Roberts & Rees, 2014). In most cases, the age of nontraditional students factor into why these students are not as adept in the use of technology as a learning tool as their younger counterparts.

People of all ages use technology in their everyday lives. Understandably, age is often a determinant in how students use technology and how they learn to use technology (Chaves et al., 2016; Chen, 2014; Kirk et al., 2015; Lowell & Morris, 2019). Since most nontraditional students are much older than traditional students, Ross-Gordon (2011) and Jenkins (2012) asserted that the instructor's teaching strategy should be compatible for both age groups. Jenkins (2012) maintained that the instructor's tasks involve much more than lecturing and grading assignments and that the most important task of instructors is being a support system for students.

Supporting the needs of nontraditional students was the focus of a Ross-Gordon (2011) article. The author stated that a growing number of institutions of higher education attempted to create programs and services that related to nontraditional students' life and

learning preferences. Instructors and administrators were challenged to think beyond traditional ways of teaching and developing educational programs. Yet, Ross-Gordon (2011) emphasized that much can be learned from "existing program's experiences with various modes of distance learning, prior learning assessment, and intensive courses" (p. 29). Ross-Gordon also stated that instructors can play an important role as change agents in creating supportive learning environments for nontraditional students by incorporating theory and research on adult learners into their classrooms and by supporting adult-oriented programs and services on college campuses.

The instructors' role as change agents may be found in how they teach technology-based courses and support they give to nontraditional learners. Several researchers have examined how college instructors use technology in the classroom and the impact the use of educational technology has on students (Dunn & Kennedy, 2019; Jääskelä, et al., 2017; Kivunja, 2015; Knox, 2014; Motshegwe & Batane, 2015). In another article, Knox (2014) discussed the increase in e-learning courses and its impact on education. Knox explained that the integration of technology in college coursework makes it easier for people from across the globe to enroll in online classes.

Technology provides instructors an "opportunity to expose large numbers of students to digital literacy practices and networked environments" (Knox, 2014, p. 165). Knox went on to show that problems with academic support could occur if too many students enroll in a course at any given time. Like instructors using technology in courses taught in campus settings, online instructors must seek ways to support their students. Knox (2014) recommended that instructors adopt practices that work to reduce class size

enrollment and/or incorporate interactive teaching techniques to help students retain information taught in the courses.

While many instructors welcomed the use of technology in the classroom, others were not as happy about the new addition to the educational curriculum. Kemp et al. (2014) used a qualitative method called expert discussion, featuring unedited conversations with participants, to present a debate on the role and value of technology in education. The debate was between the proponents of technology, three instructors with backgrounds in educational technology, and the opponents or critics of technology, three instructors who were not experts in technology but had experience with educational technology. The three instructors who were not experts in technology viewed the use of online tools such as emails and discussion boards as culprits of a loss of immediacy in the learning process. Kemp et al. (2014) posited that since technology gives students the ability to communicate with instructors at any place and at any time, the students' ability to think independently was dramatically hindered. Students seek their instructors for solutions rather than trying to solve problems on their own. "The line between caring about student's learning and spoon-feeding them has become increasingly vague in practice, largely due to technology" (Kemp et al., 2014, p. 19). In these instructors' viewpoint, technology is not beneficial to students.

Another drawback in the use of technology in education is that instructors are continually under pressure to respond immediately to e-mail, texts, and phone calls received from students. Kemp et al. emphasized that quick exchanges orchestrated by technology could hinder the development of students' personal communication skills.

According to the authors, the "use of communication technologies provides instant gratification, oftentimes without substance if students do not have sound skills in interpersonal communication" (Kemp et al., 2014, p. 19). Additionally, Longman and Green (2011) stressed that no matter how much technology is integrated into teaching methodology, students "still need the guidance, direction, and role models provided by lecturers" if they are to comprehend coursework well enough to achieve academic success (p. 125). Longman and Green posited that the instructor's role is disrupted when greater emphasis is placed on technology and self directed learning rather than learning from an instructor's lecture. Also, if college administrators want to incorporate technology based teaching and learning at their colleges and universities, they must establish a working relationship between instructors and technicians working in information technology (Salmon & Angood, 2013) advised that. Regardless of how instructors feel about the use of technology in education, colleges and universities expect instructors to integrate technology into their curriculum and to make changes in their teaching strategies to address changes in the way people teach and learn.

Coping with Educational Technology

Using technology may be an unnerving experience for nontraditional students who are not accustomed to using technology in an educational setting. Community college instructors often expect students to have enough technology skills to complete course assignments and communicate with their teachers and peers (Anderson & Horn, 2012). The fact of the matter is not all students possesses such skills. To best meet the needs of students, college and university teachers are integrating technology into their

teaching strategies. Scott and Lewis (2012) provided information on how nontraditional students cope with intimidating college environments and how the support of family, teachers, and peers help them overcome challenges encountered in their pursuit of a college degree.

Sometimes coping with change requires making self-adjustments. Jamil and Shah (2011) and Ramsay and Terras (2015) outlined how technology changed the way people teach and learn, while Day et al. (2011) and Goddu (2012) addressed equipping teachers to address the educational needs of adult (nontraditional) students. In a quantitative study on the potential effects of technology on teaching in higher education, Jamil and Shah (2011) claimed that technology has changed the traditional educational concept of "learning by doing" to "doing and making to learn with technology" (p. 39). Although the researchers were from Pakistan, they used literature findings and questionnaire results from university instructors from a region of northwestern India and Pakistan to examine the global impact of technology on teaching in higher education.

To conduct their survey, Jamil and Shah (2011) developed and distributed questionnaires to 450 instructors from eight universities. Three hundred and thirty-six or 81% of the questionnaires were successfully collected. Jamil and Shah reported that technology in education has changed classrooms from a teacher centered environment to a student centered environment. Also, because of the use of technology in higher education, instructors had to manage the learning process to include creative and interactive teaching techniques to develop learners' interest and help them improve retention of course material. Jamil and Shah found that most instructors favored

integrating technology into the teaching and learning process because learner's attitude had become more active than passive. Jamil and Shah contended that students wanted to interact more with their instructors rather than just attend lectures. Goddu (2012) added that as students stop being passive receivers of information and take responsibility for learning, the instructor no longer takes on the role of classroom leader, but rather the role of facilitator of learning. Although Goddu stated that the role of the instructor had changed, instructors were yet encouraged to provide a support system for their students.

Instructor's Support to Use Technology

Nontraditional students' need for instructor support is evident as they begin to use technology in their coursework. As a result, increasing numbers of colleges and universities require instructors to integrate technology into their teaching and learning strategies (Barbour et al., 2014; Cydis, 2015). Instructors integrate technology into their teaching strategy to stay abreast of the changes in higher education. Some students considered using technology in coursework as an easy task, while others express difficulty in using technology. No matter how difficult the use of technology may appear, nontraditional students must learn enough about technology use to complete course assignments.

Nontraditional students must also conquer their fears and adjust to college life and new learning approaches which use technology. Levine and Dean (2013), Scott and Lewis (2012) and Thota and Negreiros (2015) showed how nontraditional students cope with intimidating college environments and how the support of family, teachers, and peers help them overcome challenges encountered in their pursuit of a college degree.

Levine and Dean examined undergraduate students' use of technology in education from 2006 and 2012. The study included a sample of 5,000 national students, two national surveys of chief student affairs officers, and interviews of focus groups from 33 universities. The researchers also collected information from student leaders and student affairs staff.

Levine and Dean (2013) substantiated that when students enter college, "they expect to advance intellectually," but in some cases, their expectations are not fulfilled (p. 7). Still, students are not alone in their adjustment to the use of technology. Levine and Dean found that in many cases primarily digital immigrants taught students. Smith (2013) defined digital immigrants as individuals born before 1980 who grew up in a world without technology. Digital immigrants lacked confidence and were not familiar with using technology. Levine and Dean discovered that while 79% of the students surveyed were satisfied with college and 87% were satisfied with the quality of teaching at their colleges, they wanted to utilize more technology in their classes. According to Levine and Dean, four out of five students stated that "undergraduate education would be improved if their classes made greater use of technology (78%) and if their professors knew more about how to use it" (p. 7). Also, 52% of the students wanted more blended instruction which combined online and in-person classes (Levine & Dean, 2013). According to Levine and Dean, 33% of students even asked for more courses to be totally online.

Although students appeared to show interest in technology, the study revealed students were constantly criticized for their lack of research skills and their attitudes

about research. “They were chastised for thinking Wikipedia or Google searches were adequate. They were disparaged for not using the library, for not reading books, for not consulting journals, and for being just plain lazy” (Levine & Dean, 2013, p. 7). The researchers concluded that no change in higher education was larger or had a greater impact on academia than the use of technology.

Scott and Lewis (2012) used a case study to examine nontraditional students’ perspectives on college learning environments, the interaction between students and teachers, and overall perceptions of the college experience. The five nontraditional students participating in the study were randomly selected from two community colleges and 4-year universities near Houston, Texas (Scott & Lewis, 2012). Scott and Lewis reported that of the five participants, three were females over the age of 50 and two were males, age 48 and 55. Three were part-time students, while two attended school full time. Scott and Lewis used a semi-structured personal interview using 15 open-ended questions and a classroom observation in June and July 2010 to collect data for the study. The objective of Scott and Lewis’s study was to show that with adequate support from colleagues, instructors, college services, and even family, nontraditional students can learn in hostile or intimidating college environments. Findings from the Scott and Lewis study revealed that mentoring programs help nontraditional students cope with hostile and intimidating college environments in their pursuit of a college degree. Scott and Lewis maintained that mentoring components such as centers, clubs, and community organizations bridge the academic and social gap. Encouraging collaboration with these

mentoring components added more family, friends, and peer group support to the nontraditional students' support system.

Thota and Negreiros (2015) suggested steps instructors could take to support students in learning technology. In the article published in an educational journal, Thota and Negreiros stated that instructors allow students to express their points of view and contribute to the learning process. Students were also allowed to establish a learning environment that allows students to interact with the instructor and ask questions if they do not understand a lesson and give students and opportunity to express their thoughts and ideas, debate an issue, and discuss and test new ideas. Another researcher, Alemu (2015) declared that technology is a tool of empowerment for both community college teachers and students in the move towards more effective and efficient education. Alemu used a mixed study to explore the role of technology in the transformation teaching and learning styles and how technology could affect the way programs are offered and delivered in the colleges and universities of the future.

Although the study was conducted in Ethiopia, Alemu emphasized that technology is improving lives of people and enhancing the quality of education across the globe. Participants in this study were selected from five schools from Adama Science and Technology University. The total number of participants was 203: 10 school deans and vice deans, five department heads, and 188 instructors. Instruments used to conduct this study were individual interviews, observations, and questionnaires. Alemu (2015) found that instructors play a vital role in ensuring that technology is integrated into the teaching and learning process in a thorough and effective manner. Instructors evaluated the

appropriateness and effectiveness of various technologies and decided when and how they should use them to educate students. Additionally, Alemu reported that on some occasions instructors do not integrate technology into the teaching and learning process because they have inadequate knowledge, skills, and attitudes in the use of technology.

While technology has caused college and university officials to move away from lecture only classes, Longman and Green (2011) insisted that the instructor's role remains vital in engaging students in their learning experience and suggested that the role of instructors in supporting nontraditional students in using technology includes helping students overcome hindrances to their academic success. One such hindrance is the inability to use the technology required to complete college coursework. Other hindrances identified by Longman and Green included outdated teaching techniques and the failure of some colleges to embrace the use of technology in coursework. Although a wide range of research was conducted to address the college experience of nontraditional students, with some specifically highlighting their issues with using technology, instructors continue to seek ways to help nontraditional students overcome obstacles that may hinder their quest for academic success.

Focusing on Student Needs

The role of instructors in supporting nontraditional students in using technology in education requires more than moral support. Instructors' support requires focusing on the educational needs of nontraditional students (Burt et al., 2013; Goddu, 2012; Thota & Negreiros, 2015). Hashim (2015) noted that when instructors focus on the needs of students, it leads to a better learning environment and a better learning experience.

Hashim further stated that the use of technology in education could help students gain a better understanding of what is taught in class. In a qualitative study done at two technical schools in Malaysia involving both students and instructors Hashim emphasized that instructors should know the characteristics and educational needs of their students well enough to develop learning modules to provide support and encouragement in their learning experience. Hashim added that instructors are role models in educating and encouraging students and developing activities that help meet the educational needs of students.

Some colleges and universities are assisting instructor's efforts to meet the educational needs of students. Anderson and Horn (2012) provided information on what college and university administrators are doing to equip students with technology skills that are necessary for students to successfully complete assignments and communicate with their peers and teachers. Anderson and Horn stated that administration and staff of most colleges and universities consider computer literacy as crucial if students are to receive a well rounded college education. The authors also estimated the relationship between the students' use of technology and their self-reported academic and technology gains. Research findings in the Anderson and Horn study revealed that community colleges provided students with the tools and skills needed to succeed at four-year institutions and eventually succeed in future careers. In addition, the authors of the study encouraged students in the use of technology by providing computer labs and other places on campus for students to use technology, integrated more technology and

information literacy into teaching and classroom activities, integrated online courses into class curricula, and encouraged students to take at least one computer literacy course.

Implications

Two possible projects were considered in the proposal for this research study. Based on early discussions of the research topic, the literature review, and implications in research findings, I proposed developing a professional training project, preferably a 3-day professional development workshop, to equip instructors with the skills needed to address student needs, as well as the purpose, goals, and learning outcomes of the project. Upon completing the data collection and analysis processes, I discovered the college already has a professional development training program in place. Because of this discovery, I decided that instead of developing a professional training project, I would use my second project choice which was a policy recommendation report.

The policy recommendation report was deemed an ideal project because although the college has a professional development plan in place, some instructors are unaware of all the resources and benefits the college provides to assist instructors teaching nontraditional students in the use of technology. The implications of the literature review conducted for this study revealed that like other colleges and universities throughout the United States, this local community college has an increase in the number of nontraditional students enrolling in classes (Goddu, 2012; Jenkins, 2012). Research showed that some of these nontraditional students entering college lack information literacy and are unable to use information resources and technology to work and learn relevant skills to complete assignments and solve problems (Xu & Chen, 2016). The

proposed objective of the policy recommendation report was to present ways instructors can better support nontraditional students in using technology in their coursework. However, after discussing my research findings with my committee, it was determined that another project would best serve my research study. With assistance from the committee, I decided that a position paper would be the best way to present my research findings. The project will be discussed in Section 3 and presented in Appendix A.

Summary

The lack of technology skills of nontraditional students enrolling in community college and the lack of support from some instructors resulted in a concern from administrators and instructors at the community college in this study to find ways to help nontraditional students learn to use technology. The community college in this study is one of 15 state funded community colleges, located in a community in the Southern United States. The school has a growing nontraditional student population, which prompted college officials to establish the Nontraditional Student Success Center that gave nontraditional students a place to meet and study with peers. Following the retirement of the founder and director of the Nontraditional Student Success Center and the center's closure, the college established the Student Success Center that serves both traditional and nontraditional students. The Nontraditional Student Association meets once a week to provide peer support to nontraditional students enrolled at the college. Still, instructors were not providing adequate support to nontraditional students who were novice technology users.

In Section 1, the problem identified at a small community college in the southern United States was that instructors are providing limited support for nontraditional students using technology, which may leave students ill-prepared to complete coursework. The conceptual framework that shaped this study was a combination of the Knowles's adult learning theory, Daloz's mentoring theory, and Siemen's connectivist theory. The literature review consisted of data from articles and studies addressing the broader problem, as well as current literature addressing the problem. The literature review also included definitions of nontraditional students and problems they face when using technology in educational coursework.

Before a study can be researched, there must be adequate evidence that the problem exists. Archived literature, as well as personal communications from instructors and advisors, was used as evidence of the problem. I also provided data on how students and instructors cope with educational technology, as well as information on how instructors support nontraditional students in the use of technology. This section ended with implications of the study and a potential solution to addressing the gap in practice between the need of nontraditional students to use technology for their academic success and lack of support in the community college.

In Section 2, I describe the methodology used for this study. I use a qualitative case study to investigate community college instructors' support of nontraditional students in using technology and problems instructors observed nontraditional students encountering when using the technology. I also describe the site of the study, participants, and the type of data analysis used in the study.

Section 2: The Methodology

Although a local community college has valuable resources in place to help instructors support nontraditional students use technology, not all instructors are taking advantage of these resources. Examining the support instructors provide for nontraditional students using technology to complete coursework may resolve the problem at a small community college in the southern United States is that instructors are providing limited support for nontraditional students using technology, which may leave students ill-prepared to complete coursework. Thus, the purpose of this qualitative study was to examine instructional support of nontraditional students using technology to complete coursework and to make recommendations to improve instructional support of students.

Research Design and Approach

A case study was the qualitative research design I used to study the problem. Yin (2009) stated that case studies provide data about an individual, group, social, political, organizational, and related phenomena. Case studies allow researchers to examine the characteristics of real-life events such as teachers finding ways to help nontraditional students improve their skills in using technology thoroughly (Yin, 2009). Stake (1995) defined a qualitative case study as “an intensive, holistic description and analysis of a single instance, phenomenon or social unit” (p. 27). Merriam (2009) added that a case study is a bounded system and refers to a specific “bounded” location and or phenomena that will be studied as a self-contained unit. Another definition for case study is an in-depth examination of a bounded system such as an activity, event, process, or individuals

based on a varied data collection (Creswell, 2012). According to Creswell (2012), "Bounded means that the case is separated out for research in terms of time, place, or some physical boundaries" (p. 465). The bounded systems in my case study are bounded by time and place, while utilizing a variety of sources, including interviews, documents from the Student Success Center, and the college's *Policy and Procedure Manual for Distance and Electronic Learning*.

In relation to time, place, or physical boundaries, the local college's Human Subjects Research Committee (HRSC) set a deadline for onsite data collection, requiring that interviews be completed by March 29, 2018. Additional boundaries were that I interviewed instructors at a specific community college and all interviews were conducted in a private isolated room on the college campus. Creswell (2012) stated that a case may consist of an individual, several separate individuals, or a group of individuals, a program, activities, or events. In this study, I interviewed only those instructors who teach nontraditional students. Identifiers specified by Merriam (2009) indicated that this project study is suitable for a case study design. Still, I had to choose which type of case study would work best for my project study.

Rationale for Research Design

Although the case study was the qualitative research design, I employed for this study, Stake (1995) identified three types of case studies that could be used in educational research: intrinsic, instrumental, and collective. An intrinsic case study is used to gain an understanding of a specific case of interest, whereas a collective case study consists of multiple cases that are investigated together to gain an understanding of a phenomenon,

general condition, or population (Stake, 1995). The intrinsic case study was not suitable for my project because I focused on a specific issue, not a case. Likewise, a collective case study was not suitable because collective case studies focus on more than one case (Stake, 1995) rather than focusing on a single issue as in my study. The instrumental case study was ideal for my project because instrumental case studies allow researchers to establish a clear and in-depth understanding of a specific issue, relationship, or cause (Creswell, 2012; Stake, 1995).

In this instrumental case study, the learning perspectives of community college instructors were addressed. More specifically, I examined instruction and learning strategies used by instructors were to determine if and how instructors support nontraditional students in the use of technology. Nine instructors were interviewed to discover what they were doing and why they were doing it to support nontraditional students in using technology. Qualitative researchers use such resources as interviews, field notes, recordings, and memorandums to help them understand or interpret the phenomenon (Denzin & Lincoln, 2005). In addition, qualitative researchers identify the problem and examine trends and thoughts that are more in-depth when studying the problem in search of a resolution (Creswell, 2013; Leavy, 2014; Marshall & Rossman, 2014; Merriam & Tisdell, 2016; Taylor et al., 2016). While existing research was useful for providing background information on the hardship nontraditional students encounter using technology in college coursework, interviews and observational field notes provided personal local insight of the problem. Research findings revealed how to

address the problem stated in the research study. Upon completion of the study, the findings were used as an instrument to change the bounded case that was studied.

Alternative Qualitative Research Approach

Although several other qualitative research approaches exist, only two were examined as alternative approaches for this study: ethnography and phenomenology. While ethnographic research is often categorized with case studies, the two approaches are different (Lodico et al., 2010). Case study researchers focus on interactions of small groups or individuals in specific settings, whereas ethnographic researchers investigate people in their native environment and culture. However, ethnographic researchers also explore how a cultural group's interactions are influenced by the larger society (Lodico et al., 2010). Another similarity is that both case study researchers and ethnographic researchers use multiple perspectives to collect data about the phenomena being investigated.

Ethnographic researchers go a step further than case study researchers do by assessing or filtering information collected through the setting. In ethnographic research, the setting itself has a role and a function in the study. Ethnographic research also requires researchers to become familiar with the environment by becoming a member of the group that is being studied (Lodico et al., 2010). None of the elements of ethnographic research are an essential part of case studies. Since ethnographic researchers are required to become a member of the group that is being studied, this approach was eliminated for this study. Although I am a nontraditional student, I am not a student at the

community college in this study, meaning I cannot become an official member of the group that I studied.

Phenomenological research was also deemed unsuitable for this study. In phenomenological research, the researcher uses precise details to describe the personal experiences of the people participating in the study (Lodico et al., 2010; Merriam, 2009). Lodico et al. (2010) added that phenomenological researchers "are interested in understanding and recording the social and psychological perspectives of the participants in the study" (p. 17). The reasoning for my undertaking of this study was not founded on an interest to understand and record social and psychological viewpoints of participants. Rather, I conducted the study to (a) explore problems instructors observed nontraditional students were encountering when using technology, (b) identify the support instructors provide to nontraditional students in using technology, (c) examine how the community college's *Policy and Procedure Manual for Distance and Electronic Learning* informs instructors in supporting nontraditional students in using technology, (d) investigate how community college instructors collaborate with the Student Success Center staff to support nontraditional students in using technology, and (e) identify strategies community college instructors would recommend to better support nontraditional students in using technology in their coursework.

This case study helped increase instructors' support for the technology needs of nontraditional students by establishing a clear and in-depth understanding of how instructors at a small community college in the southern United States are providing limited support for nontraditional students using technology to complete coursework,

which may leave students ill-prepared to complete coursework. The voices of local community college instructors, who currently work with or have worked with nontraditional students were heard. Collected data familiarized stakeholders (teachers, students, college administrators, state lawmakers, state college boards, civic leaders, and local government officials) with the phenomenon. The objective is to get these stakeholders to work toward a resolution for the problem identified in this study.

Participants

Procedure for Selecting Participants

In the qualitative case study approach, researchers write subquestions that are based on research topics or research questions found at the start of the study and throughout the progression of the study (Lodico et al., 2010). The researcher then examines the subquestions and chooses a sampling strategy to select "participants who are best able to provide the information essential for the study" (Lodico et al., 2010, p. 163). Creswell (2012) noted that purposeful sampling is the process used by qualitative researchers to select participants for their study. Qualitative researchers intentionally select individuals who have knowledge of the central phenomenon in the study. This procedure used to select study participants is called purposeful sampling (Cowan & Maxwell, 2015). Furthermore, several researchers noted that participants are selected because of their significant knowledge or information relating to the purpose of the study (Bogdan & Biklen, 2007; Creswell, 2012; Lodico et al., 2010; Merriam, 2009). Hence, local community college instructors who teach nontraditional students played a key role in fulfilling the purpose of this study.

After gaining Institutional Review Board (IRB) approval to conduct the study from both the community college and Walden University, the appropriate people were contacted to begin the request for participants. The participant selection involved inviting 50 instructors teaching nontraditional students at the local community college. Participants were community college instructors who use technology to teach students enrolled in their classes. As suggested by Cowan and Maxwell (2015), college instructors were selected not because they represent a larger population but because of their knowledge and experiences with the phenomenon explored in this study. With assistance from the college's HSRC (the community college's IRB) and others, I worked to compile a list was compiled with the names and contact information of 50 instructors with knowledge of teaching nontraditional students. During the Fall semester 2018, I contacted 50 instructors, with the goal of interviewing approximately 15.

I had to send two emails to potential participants to get enough instructors according to guidelines specified by Creswell (2012). When only two instructors responded to my first appeal for participants after a 2-week period, a second invitation was sent to instructors on the list supplied by the HSRC. The HSRC, which included staff of the Student Success Center, vice president of instructional affairs and institutional effectiveness, and vice president of student affairs, only allowed me to email the request for participation twice. Additionally, the HSRC gave a March 29, 2018, deadline for onsite data collection. Although my goal was 15 instructors, only nine instructors consented to participate in the case study.

Criteria for Selecting Participants

To participate in the study, I required instructors to have significant knowledge or information relating to the purpose of the study. Requiring participants to meet specific selection criteria is called purposeful sampling (Bogdan & Biklen, 2007; Creswell, 2012; Lodico et al., 2010; Merriam, 2009). Researchers should decide during the planning stage of the study if they will work with the entire target population or a sample (Lodico et al., 2010; Merriam, 2009). I chose to work with a sample consisting of instructors who teach nontraditional students and use technology in their classes were selected as participants, rather than work with an entire target population.

Justification of Sample Size

The sample size was reasonable by Creswell's (2012) recommendation of a group of three to 15 people for a case study. Although a list of 50 possible participants was compiled and the plan was to interview 15 instructors, the nine participants were within Creswell's recommended sample size. I emailed invitations to 50 instructors and according to Creswell, the number of participants was large enough to provide ample information for the study, yet small enough to avoid a lengthy process that could have led to superficial perspectives.

Procedure of Gaining Access to Participants

I am not a student or instructor at the site of this stud; however, during my tenure as a journalist in the community where the community college is located, I became acquainted with the college's gatekeepers. I had to receive approval from the HSRC before I could begin my research study. I also had to complete a research application

supplied by the HSRC at the site of this study before I could begin my research. Since I conducted my research at only one of the colleges within the statewide community college association, the local community college's HSRC stated that I did not have to submit the application to the state association for approval. The HSRC decided whether to approve the proposed study. A completed and signed application, dated December 14, 2017, documented the college's cooperation with the researcher.

Members of the college's HSRC assisted me with compiling a list and contact information of 50 instructors who were currently teaching nontraditional students or who have taught nontraditional students in the past. I then contacted potential participants via telephone, using a script to introduce myself and to relay the purpose of the call. The same introductory script was used on all potential participants. I established a working relationship with the instructors by showing courtesy and respect to each instructor. I ended the telephone calls by letting instructors know I would email additional information about my research study and forms for them to sign should they agree to participate in the study.

Researcher-Participant Working Relationship

Having a phone conversation followed by an email to potential study participants established a researcher-participant working relationship. I called each participant to (a) introduce myself, (b) give a brief description of my study, and (c) requested their participation in the study. Participants were also informed that I would send an email that would include a formal letter of invitation and a letter of consent. Both letters informed participants of my graduate program and provided details of the research study I was

conducting, my contact information, and mentioned a $20 gift card from Walmart that would be given as compensation for their time. The letter of consent included my personal contact information, along with a phone number for the research participant advocate at Walden University to assist participants with concerns about their rights as participants in the study. The letter of consent also disclosed potential conflicts of interest. The language used in the letter of invitation and consent form did not ask participants to relinquish their legal rights intentionally or voluntarily. Additionally, participants were not coerced or pressured to give desired responses during interview sessions. The objective was to build a level of trust between participants and myself.

Although it is important to gain the trust of participants, as recommended by Alase (2017), I remained objective. Objectivity implies that I distanced myself from participants observed for the project study and I deciphered data and reported findings without bias (Varga-Dobai, 2012). In addition to being objective, a researcher must be prepared to expect the unknown regarding the actions and/or inactions of the interviewee and try to establish rapport with research participants so that participants feel relax and confident about the interview sessions (Alase, 2017). As Alase stated, participants "need to be comfortable with you, to know what you want and to trust you" (p. 14). Transparency is an important part of the research study because uncertainties about the original research design that may have developed during data collection and could have led to changes in the design approach. Keeping participants informed about the progress of the study helped maintain a researcher-participant relationship of honesty and trustworthiness.

Protection of the Participants' Rights

Protecting the rights of participants is paramount. I used an interview protocol (see Appendix B) that included a statement explaining the study would focus on research surrounding the phenomenon of community college instructors' support of nontraditional students in the use of technology for college coursework. The college does not employ me, but I am a graduate of the institution. I was not a student of any of the interviewed instructors. The study serves as part of my requirement for the Doctor of Education program at Walden University. I used the letter of consent to state that the purpose of the study.

As advised by Creswell (2012), the letter of consent contained an outline of data collection procedures. Next, a form to schedule a place and time to meet with participants for the individual, one time interviews (Bogdan & Biklen, 2007; Creswell, 2012) was emailed to potential participants. A private room provided by the college was used to interview each participant. A DICTOPRO X 100 HD digital voice recorder was used to audio record the interviews for the accuracy of the dialog between interviewer and interviewee. A second digital recorder was available for backup in case a malfunction occurred with the first device. I took notes by hand to describe body language, environment details or any additional information that an audio recorder could not collect (Creswell, 2012).

The letter of consent stated that participation in the study was voluntary. The letter of consent also assured participants that they would not undergo any repercussions if they decided to withdraw from the study. A statement of risks and benefits of

participating in the study was included in the letter of consent and uncomfortable situations that could occur because of participation in the study were also addressed (Bogdan & Biklen, 2007; Lodico et al., 2010). Participating in the study could result in better support of nontraditional students using technology for coursework and it could lead to the academic success of these nontraditional students. Participants received a $20 gift certificate from Walmart for payment or compensation for their time.

My personal contact information, along with contact information for Walden's research participant advocate, was included in the letter of content to assist participants with concerns about their rights as participants in the study. The letter of consent also disclosed any potential conflicts of interest. The language used in the letter of consent did not ask participants to relinquish their legal rights intentionally or voluntarily. I did not coerce or pressure participants to give desired responses during interview sessions. Clark-Kazak (2017) emphasized participants have the right to withdraw from a research study at any time. The author stressed the importance of assuring that all research participants voluntarily consent to participate in the study. Emphasizing that participants could end their participation if they were uncomfortable answering questions made the interview process easier.

Pseudonyms were used for all participants and no personal information or identifiers were shared outside of the project. To assist in safeguarding the identity of participants, participants selected and scheduled their interview dates and times. I then adjusted my schedule to conduct the interviews. These steps were taken to eliminate the

possibility of the instructors being identified by their peers and academic deans within their departments of study.

I then sent participants a member checking request and a copy of the initial data analysis with focused themes for member checking. I also emailed participants a copy of the member checking document for feedback regarding their portions of the findings. If I did not receive a response from participants within three days, I sent a follow-up email informing them of a 2-day deadline.

I will keep all collected data and audio recorded coded transcripts in a locked file cabinet for 5 years. In addition, all computer files are locked and are secured by a password for 5 years. I will shred all paper files and delete all computer files after the expiration of the 5-year period. The privacy and confidentiality of participants is vital (Lancaster, 2016). Lancaster posited that anonymity is a way of "ensuring that individuals cannot be identified" (p. 98). Creswell (2012) explained that complying with informed consent is ethical and a good way for researchers to assure the confidentiality and privacy of participants. Lancaster (2016) cautioned that confidentiality is a complex process that involves much more than using pseudonyms or other means of disguising the location of research sites or participants.

I wrote the results of my research findings and took precautions to protect the privacy, confidentiality, and anonymity of research participants (Creswell, 2013; Lodico et al., 2010; Tangen, 2014). In qualitative research, "participants may be asked to discuss private details of their life experiences over a period of time" (Creswell, 2013, p. 230). Researchers must establish a trustworthy relationship with participants that allow

participants to share information without reservation (Creswell, 2012; Lodico et al., 2010). I did not only build a trustworthy relationship with participants, but I also included a confidentiality clause in my consent form and ensured participants that their confidentiality and anonymity would be protected in the transcription process. The transcriber signed a confidentiality form and was instructed to delete files from the computer or transcription device once the transcription files were in my possession.

Data Collection

Qualitative research is used when the researcher seeks to explore and understand a specific phenomenon. To explore and understand the phenomenon qualitative researchers use such resources as interviews, field notes, recordings, and memorandums to help them understand or interpret the phenomenon (Creswell, 2013; Gregory, 2020; Mozersky et al., 2020; Pagan, 2019). The data sources used in this case study were interviews of local community college instructors, tips and guidelines from the college's *Policy and Procedure Manual for Distance and Electronic Learning*, brochures, and flyers from the college's Student Success Center. Additionally, handwritten notes (see Appendix C) were taken of nonverbal expressions observed during each interview sessions. The notes did not provide information that was relevant to the study and were not classified as a data source.

Data collection did not begin until Walden University's IRB, as well as the community college's HSRC approved my study. My Walden University IRB approval number is 08-25-17-0312973. A signed document granting approval of the study was received from the HSRC chairperson on December 14, 2017. According to Creswell

(2013), qualitative researchers generally collect data from multiple sources instead of relying on one source of data. I completed the data collection, reviewed the information, and selected the information that was relevant to the study.

Justification for Data Collection

I developed my qualitative research study using data collected from semi-structured interviews, handwritten notes from the interviews, information from the community college's *Policy and Procedure Manual for Distance and Electronic Learning*, and program information provided by staff at the college's Student Success Center. I conducted interviews which were the main data source. Creswell (2012) stated that qualitative research interviews transpire when researchers ask participants one or more "general, open-ended questions and record their answers" and the researchers then "transcribe and type the data into a computer file for analysis" (p. 217). In keeping with Creswell's guidelines for qualitative research, I interviewed instructors who teach nontraditional students. Also, as recommended by Creswell, the instructors I interviewed were those who were familiar with the problems nontraditional students face when using technology in coursework. I interviewed instructors about programs in place to assist nontraditional students in the use of technology and achieving their academic goals or the lack of such programs.

I used the college's *Policy and Procedure Manual for Distance and Electronic Learning* as a data source because it provided tips and guideline for instructors who were using technology to teach students. The manual also provided support strategies for instructors. Information found in the manual proved useful in addressing the problem

identified in the study. The problem and gap in practice at a small community college in the Southern United States is that instructors are providing limited support for nontraditional students using technology, which may leave students ill-prepared to complete coursework.

The Student Success Center was used as a data source because it contained resource material to support students in using technology. The Student Success Center also provides support services for instructors, as well as students, in using technology in coursework. Flyers, brochures, and pamphlets from the Student Success Center provided valuable support for both students and instructors in using technology. Information from the Student Success Center was also useful in addressing the problem highlighted in the study.

Data Collection Instruments and Sources

Interviews, program information from the Student Success Center, and recommendations from the college's *Policy and Procedure Manual for Distance and Electronic Learning* are the data collection tools used for my qualitative case study. Different instruments were used with each source to collect data to address the research questions. The interviews were recorded, while data from the Student Success Center and the *Policy and Procedure Manual for Distance and Electronic Learning* were written on response sheets that listed each research question and allowed space for responses to the questions as uncovered in a review of resource material from the Student Success Center and the *Policy and Procedure Manual for Distance and Electronic Learning*.

I conducted individual interviews in a private room provided by the college. In each interview session, I used an interval protocol I developed using Microsoft Word. Fifty minutes was designated as the maximum time for each interview. A few minutes were allocated before the start of each interview to get acquainted with the participant and discuss the research topic. During that time, I asked for permission to record the interview session using a digital voice recorder. Each participant granted me permission to record their interview session. I then checked my audio recording device (DICTOPRO X100 HD digital voice recorder) to make sure it was operating correctly. Although the signed interview consent form granted permission for me to record the interview, I asked for permission out of courtesy and as a way of making participants feel more comfortable and at ease during the interviews. After checking the audio recording device, I began the interview session. A Sony M-560V Micro-cassette Voice Recorder served as a back-up recorder if I had problems recording with the digital device during the interview sessions.

The interviews included open-ended, semi-structured, and in-depth questions (Creswell, 2012). The research questions were listed on the interview protocol and were used to develop interview questions that could provide answers to the research questions (see Appendix B). The interview question that addressed RQ1 was Question 1: “What, if any, situation have you experienced when a nontraditional student had difficulty using technology to complete coursework? How did you handle the situation? What were the results of your action?) Can you describe another situation? Another?” Interview questions derived from RQ2 were Interview Questions 2, 3, 4, 5, and 6: “Describe the plan you have in place to assist nontraditional students who do not have sufficient

knowledge in the use of technology to complete coursework? If there is no plan, why not?", "What would you recommend to make sure nontraditional students can master the school's learning management system (Canvas)?", "Describe any strategies you use as you need them to assist nontraditional students who do not have sufficient knowledge in the use of technology to complete coursework?", "How did college administrators prepare you to deal with nontraditional students who may not have adequate skills in using technology for coursework?", and "How much time do you spend helping nontraditional students adjust to using technology? Is any of this time after regular class hours? Explain."

The interview question developed in association with RQ3 was Interview Question 7. This interview question asked: "What tips or recommendations from the policy and procedure manual for distance and electronic learning do you use to support nontraditional students in the use of technology? If none are used, why not?" Next, RQ4 was addressed by Interview Question 8: "In what ways does the Nontraditional Student Success Center assist community college instructors in the support of nontraditional students in the use of technology?" Lastly, Interview Question 9: "Describe any strategies you would recommend to better support nontraditional students in using technology in their coursework." addressed RQ5.

I used a different approach to collect data from the Student Success Center and the *Policy and Procedure Manual for Distance and Electronic Learning*. I used Microsoft Word to create response sheets for each source. The response sheets listed each research question and allowed space to record answers to the questions. Because

collecting data from the Student Success Center and the Policy and *Procedure Manual for Distance and Electronic Learning* involved retrieving data from documents, I chose key phrases from each question. The key phrases were then listed under each question and information that coincided with the key phrases were listed in the response slots located under the question.

The key phrase for RQ1 was "problems instructors observe nontraditional students encounter when using technology". RQ2's key phrase was "support instructors provide to nontraditional students using technology". The key phrase for RQ3 was "how the *Policy and Procedure Manual for Distance and Electronic Learning* informs instructors' support of nontraditional students using technology". For RQ4, the key phrase was "how instructors collaborate with the Student Success Center to support students using technology". The key phrase for the final research question, RQ5, was "strategies recommended by college students to better support nontraditional students using technology." Not all research questions applied to the sources. In these cases, "N/A" was written in the response. The "N/A" signified that a response was not applicable.

Source for Data Collection Instruments

Interviews

Interviews were the main data source. Creswell (2012) stated that qualitative research interviews transpire when researchers ask participants one or more "general, open-ended questions and record their answers" and the researchers then "transcribe and type the data into a computer file for analysis" (p. 217).

An interview protocol and questions (see Appendix B), created using Microsoft Word, were used to guide me through interview sections with each participant. Interviews consisted of open-ended, semi-structured, and in-depth questions (Creswell, 2012). The interviews consisted of nine open-ended questions that allowed me to ask more probing questions for clarification and in-depth data (Creswell, 2012). Each interview session lasted from 45 to 50 minutes and was recorded using a DICTOPRO X100 HD digital recorder. Nordstrom (2015) posited that digital recording the interviews "preserve natural interactions and reduce researcher bias" (p. 390). Even though a recording device was used during the interview sessions, notes were taken (see Appendix D) to record additional questions and/or probes and to record nonverbal communication that helped with the data analysis (Creswell, 2012). The interview questions were structured to answer the research questions.

According to Alase (2017), qualitative interviewing is a technique that involves conducting individual interviews with a small number of participants to explore their knowledge of a specific idea, program, or situation. The instructors interviewed for the study teach nontraditional students and, therefore, shared their knowledge of nontraditional students and the use of technology. The instructors' experience teaching nontraditional students provided insight on problems encountered by the students and best practices to resolve the problems.

For accuracy, accountability, and cross checking I recorded, transcribed, and transferred each interview to a color-coded tracking form (see Appendix H), a table developed using Microsoft Word. The form listed my 5 research questions and provided

columns for responses and codes for data from each participant. The form was developed on my computer and was secured with a protective password. The same procedure was used to develop a tracking log (see Appendix I). I transferred coded data from the tracking form to the tracking log to make it easier for me to analyze the interview data.

Policy and Procedure Manual for Distance and Electronic Learning

I reviewed the college's *Policy and Procedure Manual for Distance and Electronic Learning* to obtain information about how instructors support nontraditional students in using technology. The manual is considered and artifact by qualitative researchers (Edwards & I'Anson, 2020). There are three types of artifact used by researchers, personal documents, official documents, and objects. McMillan and Schumacher (2010) describe personal documents as "any first-person narrative that describes an individual's actions, experiences, and beliefs" (p. 361). Personal documents may include personal letters, diaries, journals, lesson plans, and medical records.

McMillan and Schumacher went on to say official documents are any information that describes functions and values within an organization. McMillan and Schumacher maintained that official documents also reveal how various people define organizations by providing the official chain of command and information about leadership styles and values. Examples of official documents included newsletters, program brochures, school board reports, news releases, and public statements. Based on the descriptions provided by McMillan and Schumacher, the school's *Policy and Procedure Manual for Distance and Electronic Learning* falls in the category of official documents. An entry in the *Policy and Procedure Manual for Distance and Electronic Learning* stated that the

college would continue to develop, modify, and improve support services for students using technology.

The Policy and Procedure Manual for Distance and Electronic Learning further mentioned that to guarantee satisfactory student support, the performance of instructors is reviewed and evaluated each semester. Information from the manual was used to help develop codes that were used to formulate themes from collected data.

Program Information From the Student Center

I visited the college's Student Success Center and gathered information from a flyer (see Appendix J) that described the center as the students' one-stop resource for information and student support. Brochures and pamphlets at the Student Success Center highlighted services offered at the facility. Academic tutoring and technical assistance in the use of technology are among support services offered by the center. Like the *Policy and Procedure Manual for Distance and Electronic Learning*, the information from the Student Success Center is categorized as official documents because they "suggest the official perspective on a topic, issue, or process" (McMillan & Schumacher, 2010, p. 361). The literature at the Student Success Center provided valuable information about how the Student Success Center has services in place to assist students, as well as instructors, as they support students in the use of technology. I made notes of the information found at the Student Success Center and compared these notes with the interview transcripts and notes from the *Policy and Procedure Manual for Distance and Electronic Learning*.

Sufficiency of Data Collection

I interviewed participants, documented information from the college's *Policy and Procedure Manual for Distance and Electronic Learning*, and gathered brochures, pamphlets, and posters from the Student Success Center to collect qualitative data for this study. Data collected from interviews were aligned with the conceptual framework and the inductive approach used in qualitative research. Qualitative research is the study of problems in natural settings in attempting to understand or interpret a phenomenon (Bogdan & Biklen, 2007; Denzin & Lincoln, 2005). Qualitative research involves locating data by describing, explaining, and interpreting such patterns as words, numbers, matrices, pictures, or sounds (see also Chenail, 2011). In qualitative research, the inductive approach is used to reveal frequently reported patterns found in collected data (Liu, 2016). Open-ended questions were used in the interviews (see Appendix B) to address the problem discussed in the research study. Each interview session entailed two sets of questions.

I used the first set of questions to become acquainted with study participants and gain background information about their experiences as instructors. This set of questions addressed such subjects as (a) why participants decided to become community college instructors, (b) if nontraditional students were always enrolled in the instructors' classes, and (c) what differences the instructors noticed in nontraditional and traditional students. These questions were used to determine the participants' experience in teaching nontraditional students and to gain knowledge of their thoughts about the teaching and

learning of nontraditional students. The first set of questions were justified because the researcher had a better understanding of who the participants were.

Data collected from *the Policy and Procedure Manual for Distance and Electronic Learning* were justified in that the information from the pages of the manual painted a clear picture of how and why the college expects instructors to support students in the use of technology. Likewise, data collected from documents at the Student Success Center were justified in that they alerted readers of the support system the college had in place for both students and instructors.

The second set of questions were interview questions focusing on instructors' support of nontraditional students in using technology. The questions pertained to participants' observations and opinions about (a) problems instructors observed nontraditional students encountering when using technology, (b) support instructors provide to nontraditional students in using technology, and (c) how the college's *Policy and Procedure Manual for Distance and Electronic Learning* inform instructor support of nontraditional students in using technology. The second set of questions also addressed how instructors collaborate with the Student Success Center to support nontraditional students using technology, and strategies instructors recommended to better support nontraditional students in using technology in their coursework. These interview questions are connected to the research questions concerning the gap in practice examined by this qualitative study was between the need of community college nontraditional students to use technology for academic success and lack of instructors' support of these students using technology for academic success.

Questions were designed to collect instructors' perceptions about the problem addressed in the study without guiding their answers or suggesting a particular response. Also, open-ended, semi-structured, and in-depth questions were used during the interview sessions, allowing the addition of probing questions to gain clarity and depth of information (Creswell, 2012; Merriam, 2009). I held interviews in mutually designated locations at a time designated by each participant and provided by college administrators. After gaining participants' consent, I used a digital audio recorder to record each interview. Additionally, I took handwritten notes during each interview to add to the accuracy, validity, and credibility of the study. To maintain confidentiality, I referred to participants by numbers rather than using their names.

Data collected from all instruments were then coded and transported to a tracking form (see Appendix H). The tracking form was used to record the participants' responses to research questions and identify codes. To help me codes derived from the responses to each question were transferred to a tracking log (see Appendix I) which made it easier to view the codes and identify sub-themes that were ultimately expanded to broader themes. Additionally, data gathered from the Student Success Center were also used to formulate themes for the study. Codes, sub-themes, and broader themes derived from each research question are highlighted below.

Processes for Data Collection

The HSRC at the local community college granted permission to conduct the study from February 28, 2018, to March 30, 2018. I sent the first email request for participants on February 29, 2018. The committee also informed me that if I did not

receive response from an adequate number of instructors by March 11, 2018, I could send out a second email. In addition, I had to complete all interviews by March 30, 2018. Only nine instructors had consented to participate in my study by the deadline established by the HSRC.

I scheduled semi-structured interviews at a time that worked best for the interviewees. The local college supplied private rooms for the interviews that were conducted from March 26, 2018, to March 30, 2018. A DICTOPRO X100 HD digital recorder was used to record each interview and handwritten notes were taken of nonverbal expressions and observations during the interviews. Once interviews were completed, the digital recorder was hand delivered to a private transcriber at Virtual Office Center, LLC, who uploaded the interviews to her computer for transcription. The transcriber signed a confidentiality agreement and sent emails notifying me when the transcripts were completed and when I should expect to receive the transcribed documents. Audio files of the interviews were stored in a password protected account at Virtual Office Center, LLC where they will remain for 5 years. A copy of the audio files is also stored in a secured file on my personal computer where they will also remain for 5 years. As an additional safeguard a compact disc containing the recorded interview sessions and copies of the transcribed documents were placed in a locked file cabinet where they will remain for 5 years.

The second source of data collection was the community college's *Policy and Procedure Manual for Distance and Electronic Learning*. I received information about what the college expects from instructors who use technology to teach both nontraditional

and traditional students. The manual provided teaching tips for instructors and guidelines for supporting students as they used technology. Thirdly, I retrieved information from the college's Student Success Center that helps with nontraditional and traditional students who may have questions about the use of technology. The college no longer has the Nontraditional Student Success Center that once provided the service solely to nontraditional students.

Systems for Keeping Data

Data collected from interviews were entered on a color-coded tracking form that was created using Microsoft Word (see Appendix H). The form listed the five research questions and rows were numbered and color coded to record the response of each participant. The same numbers and color codes were used under each question as responses of participants were documented. I compiled a list of predetermined responses into which the participants' responses were anticipated to fit (Yilmaz, 2013). The predetermined responses were used to develop codes for data collected from the interviews. I then placed the codes in a code column on the tracking form (see Appendix H). I created a tracking log (see Appendix I) to make reporting the research findings easier. The tracking form and tracking log are kept in a secure, password protected file on my computer. Additionally, I printed out copies of the forms and placed them in a locked file cabinet for safe keeping.

Procedure of Gaining Access to Participants

I am not a student or instructor at the site of this study. During my tenure as a journalist in the community where the community college is located, I became acquainted

with the college's gatekeepers and had no difficulty contacting college officials about my research plans. I did have to complete a research application and receive approval from the college's HSRC before I could begin my research study. Because I conducted my research at only one of the colleges within the statewide community college association, the local community college's HSRC stated that I did not need to submit the research application to the state board of community colleges for approval as customary. The local college's HSRC voted to approve my study.

The HSRC chairman assisted me with compiling a list and contact information of 50 instructors who were currently teaching nontraditional students or who have taught nontraditional students in the past. After the list was compiled, I contacted potential participants via telephone, using a script to introduce myself and to relay the purpose of the call. The same introductory script was used on all potential participants. I established a working relationship between the instructor and researcher by showing courtesy and respect to each instructor. I ended the telephone calls by letting instructors know I would email additional information about my proposed research study and forms for them to sign should they agree to participate in the study.

Role of the Researcher

While I am not currently working as an educator, I am a volunteer tutor and General Educational Development (GED) instructor at a local adult education center. By profession, I am a special projects officer in the public relations department of a state-funded program. My role in relationship to the phenomenon of instructor support of nontraditional students in the use of technology is one of a future college instructor who

observed a need to bring about social change for the benefit of instructor support of nontraditional students in the use of technology both locally and nationally. As a nontraditional graduate student who was not familiar with the technology used in much of the college coursework, I recognized I achieved better grades and received better understanding when I had the support of instructors. Following the guidelines of Creswell (2012) and Lodico et al. (2010), personal opinions did not dictate my study and I wrote objectively. Regardless of a researcher's passion for a given research topic, that passion should not govern the outcome of the research study.

Data Analysis

Process of Data Analysis

Data analysis is an integral section in a research project study that involves an interactive process where data are thoroughly searched and analyzed to provide a revealing description of the phenomenon (Azungah, 2018; Onwuegbuzie et al., 2012). I began by uploading the digitally recorded interviews from the DICTOPRO X100 HD digital voice recorder to my computer. I then downloaded the interviews from my computer to a flash drive that was hand delivered to a hired transcriber. The transcriber uploaded data to the Virtual Office Center, LLC transcription link. Virtual Office Center, LLC provided a confidentiality agreement that included both security and confidentiality clauses. When the transcriptions were completed, the transcriber sent an email to inform me that the transcribed text was ready for return.

I then drove to the transcriber's office to pick up the transcribed interviews. The transcriber provided two typed copies of each transcribed interview and returned the flash

drive I hand delivered to her. Once I returned to my home, I placed one copy of the transcripts and the flash drive in a secured file cabinet where they will remain for five years. I used the second copy of the transcripts to begin the first step of the data analysis process for my qualitative case study. I then used inductive analysis to evaluate the data. Inductive analysis involved reading the transcripts to develop "concepts, themes, or a model through interpretations" of the collected data (Thomas, 2006, p. 237). I used an inductive approach to reduce collected data into brief summaries and to establish a connection between the purpose of the research and the summary derived from the collected data, as well as develop a framework of the major experiences or processes found in the data (Creswell, 2012; Nassaji, 2015; Thomas, 2006).

During the data analysis process, I interpreted and assembled collected data in a thorough and transparent format without adding to or taking away from the accounts stated by participants (Noble & Smith, 2013). Creswell (2012) listed six steps to help researchers analyze data:

1. Preparing and organizing data,
2. Exploring and coding data,
3. Describing research findings and establishing themes,
4. Representing and reporting findings,
5. Using narratives and visuals to represent findings, and
6. Validating the accuracy of research findings (p. 236).

Data were prepared and organized from various sources. I analyzed data generated from the transcripts of semistructured interviews with the nine community

college instructors and reviewed handwritten notes (Appendix C) of nonverbal expressions observed during each interview session. Additionally, program information from the Student Success Center was examined to determine if students utilized the computer lab and faculty advisors. I also reviewed the college's Policy and Procedure Manual for Distance and Electronic Learning for feasible data. Yet, interviews were the main data sources.

Coding Process

During the second step of data analysis, I explored and coded data. I began the analysis and interpretation process by reading each transcribed interview three times to determine appropriate codes and themes. Neuman (2014) maintained that researchers can organize data by dividing it into convenient portions that can be examined for insights regarding the research questions. Neuman (2014) posited that the best way to organize transcribed interviews is to label data with codes that represent key ideas and then organize the most frequent codes into main themes or topics that guided and emerged from the study. Merriam (2009) recommended the use of such things as numbers, letters, words, phrases, or combinations of any of these components to code data.

Merriam (2009) defined coding as a data analysis process in which researchers assign a short label or description of various aspects of the collected data. Merriam also suggested the use of letters, words, phrases, numbers, or a combination of any of these to code the data. Both Creswell (2012) and Merriam (2009) identified coding as an easy way to organize data to access essential information for the study. Saldana (2009) provided a more definitive explanation of qualitative coding, defining a code as "a word

or short phrase" that categorizes ideas from an audio or visual data collection (p. 3). Saldana further stated that the collected data could consist of interview transcripts, literature, field notes, documents, journals, photographs, video, websites, e-mails, etc.

I chose to use a tracking form (see Appendix H) made using Microsoft Word to document and manually code my research data. The tracking form listed the five research questions, the numbers used to identify each participant, their responses to the questions, and codes derived from the responses. Additionally, each participant was given a color code that was used throughout the data collection and data analysis processes. I read through each interview transcript and highlighted portions of data that included information related to the phenomena I studied (Lodico et al., 2010) by using bold font (see Appendix H). Codes were assigned to the highlighted portions.

Accuracy and Credibility of Findings

During the next step of data analysis, I validated the accuracy of research findings. Ensuring the accuracy and credibility of research findings requires some special techniques (Neuman, 2014). Member checking, data saturation, triangulation, and peer debriefing are among the techniques researchers can use to assure accuracy and credibility of research findings.

Member Checking

To assess the accuracy of the transcribed data, I emailed a document (see Appendix F) to each participant that listed the (a) research questions, (b) participant's responses to the questions, (c) codes pulled from the participant's responses, and (d) codes that emerged from the responses from all participants (Snyder, 2012). Additionally,

I asked instructors to check for accuracy in their information. I also asked the instructors to email me if they had any concerns or questions about the study. Likewise, participants were asked to notify me if there were no questions or concerns. Participants responded by email with feedback, elaboration, and clarification. Correspondence from participants was reviewed and if clarifications or elaborations were found, I adjusted them in my study. This procedure is defined as member checking (Carlson, 2010; Creswell, 2012). Creswell posited that member checking is a good way to eliminate personal bias and bring credibility to the study. In addition, Carlson (2010) stated that member checking is a good way for researchers to show they "did everything possible to ensure that data was appropriately and ethically collected, analyzed, and reported" (p. 1103). Not only did member checking bring credibility to this study, but it ensured the credibility of the transcribed data. Carlson suggested that it then becomes imperative for qualitative researchers to use such tools as member checking to demonstrate the trustworthiness of every phase of their research process.

To further assist with credibility of the study, I reviewed the interview transcripts and developed a tracking form (see Appendix H) which included each research question and color-coded responses from each participating instructor. Once relevant transcript data were entered, I searched for codes and listed them in a separate column on the tracking form. After completing the tracking form, I transferred the codes to a tracking log (see Appendix I) that provided easier access to the codes and made it easier to note repetitive answers to research questions. The same color codes used to identify

participants on the tracking form were used on the tracking log. The form and log were useful tools in employing data saturation.

Data Saturation

Saturation is important in any research study, whether it is quantitative, qualitative, or mixed methods (Fusch & Ness, 2015). Researchers have defined data saturation as the point at which new data produces no new insights, issues or categories and are not identified for a data category (Creswell, 2012; Fusch & Ness, 2015; Hagaman & Wutich, 2016; Hancock et al., 2016; Hopf et al., 2016). To obtain data saturation, I asked each participant the same questions. Data saturation was achieved when participants began to give the same or similar response to questions. For example, 6 of the responses to RQ1 identified problems using Canvas as a major issue confronting nontraditional students. Other problems mentioned by the remaining three instructors were associated with using Canvas or programs within the Canvas learning management system. Other research questions also reached a point of saturation when no new insights were provided. Fusch and Ness stated that data saturation brings strength and credibility to the project study.

Triangulation

Interviews alone did not answer all the questions I had regarding instructors' support of nontraditional students in the use of technology. Among the questions I was interested in addressing were: "How does the *Policy and Procedure Manual for Distance and Electronic Learning* inform community college instructors' support of nontraditional students in using Technology?" and "How do community college instructors collaborate

with the Nontraditional Student Success Center to support nontraditional students in using technology?" To appropriately answer these questions, during the interviews I asked: "What tips or recommendations from the *Policy and Procedure Manual for Distance and Electronic* Learning do you use to support nontraditional students in the use of technology? If none are used, why not?" and "In what ways does the Nontraditional Student Success Center assist community college instructors in the support of nontraditional students in the use of technology?" I used the school's *Policy and Procedure Manual for Distance and Electronic Learning* and flyers and brochures from the Student Success Center to supplement the data received during the interviews.

Creswell (2012) posited that qualitative researchers triangulate data from different sources to enhance the accuracy of their study. Triangulation was defined as "the process of corroborating evidence from different individuals, types of data, or methods of data collection in descriptions and themes in qualitative research" (Creswell, 2012, p. 259). Data is collected from different people or groups, at different times and different places, as well as from interviews, questionnaires, observations, and archival data (Carlson, 2010; Hancock & Algozzine, 2016; Harrison et al., 2017). In triangulation, researchers examine each data source to find evidence to support a theme. Creswell (2012) noted that this step ensures that the study will be accurate because the information draws on multiple sources of information, individuals, or processes.

Triangulation encourages researchers to develop studies that are both accurate and credible. In this study, triangulation included interviews from instructors, tips and guidelines on teaching with technology from the college's *Policy and Procedure Manual*

for Distance and Electronic Learning, resource material from the Student Success Center detailing programs and information available to assist instructors in the support of nontraditional students in the use of technology, and a peer debriefer who was impartial to the study.

Peer Debriefing

The peer debriefer in this study was a retired educator that was recommended by a friend. Although the peer debriefer taught nontraditional college students for more than 25 years, the peer debriefer did not and does not currently teach at the study site. I used the peer debriefer to examine my research findings and the way they were presented in the study. I wanted my findings to be thorough, accurate and valid. Fusch and Ness (2015) explained that there is a direct link between data triangulation and data saturation. Fusch and Ness explained that data triangulation ensures data saturation, adding that data triangulation is a method to achieve data saturation. I used both triangulation and saturation to ensure accuracy and credibility of my collected data.

Dealing with Discrepant Cases

As they search for articles to support their topics, researchers often discover what are termed discrepant cases (Creswell, 2012; Merriam, 2009; Silverman, 2010). Creswell, Merriam, and Silverman defined discrepant cases as those cases that appear to contradict themes, patterns, or explanations. Discrepant cases involve searching for and discussing elements of the data that do not support or appear to contradict patterns or explanations that are developing from data analysis (Creswell, 2012; Lunny, et al., 2016; Merriam, 2009; Silverman, 2010; Torous et al., 2017; Voss et al., 2016). I found positive and

negative data from the interviews. I did not avoid including negative data in my study because real life situations include both negatives and positives. Creswell (2013) posited that adding discrepant information adds to the credibility of the research study. I included discrepant information in my study with the hope of presenting a study that is more representative of real life and more valid.

Discrepancies

While most participants were quick to state that the duty of an instructor is to assist students with using technology whenever the need arises, two of the nine instructors said they do not have time to assist students. Participant 1 and Participant 8 argued that time constraints and workloads were an issue. Both instructors preferred finding other resources to support to students using technology.

Data Analysis Results

Nine community college instructors who taught nontraditional students using technology during the Fall 2018 term of the local community college, the *Procedure Manual for Distance and Electronic Learning*, and the Student Success Center contributed to data collected for the study. The data analysis progress began with downloading interviews that were transcribed and stored on a password protected flash drive for easy access. After reviewing the interview transcriptions from the transcriber, I created a tracking form (see Appendix H) that contained the five research questions on a color-coded table with responses from the nine participants. The goals of the research questions were to (a) identify problems community college instructors observed nontraditional students encountered while using technology in coursework, (b) examine

the support instructors provided to nontraditional students using technology, (c) discover how the college's *Policy and Procedure Manual for Distance and Electronic Learning* informed community college instructors' support of nontraditional students in using technology, (d) pinpoint how community college instructors collaborate with the Nontraditional Student Success Center to support nontraditional students using technology, and (e) identify strategies would community college instructors recommend to better support nontraditional students in using technology in their coursework.

After data were collected and analyzed, data findings were placed on a color-coded tracking form and then transferred to color-coded tracking log that was developed and formatted as a Tracking Log (see Appendix I). The Tracking Log was organized by listing the numbers assigned to each participant in a column creating columns for each research question and codes associated with the questions. Codes associated with the responses from each participant were placed on the row which contained the number of the responding participant. Once the codes were logged, I reviewed the codes to identify themes that emerged from each research question.

Themes

For Research Question 1 the themes were lack of basic computer skills, support of non-traditional students, lack of internet access, and unfamiliarity with Canvas. For Research Question 2 the themes were provide supply list of needed resource material and required computer skills, provide individual help to students, assist students with Canvas and Gmail use, refer students to additional resources, and provide tips and guidance to students. For Research Question 3 the themes were provide tips and guidance to

instructors and irrelevancy of the *Policy and Procedure Manual for Distance and Electronic Learning*. For Research Question 4 the themes were provide student help sessions and the Student Success Center. For Research Question 5 the themes were pretest students' computer knowledge and skills, encourage students to practice using the computer, advise students to explore Canvas, recommend the use of YouTube tutorials, and update the college's technology equipment.

Evidence for the themes is listed in three sections below due to the research questions and different forms of data. The first section defines the theme and provides excerpts from the transcript to provide evidence of the theme. The second section provides excerpts from transcripts about how teachers assist the theme because of the study's focus on what instructors' strategies are for addressing computer problems most directly addressed by Research Question 2. The third section provides not evidence of the theme, but instead how the document data addressed the theme, if at all. This structure reflects the unique characteristics of this study to examine instructional support of nontraditional students using technology to complete coursework and to make recommendations to improve instructors' support of students.

RQ1 Themes

Several themes emerged from Research Question 1: What problems do community college instructors observe that nontraditional students are encountering when using technology in coursework? The analysis of the data revealed that instructors noticed that nontraditional students had problems using computer programs such as

Microsoft Word, as well as problems navigating the school's learning management system.

Table 1 displays Research Question 1 and the codes that were derived from the participants' responses. The codes were reviewed to determine a common thread. The common thread was then listed as the subtheme. I then reviewed the responses to Research Question 1 to find key terms or phrases associated with the sub-theme. These terms or phrases were then listed as broader themes. The results of the findings are listed in Table 1 below.

Table 1

Research Question 1: Codes, Subtheme, Broader Themes

Research questions	Codes	Subtheme	Broader themes
1. What problems do community college instructors observe that nontraditional students are encountering when using technology in coursework	Problems using Word Problems using Google Drive Problems using Canvas Problems using laptops Problems using Microsoft Office Problems uploading to Canvas Problems using a computer Fears Lack of Internet Access	Technology skills, computer knowledge/lack of	Lack of basic computer skills Support of nontraditional students Lack of internet access Unfamiliarity with Canvas

Four broader themes were identified: (a) lack of basic computer skills, (b) support of nontraditional students, (c) lack of internet access, and (d) unfamiliarity with Canvas. These themes and the responses used to identify themes are detailed in the paragraphs below:

Lack of Basic Computer Skills

Many of the answers to Research Question 1 fell under the theme of students lacking basic computer skills. Issues ranged from simply not knowing how to turn on computers to not knowing how to retrieve or submit assignments to Canvas, the college's learning management system.

Excerpts From Transcripts. It became clear that there were many different issues, but all referenced the same thing, basic computer skills. For example, Participant 9 discussed how nontraditional students enroll in college with several issues related to the use of technology. "My older students are not that familiar with the computer," explained Participant 9. "At best, these students know how to turn computers on and off." Participant 9 added that when the students enroll in classes where all assignments are completed using a computer, "students are lost and doomed to fail."

Participant 4 added that it is extremely difficult for nontraditional students to receive passing grades when they do not know how to use computers. "So, they come in class not knowing how to use computers and find that we do everything on computers," said Participant 4. "We write in class, but all of our essays are typed on computers."

Additionally, Participant 4 explained that all assignments are in Canvas. Students do not turn in paper copies of assignments; they must upload them to Canvas. "Some of my students haven't even logged into Canvas because there is a special way you log into the computer. Participant 4 stated that students log in with their student identification and then they must use a password. "It is the first two letters of your last name and the last

four numbers of your social security number," the instructor stated. "So, for many nontraditional students they have no idea of what to do."

Participant 4 gave an example of a nontraditional student who was practically in tears at the end of class. The instructor estimated that the student was in her late 50s. "She was struggling with health problems, but she wanted to complete her college education so bad," said Participant 4. "It was the technology involved with using the computer that was so hard for her to maneuver." This nontraditional student sat by 18-year-old students who saw her struggling and offered to show her what to do. Despite the efforts of the instructor and her younger peers to assist the student in navigating the school's learning management system, the nontraditional student eventually dropped out of school. "Even though I thought she was making progress, she eventually gave up. It was too much for her to handle."

Other instructors noted difficulties students encountered because of lack of computer skills. Participant 1 mentioned she had students who did not know anything about computers other than turning them on and off. Participant 1 further stated,

> They don't know what a Word document is. They don't know what Google Drive is. They don't know how to cut and paste. They don't know how to make folders and label documents and put them in a folder. They don't know how to use Canvas and how to upload or download course work. They don't even know how to attach items to emails. I tried to explain and help them as much as I could. I also advise them to go to the Information Technology Department for help.

Participant 5 shared the story of a student who had difficulty uploading coursework to Canvas, but who was great at using email. Participant 5 said the student sent emails asking how to type such things as Roman numerals and how to format documents. Participant 8 added: "Even though they don't know how to access assignments on the computer and don't have a lot of computer skills, nontraditional students are very motivated to learn. A lot of times they are hesitant to ask for help." Therefore, part of lack of basic computer skills is the fear and hesitancy students exhibit because of their lack of computer skills. Participant 7 pointed out that most of the students who express fear and concern are students who have minimal computer skills, adding that students mainly think they are going to mess up something up. "They are afraid they may hit the wrong icon and delete something or mess something up in class and I try to make them realize they are not going to mess anything up," added Participant 7. "It's just that anxiety with the unfamiliar."

Artifact Support. In addition to the transcript data that addressed nontraditional students' lack of basic computer skills, the Student Success Center addressed nontraditional students' lack of basic computer skills by using (a) brochures, (b) pamphlets, (c) posters, and (d) flyers to alert nontraditional of the resources the college had in place to help nontraditional students improve or develop skills in using technology. However, the school's *Policy and Procedure Manual for Distance and Electronic Learning* did not address students' lack of basic community skills.

Support for Nontraditional Students

Interviews from participants and documents and support resources from the college's student success center were examined for its support of non-traditional students. Some responses to Research Question 3 align with the theme of support for nontraditional students. The college's Student Success Center was established to assist both students and instructors find solutions to problems encountered as students work to achieve academic success. An informational technology professional was on hand to help instructors and students navigate the Canvas learning systems. The student success center also had tutors on hand to assist students when additional help was needed.

Excerpts From Transcripts. Collected data from interviews revealed that instructors considered the Student Success Student a vital resource for students. Participant 4 pointed out that even though the Student Success Center aided all students, the center also offered programs and services specific to the needs of nontraditional students. The Student Success Center houses an organization called the Nontraditional Student Association. Participant 4, who serves as co-sponsor of the association, said the association is partnering with Phi Theta Kappa academic honor society to provide tutors to assist nontraditional students with using technology, including how to use (a) Microsoft Word, (b) Google Docs, and (c) Canvas.

"So, they have group tutoring there, and they can also get individual tutoring," explained Participant 4. "All they have to do is make an appointment." Participant 1 added that nontraditional students meet at the Student Success Center each day at 12:30

p.m. During these meetings nontraditional students received help with problems they may be having with technology or other coursework.

Artifact Support. The Student Success Center offered support to nontraditional students using technology by providing tutors and computer lab where students received one-on-one help. The Student Success Center also had staff in place to assist instructors who support nontraditional students in using technology. Also, the school's *Policy and Procedure Manual for Distance and Electronic Learning* addressed this theme by stating that the college ensures that students have access to adequate and appropriate eLearning resources. The manual also mentioned that the college provides technology support to students and provided contacted information for students interested in the service.

Lack of Internet Access

Since the local community had students from surrounding rural communities enrolling in the college, many students from these rural areas did not have access to the internet. Most of the college assignments required the use of computer technology. If students did not have internet access and were unable to visit one of the college's computer labs during regular visiting hours, they may not have been able to complete assignment. This, in turn, could result in academic failure.

Excerpts From Transcripts. Participant 6 pointed out that many of the students attending this community college lived in rural areas that did not have internet service. The lack of internet service made it difficult for students to complete coursework in a timely manner. Participant 6 also explained that the community college uses the Canvas learning management system. The college used a program from Assessment Technology

Incorporated (ATI) that did not always have good internet connection and sometimes causes students to lose their work. Losing coursework that had taken hours to complete lead to discouragement. The college had a computer lab available for students who did not have internet service in their area or those that may have poor internet connection. These computers were available during regular business hours, from 8 a.m. to 4:30 p.m.

Additionally, posters and bulletins from the Student Success Center stated that computers were available at the center for students who did not have internet access to use at their convenience. Computers were available at the student success center from 7:30 a.m. to 6:30 p.m., Monday through Thursday and 7:30 a.m. to 3:30 p.m. on Friday.

"We really encourage students that if you know you have connection problems out in the middle of nowhere where you live, get your work done here," said Participant 6. "Everyone at the college wants to see the students succeed because if they succeed, the college succeeds, and the community succeeds." Participant 6 further stated that the community benefits because graduates may join the workforce and pay taxes, resulting in a win-win situation for everyone involved.

Artifact Support. The school's *Policy and Procedure Manual for Distance and Electronic Learning* did not address supporting students who did not have internet access. No information related to the theme was found in the manual, although the manual emphasized the importance of meeting the needs of students. Therefore, this source was irrelevant for this research question.

Unfamiliarity With Canvas

Canvas is the learning management system used by instructors and students at the study site. Nontraditional had to know how to navigate Canvas because the learning management system contained (a) their class schedule, (b) syllabus, (c) assignments, (d) discussion board, (e) contact information for their instructor, and much more. Nontraditional students who were not familiar with Canvas were possibly not be able to submit assignments or complete other coursework. As with a lack of internet access, this can result in academic failure.

Excerpts From Transcripts. Instructors expressed various viewpoints about nontraditional students' unfamiliarity with using Canvas. The instructors stressed that not knowing how to use Canvas is detrimental to students' academic success. Participant 4 said some older nontraditional students are not that familiar with using computers and Canvas. Participant 4 went on to say nontraditional students are somewhat shocked when they discover that everything in class is done on a computer. Participant 4 added, "We write in class, but all of our essays are typed on the computer. Your assignments are in Canvas. You don't turn in a paper copy. You upload to Canvas."

Participants 2, 5, 6, 7, and 9 also said they have observed nontraditional students' unfamiliarity with Canvas. Participant 2 shared the story of the frustration experienced by an older student who did not know how to use Canvas. The student had to "upload papers onto Canvas and that was kind of new to her," explained Participant 2. "This was right when we transitioned from turning in paper copies of everything to just submitting everything online. So, the student had a little bit of an issue with that. Participant 5 said

instructors just assume everybody know how to use a computer and how to upload documents to Canvas. “That’s not always the case,” continue Participant 5. “Sometimes our nontraditional need help, someone who will take the time to show them how to do things.” Participant 6 added that the college provided great instructions on how to use campus for those unfamiliar with the learning management system. Nontraditional students should take time to look at these instructions and follow them.

Sometimes instructors made special efforts to familiarize nontraditional students with the Canvas learning management system. When nontraditional students did not know how to use Canvas, Participant 7 took time to walk them through the assignment submission process. “I go into our Canvass class and I highlight things on the screen that are in the class shell,” stated Participant 7. I might pull up the syllabus or I might even click on the bookshelf to show them how to access the book, things like that.”

Artifact Support. In addition to the transcript data that addressed nontraditional students’ unfamiliarity with Canvas, the Student Success Center addressed the theme by using (a) brochures, (b) pamphlets, (c) posters, and (d) flyers to alert nontraditional of the resources the college had in place to familiarize students with Canvas. The college’s *Policy and Procedure Manual for Distance and Electronic Learning* did not address the theme. Therefore, this source was irrelevant for the research question.

RQ2 Themes

Five themes emerged from Research Question 2: What support do instructors provide to nontraditional students in using technology? The analysis of the data concluded that all instructors provided some type of support of students using technology. Seven of the nine or 77.8 % of the instructors took time to support students

by providing personal assistance. One instructor said she did not have time to personal assist students and provided a material and supply list (see Appendix K) as a means of support. Another instructor preferred to direct students to the information technology department or other staff for help. Key terms and phrases found during the data analysis included a material list, typed material, peer partnering, orientation class, recruit help, and help with Canvas.

Table 2 displays Research Question 2 and codes derived from participants' responses. The codes were reviewed to determine a common thread. The common thread was then listed as the sub-theme. I then reviewed the responses to Research Question 2 to find key terms or phrases associated with the subtheme. These terms or phrases were then listed as broader themes. The results of the findings are listed in Table 2 below.

Table 2

Research Question 2: Codes, Subthemes, Broader Themes

Research questions	Codes	Subtheme	Broader themes
2. What support do instructors provide to nontraditional students in using technology?	Material List Typed material Peer partnering 15 minutes to provide individual help Refer to IT Orientation Class Departmental instructors 2 hours to provide individual help Recruit help Provide individual help an hour a month Computer lab help Help with Canvas Help with Gmail Individual help after hours Partner with teacher Refer help Provide personal help Spend as much time as needed Screen shot of computer Open door policy Provide needed help Email Early posts to Canvas	Instructor support/limited	Provide list of needed resource material and required computer skills Provide individual help to students Assist students with Canvas and Gmail use Refer students to additional resources Provide tips and guidance to students

The following broader themes were identified (a) providing the list of needed resource material and required computer skills, (b) providing individual help to students, (c) assisting students with Canvas and Gmail use, (d) referring students to additional resources, and (e) providing tips and guidance to students. The themes and the responses used to identify themes are detailed in the paragraphs below.

Provide Supply List of Needed Resource Material and Required Computer Skills

Some instructors provided documents that listed course material and requirements as means of supporting students in using technology. Instructors at the study site suggested that nontraditional students tend to do better in classes when they have an idea of what the course entails and what is expected of them as students. The community college instructors emphasized that instructors should seek ways to engage students and help them master skills needed to complete coursework.

Excerpts From Transcripts. Providing a list containing the course description, assignment guidelines, and course requirements for students was one way of supporting nontraditional students in using technology. At the start of each term, Participant 1 gave each student a document that described what computer skills were needed to achieve academic success. The instructor also explained that the document is a typed paragraph that lists material and supplies students need to complete the course (see Appendix K). The list also informed students of the technology and skills they need to know and understand to pass this course in Canvas. “This class uses Microsoft Office 2013, 2016, or Office 365,” explained Participant 1. “Older versions like Office 2007 and 2010 will not work.” Participant 1 added that students need a personal computer that contains the

Windows 10 operating system with at least a 15-inch screen. “Unfortunately, Chromebooks, MacBooks, netbooks, cellphones, and other small devices will not work for this class,” continued Participant 1.

Lastly, Participant 1 stressed that students must know what a Word document is, how to use Google Drive, and how cut and paste in Word Documents. “A lot of my nontraditional students don’t know anything about these things,” said Participant 1. “They don’t know how to use Canvas and how to upload or download course work.” The instructor maintained that what nontraditional students do not know and cannot do may be the difference between academic success and academic failure.

Artifact Support. Data collected from interviews were not the only source emphasizing the importance of documents such as the supply list of needed resource material and required computer skills. In maintaining the importance of informing students of what is expected of them, the *Policy and Procedure Manual for Distance and Electronic Learning* required instructors who are teaching virtual courses to develop (a) an e-learning syllabus for each course, (b) develop quality course materials and presentations for each course, and (c) provide students with a course orientation at the start of each semester. The manual stated that the college’s objective is to ensure all technology-assisted courses foster student learning and encourage and maintain academic excellence, ultimately leading to academic success.

The Student Success Center also had resources in place to help students achieve academic success. The center housed a library of helpful literature on how to navigate a variety of internet help sites and computer software programs. If students were not able to

find the needed resources on their own, they could go to the Student Success Center's help desk for assistance.

The college's *Policy and Procedure Manual for Distance and Electronic Learning* did not address the theme. This source was considered irrelevant for the study. However, the manual proved valuable in answering other questions.

Provide Individual Help to Students

Sometimes nontraditional students need instructors to provide one-on-one help to understand the technology used to complete coursework. Instructors at the local college said once students understand how to use the technology, they gain the confidence needed to succeed in completing assignments. Seven of the nine study participants posited that instructors should be motivated to provide individual help to students when needed.

Excerpts From Transcripts. Concern for academic success of nontraditional students enrolled in their classes, some instructors at the local college try to provide personal help to students who are novice technology users. For instance, Participant 7 took time to observe students using their laptops and show them how do find various coursework links on Canvas. Once students were shown how to access course material they could work on their own. They also had a better understanding of how to use the technology. "That's why even if I have to stand over them and watch as they go through the process, I will do it," said Participant 7.

Participant 9 used similar approaches with students who may not know how to use technology. "So sometimes you've got to give them more step-by-step by step

directions and then it may take them just a little bit longer to get the hang of it," said Participant 9, stressing that sometimes instructors must exercise patience with students. "Instructors should realize that many nontraditional students have not used computers for perhaps years."

Both instructors stated that students went on to improve their grades in their classes once they took time to show them how to use the technology. Their nontraditional students stated that now that they understand how to use the technology, the coursework seemed a lot easier. Participant 7 said knowing and understanding what you are doing makes all the difference in the world.

Artifact Support. Providing individual help to students was also addressed at the Student Success Center. Tutors were available to provide one-on-one tutoring for nontraditional students who request it. Students have an opportunity to schedule the day and time of the individual tutoring. The college's *Policy and Procedure Manual for Distance and Electronic Learning* did not address the theme and was deemed irrelevant for this research question.

Assist Students With Canvas and Gmail Use

Assisting students with Canvas and Gmail use was not included as a learning objective on the syllabus of the classes offered at the study site. However, some instructors cared enough about the academic well-being of their students that they took time to assist students with Canvas and Gmail use. For nontraditional students who have limited technology skills, assisting these students with using Canvas and Gmail required

patience. Sometimes assisting students meant taking extra taking extra time to show students how to use Canvas and Gmail.

Excerpts From Transcripts. Participants 4 and Participant 7 emphasized that not knowing how to use Canvas and Gmail could be detrimental to students' academic success. Participant 4 promoted academic success of students by demonstrating how to use Canvas and other classroom technology until students clearly understand how to use it. "When using Canvas students go to modules that lay out each week's assignments and how to complete different stages of the coursework," Participant 4 stated. "Sometimes students who are not adept to technology become so overwhelmed with course assignments they may not know how to access Canvas from one class period to the next."

Because education is so closely tied to technology, Participant 4 stated that nontraditional students must go over how to use Canvas repeatedly until they feel comfortable. Participant 4 said she is one who never hesitates to assist students when they need help using Canvas, Gmail, or any other technology. The instructor noted that some of her students have requested help using Canvas and accessing other features and programs needed to complete coursework. Among the skills and techniques taught were how to log into Gmail accounts and how to access Google Docs to create various course material. "Once we have written our essays, we type them in Google Docs," explained Participant 4. "So, they have to understand they just can't go anywhere and type their essays. They have to type it in Google Docs."

Participant 7 stressed that instructors should have a genuine concern about students' academic success and do everything possible to help students who do not know

how to manage Canvas or other programs needed to complete coursework. “To be an effective teacher, sometimes instructors have to go an extra mile to help students who are not technology savvy,” posited Participant 7. If instructors discover they cannot not provide the needed help, Participant 7 suggested that they should refer students to other resources. The objective was for instructors to provide the much-needed support for students who need help using technology.

Artifact Support. Assisting students with Canvas and Gmail use was not among the issues addressed at the Student Success Center or *Policy and Procedure Manual for Distance and Electronic Learning*. Neither of these sources provided information related to the theme. Therefore, these sources were irrelevant for this research question.

Refer Students to Additional Resources

Instructors can refer students to additional resources when they are unable to provide the needed assistance. Nontraditional students at the local college were referred to other resources when they have questions about Canvas and other technology when instructors cannot assist them. Other resources include their peers, other instructors, information technology personnel, tutors, videos, academic coaches, and the staff of the Student Success Center. These resources helped create a strong support system for students who are novice technology users.

Excerpts From Transcripts. Instructors at the local college did not hesitate to refer students to other resources when they could not help them. Participant 5 stated that sometimes students in her department are referred to other instructors who take students through a step-by-step orientation class to make sure students had basic computer

knowledge and skills. Participant 7 suggested that instructors are not the only people students can be referred to for help. “Sometimes students learn best from their peers,” said Participant 7. “I refer nontraditional students who do not know how to use technology to other students who know how to use all of this technology.”

All study participants had one referral in common. Each used the school’s information technology department staff in their list of additional resources. The instructors considered the information technology department the place to go when expert support in technology use was needed. “When you have any kind of technology issues or something like that, there is a number you can call and they can find out if it’s a technical issue with your computer or if it’s something you’re doing,” said Participant 9. The information technology staff often assisted Participant 3 when her students needed help. The instructor said they have assisted every student she sends their way. “I don’t mind sitting with them and helping them as long as I can,” said Participant 3. “There just comes a certain point where I can’t help them anymore and I have to get somebody else.”

People were not the only resources instructors referred nontraditional students to for help. A few instructors at the community college refer students to videos and website sites such as YouTube. Participant 8, who was a big fan of YouTube, said the social media site has videos that teach students how to use Canvas, as well as other programs and software. “There are videos on YouTube to teach you anything you would ever want to know,” said Participant 8. “I’ve even used it to find out how to make minor car repairs.”

Participant 8 said she emailed students a document that contains several hyperlinks that they can click on to go directly to YouTube for a specific topic. “We use a lot of resources from the Internet, but a lot of times it’s just as simple as a hyperlink,” continued Participant 9. “As long as they know to click on what’s highlighted, they can go right to it.” The instructor personally provided videos that showed students how to format documents and perform other skills such as copy and paste and capitalization. No problem students have using technology is considered small in the eyes of Participant 9. The instructor went on to say students have different skill levels and instructors must reach out to help students regardless of their skills level.

Artifact Support. The Student Success Center addressed the theme by providing brochures and flyers that referred students to addition resources. The documents provide descriptions and contact information of the resources. The *Policy and Procedure Manual for Distance and Electronic Learning* did not address the theme. Therefore, this source was irrelevant for the research question.

Provide Tips and Guidance to Students

Three participants offered tips and guidelines for students who have difficulty using technology to complete their coursework. Tips and guidance ranged from how to create a Word document to how to navigate the Canvas learning management system to how to overcome fear of using technology. These tips and guidelines were provided on typed documents, via email, or through verbal communication.

Excerpts From Transcripts. Instructors at the study site were eager to provide tips and guidance to nontraditional students who have difficulty using technology. A

major tip provided by Participants 8 was: “Don’t be afraid to try to use new technology. There are very few things people can do on a computer that cannot be undone.” The instructor posited that sometimes there is a fear factor because students are simply afraid of the unfamiliar.

Nontraditional students who fear using technology and other technology-related issues were encouraged to ask for help if they need assistance. “They should be mindful that there is no such thing as a stupid question,” advised Participant 4. “If students have never had to use a certain type of technology before, chances are they do not know what to do.” Participant 4 insisted that it is always a wise decision to ask for help when you do not know what to do. She further stated that instructors should always be there to provide tips and guidance for students using technology when it is needed.

Artifact Support. Brochures, pamphlets, flyers, and posters at the Student Success Center provide tips and guidance to students for various issues dealing with the use of technology. Also, the *Policy and Procedure Manual for Distance and Electronic Learning* provided tips and guidance for instructors rather than tips and guidance for the students. The information from the Student Success Center proved to be valuable to instructors supporting students in the use of technology.

RQ3 Themes

The third question focused on how the *Policy and Procedure Manual for Distance and Electronic Learning* informed community college instructors’ support of nontraditional students in using technology. An analysis of the data concluded that the manual informed instructors’ support of nontraditional students in using technology, but

three of the nine participants knew little or nothing about the manual. One instructor said the manual was irrelevant for her and her students, while the other two instructors were unfamiliar with the tips and guidelines presented in the manuals. Key words and phrases associated with the question included the manual (a) provides procedures and tips, (b) answers questions, and (c) provides guidance.

Table 3 displays Research Question 3 and the codes that were derived from participants' responses. The codes were reviewed to determine a common thread which was then listed as the subtheme. I then reviewed the responses to Research Question 3to find key terms or phrases associated with the sub-theme. These terms or phrases were then listed as broader themes. The results of the findings are listed in Table 3.

Table 3

Research Question 3: Codes, Subthemes, Broader Themes

Research questions	Codes	Subtheme	Broader themes
How does the Policy and Procedure Manual for Distance and Electronic Learning inform community college instructors' support of nontraditional students in using technology?	Answers questions Provides procedure tips Provides guidance	Tips and guidance	The Policy and Procedure Manual for Distance and Electronic Learning

The theme "The Policy and Procedure Manual for Distance and Electronic Learning" and the responses used to identify the theme are detailed in the paragraphs below.

The Policy and Procedure Manual for Distance and Electronic Learning

The theme for this section is "The Policy and Procedure Manual for Distance and Electronic Learning" because it is a useful tool for instructors who use technology in their courses. Research showed that when it comes to providing guidance and tips to students, as well as supporting students who lack skills in using technology, instructors strive to seek what is best for their students. Instructors often find themselves looking for resources to help them address the students' needs. Three of the nine instructors interviewed at the local college in this study found much needed help in the college's *Policy and Procedure Manual for Distance and Electronic Learning*.

Excerpts From Transcripts. Seven of the participants in the study did not use the college's *Policy and Procedure Manual for Distance and Electronic Learning*, while two participants often used the manual and found it helpful. Four of the nine study participants considered the *Policy and Procedure Manual for Distance and Electronic Learning* to be irrelevant. Two instructors were unfamiliar with the manual altogether. The instructors maintained that the manual provides valuable information about teaching and supporting students using technology.

One instructor reported being a frequent user of the *Policy and Procedure Manual for Distance and Electronic Learning*. "I frequently use the manual because it has a lot of information, we can use to improve our teaching skills, especially when it comes to

supporting our students," stated Participant 6. "The manual gives us tips and guidelines to use in our online classes." The instructor explained that the manual aids instructors when they need to help students and do not know how. Yet, although the manual provides specific tips and guidelines on how to help students, Participant 6 admitted not adhering to all the manual's directives. "I would be lying if I told you that I have not strayed beyond the borders of just strictly what they say I need to do," stated Participant 6. "In some cases, I found that improvising the guidelines worked best. But the help is there (in the manual) when I need it."

Participant 4 also found the manual to be a source of help when it is needed. The instructor said the manual was used to answer whatever questions arise about assisting students in the use of technology. The manual contains such as adult-based learning techniques and procedures instructors can use to teach and support these nontraditional students. "This is great because you don't have to call and bug somebody," Participant 4 proclaimed. "If you are not sure, you just look in the manual and see if you can find the answer for yourself."

Participant 5 and Participant 8 said they were unaware the college develop a manual to help instructors that use technology in courses. Participant 8 said the manual sounds like it could be a beneficial resource. Both Participant 5 and Participant 8 said they would seek more information about the manual to see what information would be helpful in assisting students in the use of technology.

Not all instructors considered the manual helpful. Participant 1 said the manual does not provide information related to the classes she teaches. Although the manual

provides guidance for any instructor using technology in their classes, Participant 1 and Participant 3 suggested that the manual is basically for online classes. Participant 2 explained that the *Policy and Procedure Manual for Distance and Electronic Learning* is irrelevant because she does not teach distance learning. "I know we do have some online courses, but we don't use the manual for help. If students have an issue with that, we send them to someone in e-learning," stated Participant 2.

Another instructor said the *Policy and Procedure Manual for Distance and Electronic Learning* is basically for students and does not provide information for instructors, causing instructors to find other resources. Participant 9 said personal assistance is provided to students who express they are having problems using the college's learning management system. If the students continue to struggle after the instructor's personal assistance, the student is then referred to resources such as (a) the student handbook, (b) e-learning handbook or (c) some other individual that can provide more adept assistance.

Artifact Support. The school's *Policy and Procedure Manual for Distance and Electronic Learning* did not address supporting students who did not have Internet access. No information related to the theme was found in the manual, although the manual emphasized the importance of meeting the needs of students. Therefore, this source was irrelevant for this research question.

RQ4 Themes

The fourth question addressed how community college instructors collaborate with the Student Success Center staff to support nontraditional students in using

technology. The analysis of the data revealed that instructors collaborated with the Student Success Center staff by making students aware of student support options offered by the Student Success Center. Key words and phrases associated with Research Question 4 were (a) student help sessions, (b) free counseling, (c) assist students, and (d) tutoring.

Table 4 displays Research Question 4 and the codes that were derived from the participants' responses. The codes were reviewed to determine a common thread. The common thread was then listed as the subtheme. I then reviewed the responses to Research Question 4 to find key terms or phrases associated with the sub-theme. These terms or phrases were then listed as broader themes. The results of the findings are listed in Table 4 below.

Table 4

Research Question 4: Codes, Subthemes, Broader Themes

Research questions	Codes	Subtheme	Broader Themes
How do community college instructors collaborate with the Nontraditional Student Success Center to support nontraditional students in using technology?	Daily help sessions	Student support	Provide student help sessions
	Student help sessions		
	Free counseling		Provide free counseling and tutoring to students
	Assist students		
	Tutoring		

Two broader themes were identified: providing student help sessions and providing free counseling and tutoring to students. The themes and the responses used to identify themes are detailed in the paragraphs below.

Provide Student Help Sessions

According to documents from the Student Success Center, the local college established its Nontraditional Student Success Center in 2008 to support the growing number of nontraditional students. Documents from the institution where the study was conducted revealed that the increasing number of nontraditional students enrolled at the college and included first time students, students learning new skills, or students coming back to college after many years. An archived article about the Nontraditional Student Success Center suggested that nontraditional students sometimes need extra encouragement or reassurance to achieve academic success. The article also revealed that the staff of the Nontraditional Student Success Center, now called the Student Success Center, united with instructors to assist students who may encounter problems during the school year.

Excerpts From Transcripts. Participant 1 explained that nontraditional students meet in the Student Success Center at 12:30 p.m. each day to receive help with technology and other coursework problems. Participant 9 added that when students' computer knowledge is limited to just turning the computer on and off, they are encouraged to go the Student Success Center for instructions on how to use Canvas and other technology. "When it comes to teaching students the ins and outs of Canvas, I'm no

expert," said Participant 9. "I ask the Student Success Center staff for help." Participant 9 expressed that everyone needs a little help every now and then.

Artifact Support. The *Policy and Procedure Manual for Distance and Electronic Learning* did not specifically address providing student help sessions. However, however paragraphs within the manual encouraged instructors to take whatever steps necessary to meet the needs of the students. Meeting the needs of the students could include providing help sessions to increase their knowledge and skills in using technology.

Providing Free Counseling and Tutoring to Students

The local college's Student Success Center offered free tutoring service for students that may have problems with technology and academic coursework. Participant 9 said all students must do is call and make an appointment for tutoring, explaining their problems and area of need. Tutors are available to tutor students in the use of Canvas and other technology, while counselors are on hand to address academic questions and concerns.

Excerpts From Transcripts. Instructors at the local college stated that the Student Success Center provides counseling and tutorial service for students at no cost. Participant 7 said all students need to do is speak up and let someone know they need help. "The Student Success Center is a help to not only nontraditional students, but for all students," explained Participant 7. "Whether it's providing tutoring, help using technology, or whatever, the staff of the Student Success Center is here to help." To utilize the counseling and tutorial service, students must call to make an appointment.

Participant 9 said not many students are taking advantage of this valuable resource. The instructor stated that she encourages students to visit the Student Success Center and request help if needed. The instructor said students would be surprised to find out how much the counseling and tutorial sessions will improve their computer skills and academic performance.

Artifact Support. The Student Success Center provided support for nontraditional students using technology by providing tutors and computer lab where students can receive one-on-one help. The Student Success Center also had staff in place to assist instructors who support nontraditional students in using technology. However, the *Policy and Procedure Manual for Distance and Electronic Learning* did not address supporting students who did not have internet access. No information related to the theme was found in the manual, although the manual emphasized the importance of meeting the needs of students. Therefore, this source was irrelevant for Research Question 4.

RQ5 Themes

The fifth and final research question focused on strategies community college instructors recommended to better support nontraditional students in using technology in their coursework. The analysis of the data revealed that while instructors concurred that college administrators and faculty collaborate with the Student Success Center staff by making students aware of student support options offered by the center, instructor support of students was deemed inadequate. Key words and phrases associated with Research Question 5 included (a) pretest computer knowledge and skills, (b) technology assistance,

(c) Google document and Microsoft document knowledge (d) explore Canvas, (e) learn from peers, and (f) update equipment.

Table 5 displays Research Question 5 and the codes that were derived from the participants' responses. The codes were reviewed to determine a common thread. The common thread was then listed as the sub-theme. I then reviewed the responses to Research Question 5 to find key terms or phrases associated with the sub-theme. These terms or phrases were then listed as broader themes. The results of the findings are listed in Table 5.

Table 5

Research Question 5: Codes, Subthemes, Broader Themes

Research questions	Codes	Subtheme	Broader themes
What strategies would community college instructors recommend to better support nontraditional students in using technology in their coursework?	Pretest computer knowledge	Recommended strategies	Pretest students' computer knowledge and skills
	Help from programs and staff		
	Computer class		Encourage students to practice using the computer and explore Canvas
	Pretest computer skills		
	Practice computer use		
	Google document knowledge		
	Microsoft document knowledge		Recommend the use of YouTube tutorials
	Technology assistants		
	Update equipment		Update the college's technology equipment
	Academic coaches		
	Explore Canvas		
	Learn from peers		

Four themes were identified: (a) pretest students' computer knowledge, (b) encourage students to practice using the computer and explore Canvas, (c) recommend the use of YouTube tutorials, and (d) update the college's technology equipment. The themes and the responses used to identify themes are detailed in the paragraphs below.

Pretest Students' Computer Knowledge and Skills

Three research participants posited that students would not have as much difficulty using technology when completing coursework if colleges required a pretest of students' computer knowledge and skills. The instructors maintained that the pretest would let the instructor and student know the level of the student's technology skills and what improvements are needed to complete required coursework. Additionally, instructors could assess the pretest and determine how to best support their students in using technology.

Excerpts From Transcripts. Pretesting students' technology skills before they enroll in college classes was considered a good way to determine if students are college ready. Participant 1 said pretesting is a good way to make sure students know how to operate the technology before they begin their classes. Participant 5 agreed, adding: "If you are a cold turkey on technology, you are going to be lost in your college course."

Although instructors did their best to help students, Participant 5 suggested that instructors honestly did not have time to teach you all you need to know about using a computer and accessing Canvas. The instructor said pretesting would be beneficial to all. Participant 3 added that students could take an entry test like the Accuplacer students take when they first come to the college. The test would perhaps take students no longer than

10 minutes and then they could go back and get in line for registration. Participant 3 suggested that students could take the test at a computer lab sometime before the school term begins.

Both Participants 3 and Participant 5 contended that pretesting students would be beneficial to the students, as well as instructors. Students would gain awareness of what was expected of them in the classroom, while instructors would have an assessment of each student's technology skills which could be useful during the school term.

Artifact Support. The Student Success Center and *Policy and Procedure Manual for Distance and Electronic Learning* did not address the theme of pretesting students. Information related to the theme were not found in the Student Success Center and *Policy and Procedure Manual for Distance and Electronic Learning*. These sources were irrelevant for this research question.

Encourage Students to Practice Using the Computer and Explore Canvas

Nontraditional students were encouraged to practice using the computer and explore Canvas if they want to improve their technology skills. Research participants contended that assignments and other coursework does not seem has hard if students know how to use the technology. Practice makes perfect.

Excerpts From Transcripts. Participant 4 said sometimes simple things such as practicing computer skills can increase students' computer knowledge. Participant 4 added that if students took extra time to practice using the computer, they would not have as many problems completing assignments. "If you know you are going to come back to college, be familiar with Google Docs and Microsoft Word," suggested Participant 4. "Be

familiar with how to login." Participant 5 said if nontraditional students are "cold turkey on technology", they are going to be lost in their college courses. The instructor stated that it is important for students to practice using the computer because instructors honestly do not have time to teach students all they need to know about using a computer and accessing Canvas. It is equally as important for nontraditional students who are not technology savvy to explore Canvas prior to the start of classes.

Participant 4 maintained that some students made the mistake of waiting until the first day of classes to try to login to their courses. "Really, you need to login before school starts," the instructor stated. "If they can learn to do some things for themselves in the front end, it will help them in the long run." Participant 4 added that students may not become technology experts, but if they practice, they will learn more about what it takes to complete their coursework. Exploring Canvas was also deemed as a good way for nontraditional students to improve their computer skills.

According to Participant 8, people who like to learn are curious by nature. Students' curiosity and eagerness to know prompted the instructor to encourage nontraditional students to explore Canvas. "I want them to know as much as they can about Canvas and how it is used before, they start classes," stated Participant 8. The instructor went on to say that when students launch into Canvas for the first time, they are advised to click on all the links and menus they see. For nontraditional students returning to college after a lengthy absence, using Canvas can be "a steep learning curve to try to get around and negotiate the different platforms that assignments are in," continued Participant 8. Students have emails, along with Canvas courses and assignments they

must familiarize themselves with. Participant 8 added that there can be lots of things to do in a course and not knowing where to look for these things in Canvas could lead to difficulty in the classroom and ultimately failure. The instructor maintained that no student wants to fail and that a good instructor does not want students to fail either. Instructors should not only encourage students to explore Canvas, but they should be available to answer questions if students do not understand a component within the Canvas learning management system.

Artifact Support. The theme was not addressed at the Student Success Center or in the Policy and *Procedure Manual for Distance and Electronic Learning*. The Student Success Center also had staff in place to assist instructors who support nontraditional students in using technology. No information related to the theme was found at the Student Success Center or in the *Policy and Procedure Manual for Distance and Electronic Learning*. Therefore, these sources were not relevant for this research question.

Recommend the Use of YouTube Tutorials

The popular website, YouTube, is a good resource for nontraditional students who want about Canvas and other technology. The website provided step-by-step videos that teach students how to navigate Canvas and much more. Some instructors stated that directions provided on the YouTube videos were easy for nontraditional students to understand and follow to use Canvas.

Excerpts From Transcripts. Two research participants considered YouTube a wonderful and valuable resource for nontraditional students who want to learn more

about using computers and Canvas. Participant 8 said there are all kinds of tutorials for just about everything you would ever want to know. “So, just doing quick searches online can give you a wealth of information,” said Participant. “YouTube has numerous tutorials on how to use Canvas and other technology. You just have to search and look around the website a little bit.”

YouTube contains videos made by professionals as well as everyday people. Students generally select videos that work best for them. Participant 8 said some instructors post instructional videos on YouTube. Participant 5 is among the instructors who uses YouTube videos to help students learn. She also creates videos to show her students how to format Word documents and how to use Canvas. Participant 5 said one of the good things about videos is you can view them repeatedly until you master the skill you are trying to improve. Academic help comes in many forms and fashions. Participant 8 suggested that students take advantage of as many of these resources as possible.

Artifact Support. The Student Success Center and *Policy and Procedure Manual for Distance and Electronic Learning* did not address the theme. Information related to the theme was not found in the Student Success Center and *Policy and Procedure Manual for Distance and Electronic Learning*. These sources were irrelevant for this research question.

Update the College’s Technology Equipment

Colleges play a vital role in supporting students regardless of who they are or what their issues may be. Since instructor support of nontraditional students using

technology was the issue addressed in this study, it is imperative that the college's technology is up-to-date and in good working condition.

Excerpts From Transcripts. Sometimes supporting nontraditional students in using technology requires colleges to make improvements on their campuses. Participant 6 suggested that one improvement college officials should make at the study site is acquiring updated technology equipment. Budget restraints have impacted college spending in recent years and Participant 2 said that means colleges must operate without some of the programs and equipment that supports students. Participant 6 added that college officials want to see students succeed because if the students succeed, the college and the community succeed.

Artifact Support. The Student Success Center and *Policy and Procedure Manual for Distance and Electronic Learning* did not address the theme. Information related to the theme was not found in the Student Success Center and *Policy and Procedure Manual for Distance and Electronic Learning*. These sources were irrelevant for this research question.

Summary of Findings

The research questions for my qualitative study were addressed in data collected, analyzed, and interpreted. Data included interviews from nine local college instructors; brochures, pamphlets, and flyers from the Student Success Center; and information from the *Policy and Procedure Manual for Distance and Electronic Learning*. By interviewing the community college instructors who teach nontraditional students and examining how these instructors support nontraditional students in using technology, it was determined

that seven instructors supported nontraditional students in the use of technology, while two did not. However, all participants described supporting students in using technology as an important part role in their duties as college instructors. The problem was instructors providing limited support for nontraditional students using technology, which may leave students ill-prepared to complete coursework. Instructor sought assistance from various resources, including the Student Success Center, and the *Policy and Procedure Manual for Distance and Electronic Learning*.

Entries in the college's *Policy and Procedure Manual for Distance and Electronic Learning* encouraged instructors' support of nontraditional students in the use of technology. One entry stated that college "continues to develop, modify, and improve support services for students using technology." The manual further noted that to guarantee satisfactory student support, the performances of instructors are reviewed and evaluated each semester. Instructors who did not maintain an average retention rate of 50% or more for their three most previous online courses were placed on probation for a year. If improvements were not made upon their return to teaching online courses, instructors were denied the opportunity to teach virtual courses.

Data from the Student Success Center revealed that the college had a variety of services and programs in place to assist both students and instructors in the use of technology. Program and services offered by the Student Success Center included (a) tutors, (b) printed tips and guidelines, (c) assistance from information technology staff, and (d) counselors for students in need of moral support. Additionally, data collected from all three sources were analyzed to answer the five questions posed in the research

study. Several codes were found in data collected to answer each research question. After reviewing the selected codes, sub-themes were discerned from data. The development of broader themes was the last step in organizing data to include in the research study. The first research question was "What problems do community college instructors observe that nontraditional students are encountering when using technology in coursework?" The broader themes listed for this question were lack of basic computer skills, support of nontraditional students, lack of internet access, and unfamiliarity with Canvas.

The second research question was "What support do instructors provide to nontraditional students in using technology?" The broader themes were for the second research question were provide list of needed resource material and required computer skills, provide individual help to students, assist students with Canvas and Gmail use, refer students to additional resources, and provide tips and guidance to students. Additionally, the third research question was "How does the *Policy and Procedure Manual for Distance and Electronic Learning* inform community college instructors' support of nontraditional students in using technology?" The broader theme for the question was the *Policy and Procedure Manual for Distance and Electronic Learning*. Also, the fourth research question was "How do community college instructors collaborate with the Nontraditional Student Success Center to support nontraditional students in using technology? The broader themes for this question were provide student help sessions and provide free counseling and tutoring to students.

The final research question was "What strategies would community college instructors recommend to better support nontraditional students in using technology in

their coursework?" The broader themes for the question were pretest students' computer knowledge and skills, encourage students to practice using the computer and explore Canvas, update colleges' technology equipment, and recommend the use of YouTube tutorials. Listing emerging themes proved helpful in developing a project for the study.

Conclusion

In Section 2, I identified and explained the qualitative case study used for research. The selected qualitative case study design aligned with the problem statement and research questions. For the data collection process, I interviewed instructors who teach nontraditional students. Much of the data were derived from interviews with nine community college instructors, but additional information came from college's policy and procedure manual for distance and electronic learning, and program information from the student success center. Although notes were taken of personal observations during the interview sessions, the information was considered irrelevant and was not used as a data source.

Data sources helped answer the research questions and narrow the gap in practice between the need of nontraditional students to use technology for their academic success and lack of support in a local community college. I outlined procedures for selecting participants, explained the process of gaining access, and described the method used to protect participants. The selected study design resulted in the use of semi-structured interviews. I defined my role in the study and addressed possible concerns of bias. I also described how data are stored and protected.

Although collected data revealed that, there were some good practices and instructors supported students, data also showed there are areas where improvement is needed. Improvement areas include increasing instructor knowledge of the availability of the *Policy and Procedure Manual for Distance and Electronic Learning*, making instructors aware of the resources provided to support students, and encouraging instructors to make best use of supports provided by the local college. The suggested improvements, which are highlighted in Section 3, could increase the nontraditional students' chances of achieving academic success.

Section 3: The Project

An increasing number of nontraditional students are enrolling at a small community college in the Southern United States. Likewise, an increasing number of these nontraditional students are enrolling college without the skills needed to complete coursework that includes the integration of technology-assisted teaching and learning. With the integration of technology usage being an integral part of curricula at colleges and universities across the globe, instructor support is vital to nontraditional students who are novice technology users. In this study, I examined instructors' support of nontraditional using technology. I then developed a position paper for the study site's stakeholders through data from interviews, the college's Student Success Center, and the *Policy and Procedure Manual for Distance and Electronic Learning*.

Data were collected via semistructured interviews of local community college instructors using open-ended questions during private and separate interview sessions. The collected data from the interviews were transcribed by a hired transcriber and analyzed using a color-coded tracking form and tracking log developed using Microsoft Word processing program. I collected additional data from brochures, pamphlets, and flyers from the Student Success Center, as well as from entries in the college's *Policy and Procedure Manual for Distance and Electronic Learning*. Key words and phrases were pulled from the data and used to formulate themes. These themes were researched and assessed to assist in initiating a discussion among college administrators, instructors, and other stakeholders about the community college instructors' perceptions of instructors' support of nontraditional students using technology. The position paper also shares the

instructors' recommendations for implementing strategies or programs to improve instructors' support of nontraditional students in using technology.

Although some instructors at the local college reported they currently use some of these practices, data analyses revealed the need for a unified support system utilized by all instructors, as well as a need for collaboration between instructors and college leadership. Findings supported the need for a project to help address the need of instructor support for nontraditional students in the use of technology. After reviewing collected data and examining various types of projects researchers could use to report research findings, I selected a project I deemed to be the best way to report findings.

Bekker and Clark (2018) posited that when reporting results, researchers should use clear and effective language, consider their audience, and utilize techniques that will build rapport, persuade, or offer recommendations to remedy a specific problem. Bekker and Clark noted that "the presentation never just 'is' but incorporates a multitude of choices and assumptions in its framing, emphasis, content, and delivery" (p. 2). The core ideas presented in the project were a result of the data analyses found in Section 2 of this case study that was designed to examine a gap in practice between the need of nontraditional students to use technology for their academic success and the lack of instructors' support of nontraditional students using technology for their academic success.

The results of the study are in an "artifact" (Walden University, n.d., p. 7) created based on research findings. The artifact or project chosen for this study is a position paper. The central goal of the position paper is to launch a discussion among the local

college's stakeholders regarding the role of instructors' support of nontraditional students using technology in helping students achieve academic success. The secondary goal is to implement strategies to improve instructional support of nontraditional students using technology to complete coursework.

Rationale

Businesses and organization leaders, health professionals, and educators have all used position papers to present research findings and address problems. A position paper is a written statement that discusses a specific problem and "suggests an established and agreed upon approach to the stated problem (Bala et al., 2018). Other researchers defined the position paper as an essay that uses facts and logic to persuade, recommend, and promote a solution to a particular problem (Pershing, 2015; Young Adult Library Services Association, 2019). Position papers provide useful ideas and information readers can use to understand issues, to solve a particular problem, or to do their jobs better (Malone & Wright, 2018; Pershing, 2015). The Young Adult Library Services Association (2019) added that positions papers are powerful advocacy tools that can be used to help decision-makers and influencers justify implementing suggested solutions to the problem.

The problem in this study is that instructors at a small community college in the southern United States are providing limited support for nontraditional students using technology, which may leave students ill-prepared to complete coursework. Data analysis showed that some college instructors supported nontraditional students in the use of technology. Additionally, college administrators developed a *Policy and Procedure*

Manual for Distance and Electronic Learning that provides guidelines and tips for instructor support of students using technology to complete coursework. Yet, instructors provided limited support for nontraditional students using technology.

Several options were suggested to present findings from the study: a professional development project, a policy recommendation report, and a position paper. The professional development genre was not selected because the college already has an established professional training program. The policy recommendation report genre was not selected because the findings did not have enough information on the school's policy and procedures. Collected data and the stated purpose of the study resulted in the selection of the position paper to provide recommendations instructors and college administrators can use to implement strategies or programs to improve the support of nontraditional students in using technology. This position paper may also serve as a catalyst for discussion among the institution's administrators and instructors regarding the support of nontraditional students in using technology. The position paper includes a summary of study and suggestions for instructors and college administrators (see Appendix A). A description of the data analyses, as well as recommendations to instructors and college administrators, are provided.

Review of the Literature

The review of literature for this project included an investigation of position papers and an examination of how educators develop positions papers to recommend changes or improvements in teaching strategies and educational policies. The literature review highlighted the benefits of using a position paper and how a position paper can

serve as a catalyst of support for strategies instructors recommended to support nontraditional students using technology in academic coursework.

I visited the local public library and online databases to find resources for this literature review. Online databases explored included ERIC, ProQuest, EBSCO, Walden University online data bases. Key terms used to search for data were *position papers, white papers, definition of a position paper, guidelines for writing position papers, policy recommendations*, *policy analysis,* and *policy development*. The purpose of the search was to locate and gather articles and studies about how position papers have been helpful in developing strategies to change or improve student support.

Purpose of a Position Paper

Position papers are used by business and organization leaders, health professionals, and educators to present research findings and address research problems. Bala et al. (2018) explained that a position paper is a written statement that discusses a specific problem and suggests an established and agreed-upon approach to the stated problem. Other researchers defined the position paper as an essay that uses facts and logic to persuade, recommend, and promote a solution to a problem (Pershing, 2015; Young Adult Library Services Association, 2019). Position papers provide useful ideas and information readers can use to understand issues, to solve a problem, or to do their jobs better (Malone & Wright, 2018; Pershing, 2015). Additionally, the Young Adult Library Services Association (2019) noted that positions papers are powerful advocacy tools that can be used to help decision-makers and influencers justify implementing suggested solutions to the problem.

Structuring an Effective Position Paper

A position paper consists of an argument and solutions for how to best resolve the argument. Effective position papers are well written, using facts and a compelling argument that generally follows a problem and presents a solution format (Pershing, 2015). According to Pershing, writers should provide useful ideas and information that readers can use to understand how to solve a problem or how to do their job better. Bala et al. (2018) added that the main objective of the position paper is to recommend the best possible and acceptable way to focus on an issue by fusing new information from recent or ongoing research that may result in a re-evaluation of the stated problem. Additionally, position papers should explain, justify, or suggest a solution to a problem (Roukis, 2015). Roukis (2015) also recommended that the position paper include background information and explanations that provide a strong understanding of the issues involved in the study and the rationale behind the adopted position.

When seeking tips or advice about position papers, writers may examine other position papers for guidance. Sometimes other writers of position papers that are related to the researcher's field of study may provide helpful information. Also, in some cases the authors of published position papers in various fields of study provide information that may be beneficial to researchers in other disciplines. For instance, Rotarius and Rotarius (2016) wrote tips for writing a health-related position paper that can prove beneficial to writers in other disciplines. Guidelines shared by Rotarius and Rotarius included the major components of a position paper. The authors pointed out that four stages or drafts are developed when creating a white paper, which is another name for a

position paper. The first stage is Draft 1 which consists of assembling and organizing a broad selection of supporting data that describes the status of the issue. Draft 2 is used "to refine and clarify the structural organization of Draft 1 and determine likely transition breakpoints throughout the paper for the insertion of cutting-edge ideas" (Rotarius & Rotarius, 2016, p. 181). Rotarius and Rotarius then suggested that position paper writers review Draft 2 and create Draft 3 to identify and define the cutting-edge ideas related to the topic and create new knowledge on the topic. Rotarius and Rotarius also stated that when writers complete Draft 3, writers then believe they can successfully complete the position paper. Position paper authors then use Draft 4 to improve the structure of the papers. As researchers write Draft 4 to improve the structure of their papers, they review information and edits made at different stages of the papers' development. The format and style of the paper are also reviewed and corrected.

Not all researchers use the same strategies or focus on the same components when developing position papers. Bala et al. (2018) suggested that researchers begin with developing a well-structured title for the position paper that includes key information to pique the reader's interest. Bala et al. also posited that writers present an abstract that contains a synopsis of the key elements of the paper. The knowledge gap should be defined, and the abstract should explain the significance of the position paper. The introduction and position statement follow the abstract. Bala et al. recommended that writers draft a position statement based on a comprehensive literature review and a summary of the current data collected as evidence. Recommendations should be followed by a position statement and presented in the body of the position paper. Finally, Bala et

al. suggested that position papers end with a conclusion which summarizes the paper and the writer's position. A well-researched and well-written position paper can persuade stakeholders to make relevant decisions.

Facilitating Instructor Support

The results of this research study support restructuring the local college's student support system to include innovative ways instructors can support nontraditional students using technology for their academic success. Instructor support can be defined differently by scholars. Definitions of instructor support included (a) helping students feel positive about themselves and in control of their learning environment; (b) seeking ways to connect with and motivate students by providing specific, constructive and critical feedback for improvement; (c) providing students practical advice and assistance in how to deal with issues related to study; (d) motivating students to learn; and (e) reaching out to students to ensure that they are staying on track and succeeding in classes (Bolliger & Martin, 2018; Burt et al., 2013; Fryer & Bovee, 2016; Glowacki-Dudka, 2019; Long et al., 2017; McGee, et al., 2017; Milman, 2017; Nielsen et al., 2017). For this study, all these definitions apply to instructor support identified in this study.

To adequately support nontraditional students in using technology for their academic success, instructors (a)should be equipped with the skills needed to assist students using technology, (b) have knowledge of the resources the college has in place to support students, and (c) utilize available programs and resources established to support students in using technology (Almarashdeh, 2016; Berry, 2017; Costley & Lange, 2016; McGee et al., 2017; Morehead et al., 2016; Nilson, 2016; Santos et al., 2018;

Schwartz et al., 2018; Zanjani et al., 2016). Subsequently, students' responses to the actions of the instructors' will determine their success. Additionally, instructors may improve the support of nontraditional students using technology in coursework, and college administrators may develop a unified student support plan that equips instructors with the skills needed to adequately support students using technology.

Factors suggesting the need for a unified student support plan included instructors' (a) uncertainty of best practices for supporting nontraditional students using technology, (b) lack of skills needed in support of students using technology, (c) lack of knowledge of resources the college has in place to support students in using technology, and (d) failure to utilize resources such as the college's Policy and Procedure Manual for Distance and Electronic Learning. The recommendations in the project can improve instructors' support of nontraditional students using technology.

Additionally, researchers affirmed that instructors are expected to develop a support system for students to achieve academic success (Al-Samarraie et al., 2018; Atun & Usta, 2019; Boelens et al., 2018; Geng et al., 2019; Ghasemizad, 2015; Glowacki-Dudka, 2019; Remenick, 2019; Wong, 2018). The college should implement a student support system that includes guidelines all instructors can adhere. Therefore, instructors could have a common strategy for supporting students in using technology.

Accordingly, Remenick (2019) asserted that students do their best when they have a support system to guide and encourage them in their academic endeavors. Likewise, academic motivation and achievement of students in community colleges and other institutions of higher education are enhanced when instructors support students' efforts

(Allen et al., 2016; Fryer & Bovee, 2016; Glowacki-Dudka, 2019; Martin & Bolliger, 2018; Nilson, 2016; Remenick, 2019; Sidelinger et al., 2016; Zerquera, et al., 2018). Eventually, instructors' support of students using technology can promote a better understanding for community college instructors and college administrators of the importance of instructional support of nontraditional students in using technology and its impact on students' academic success.

In summary, instructors support of students using technology is crucial to students completing coursework to achieve academic success. Washington et al. (2020) suggested that community college instructors present the use of technology in such a way that it guides nontraditional students on their educational journey. The position paper recommended by the project study can address the need instructors support of nontraditional students using technology and present ways to initiate or improve instructors' support.

Project Description

My project study includes a position paper that contains recommendations to improve instructional support for nontraditional students using technology, which may leave students ill-prepared to complete coursework. Inquiries of how to write a position paper were completed at the local library and on Walden's library website. I will meet with the chairman of the local college's HSRC to present the position paper. Following the chairman's approval, I will present the paper to the HSRC, which consists of stakeholders that include the (a) vice president of instructional affairs and institutional effectiveness, (b) vice president of student affairs, and (c) Student Success Center staff.

The intended audience for this project is instructors responsible for teaching nontraditional students. Prospective policy makers are community college board members, college administrators responsible for implementing educational programs and services at the institution. I plan to use research findings to inform stakeholders, instructors, and policy makers of proposed strategies for instructional support of nontraditional students using technology.

The HSRC will receive a paper copy and electronic copy of the position paper at one of the committee's quarterly meetings. The date and time of the meeting will be selected once the final study is approved. A presentation made during the meeting will include (a) a synopsis of the study, (b) research findings, and (c) recommendations for implementing the instructors' student support plan. Resources needed to present the position paper include (a) a computer, (b) flash drives, (c) email addresses, (d) the internet, and (e) a projector and screen to use during the presentation. To distribute paper copies, the needed items included (a) a copier, (b) copy paper, (c) stapler, (d) staples, (e) folders, and (f) labels. Supplies necessary to provide hard copies and make the presentation were readily available.

The HSRC chairman agreed to assist me in presenting my position paper inviting stakeholders, policy makers, and other appropriate personnel who are not members of the HSRC. The chairman will assist by informing committee members that a guest will make an important and informative presentation at the next meeting and other guests will be invited to attend. The date and time of the quarterly meeting will be selected once the final study is approved. I will make a presentation during the meeting that will consist of

(a) a synopsis of the study, (b) the findings, and (c) recommendations for implementing the instructors' student support plan. The HSRC chairman will also assist by changing the committee's next meeting to a room large enough to accommodate about 30 people. The chairman's assistance will include getting copies of the position paper to (a) members of the college's board of trustees, (b) faculty advisors to the Nontraditional Students Association, (c) members of the faculty council, and (d) stakeholders who may not be able to attend the meeting. Those attending the meeting will have an opportunity discuss key points and recommendations, as well as ask questions, at the meeting. My role was to create and present a position paper to the college's HSRC. I will also be available to assist committee members with the implementation of the recommendations if requested.

Project Evaluation Plan

The central goal of the position paper is to launch a discussion among the local college's stakeholders regarding the role of instructors' support of nontraditional students using technology in helping students achieve academic success. The secondary goal is to implement strategies to improve instructional support of nontraditional students using technology to complete coursework. To initiate the discussion, the position paper identifies resources instructors used to support students using technology and services and programs the college has in place to assist students using technology. The HSRC chairman will expedite discussion of the study's findings at a meeting in a conference room at the local college.

In consideration of the central goal of the position paper and potential barriers, the evaluation plan of the project will be formative. Formative evaluation "focuses

uncovering the shortcomings" of a project with the purpose of generating suggestions for improvement (Nieveen & Folmer, 2013, p. 158). In educational research, formative evaluation is defined as a methodically performed activity including (a) research design, (b) data collection, (c) data analysis, and (d) reporting aimed at improving an activity or project and its accompanying design principles.

To complete the formative evaluation of the research project, members of the HSRC and other stakeholders, such as departmental heads and instructors, will be asked to review and evaluate the position paper using a 10-question evaluation form (see Appendix L). The goal is to hear stakeholders' perspectives of what they think works well and what changes should be made. College administrators will decide if the recommendations are implemented. I will commit to changing the position paper if needed and returning the fixed electronic copy to college administrators and any other stakeholders suggested by the committee.

Project Implications

The position paper has implications for the following stakeholders: (a) instructors, (b) departmental heads, (c) college administrators, and (d) members of the HSRC. In recent years, a growing number of nontraditional students have enrolled in a local college without possessing the skills needed to utilize technology needed to complete academic coursework. Many of these nontraditional students are adults who attended school when there was little or no technology in the classroom. Current college courses that integrate technology into the core curriculum may be overwhelming and cause them to solicit help from instructors (Lowell & Morris, 2019; Robinson, 2019). In the current study,

Participant 4 affirmed how the integration of technology overwhelms students and the need for instructor support. Providing an example, Participant 4 stated,

> My older students are not that familiar with the computer. So, they come in and find we do everything on the computer. Your assignments are in Canvas and you don't turn in a paper copy. Oh, my goodness. It is just all new and they have so many fears. So, on the first two weeks of school, I specifically take them to the lab. Administration has provided me with a lab where I can take my students and I help them log on. I help them learn how to check their email. It's important for me to provide them this much needed support.

According to Lowell and Morris (2019), nontraditional students who lack experience using technology in the classroom may be at a disadvantage in learning because of insufficient technology knowledge and limited skills. The final implication is for local college administrators. The position paper could influence the administration's policy regarding the professional development of instructors. Callens et al. (2019) described professional development as an important tool in improving teacher qualities, such as commitment to students and self-assurance. If administrators establish a teaching system that provides easy and reasonable guidelines for instructors to use in supporting students in the use of technology, perhaps instructors could develop an effective support system for students. The instructors and the local college could benefit from the project in that nontraditional students will become more adept in using technology in academic coursework. As the nontraditional students improve their technology skills, it could lead

to successful completion of coursework by students that would otherwise fail or drop out of school. Graduating may allow students to continue their education at a four-year college and find better jobs and become productive citizens in their communities. Additionally, the position paper may lead to social change in that it identifies barriers that prevent instructors from supporting nontraditional students in efforts to learn to use technology and identifies ways instructors can provide much-needed support.

Section 4: Reflections and Conclusions

The project I developed to address the concerns discussed in this research study is a position paper that recommends improvements and strategies instructors can use to best support nontraditional students in using technology to complete their coursework. In Section 4, I address project strengths and limitations and suggest how instructors can provide adequate support to students who may not possess the skills needed to use the required technology to complete coursework. This section also includes my reflections on the process of developing the project, as well as my experience and personal growth as a scholar, practitioner, and novice researcher. Finally, this section contains a reflection on the importance of the project as it relates to the community college, potential to promote social change, and recommendations for future research.

Project Strengths and Limitations

The strength of the project is that, as recommended by Campbell & Naidoo (2019), the position paper serves as a platform to alert readers of research findings associated with instructors' support of nontraditional students in the use of technology. Although instructors at the local community college currently provide limited support of students using technology, other strategies and supports are available to help instructors to best support students. Presenting the position paper recommendations in meetings with potential stakeholders will provide opportunities to suggest alternative approaches to instructor support of nontraditional students using technology and discuss possible limitations of the approaches. These suggestions could help improve the support of nontraditional students in the use of technology for the academic coursework. College

administrators and instructors could also use the position paper to implement strategies and programs to improve the support of nontraditional students in using technology.

Although the position paper offers opportunities for discussions and presentations with stakeholders, this genre selection brings limitation of this project. Even with its tactical focus and recommendations to improve support of nontraditional students in the use of technology, there is no guarantee stakeholders will accept, read, or utilize the project. Instead, the position paper may be tossed aside, especially if it is too long and does not tailor to the reader's background, concerns, or objectives (Campbell & Naidoo, 2019; Hoffman, 2017). The stakeholders must deem the project to be significant and consider the information valuable. To address this limitation, I composed a position paper that included a brief introduction, which summarized the problem and provided details of the position paper. The summary contained information that is designed to catch the readers' attention and pique their interest in remedying the problem.

Recommendations for Alternative Approaches

When examining the limitations of the project and ways of providing a remedy for the limitations, I considered alternative approaches for the project. One alternative approach was to create a teacher professional development program that offered an opportunity for faculty and administration presenters to initiate discussions about how instructors support nontraditional students in the use of technology. The professional development program would have also pinpointed resources the college has available to assist instructors in supporting students. Educators use teacher professional development programs to improve the quality of instruction and student achievement (Valiandes &

Neophytou, 2018). Although the local college in this study provided teacher development workshops and various resources to assist instructors in supporting students using required technology, not all instructors were aware of these supports. The teacher professional development program would familiarize all faculty with support tools and resources and establish a strategy for supporting nontraditional students in the use of technology.

Teacher professional development programs are important at today's educational institutions because of the emergence of diverse student populations (Valiandes & Neophytou). These authors noted that with this diversity comes students with mixed academic ability. Education effectiveness in mixed-ability classrooms includes instructional approaches that address the educational concerns and needs of all students. Valiandes and Neophytou also stated that when instructors improve their teaching techniques, they become more effective in helping students advance academically.

Another alternative approach was a change of focus on the problem. Three of the nine instructors participating in the study posited that the problem was not instructor support, but rather the admission of students who are not adept in using technology. Participants 1, 3, and 5 argued that the college admissions staff should pretest students' computer knowledge and skills prior to college enrollment. The instructors maintained that pretesting nontraditional students' computer skills would provide valuable information to instructors concerning the computer literacy of students. Pretesting would also make students aware of what skills they must possess to navigate the school's learning management system.

Although we are currently living in the age of technology, not everyone is technology savvy. Likewise, although almost all college courses include some type of web-based technology to enable instructors to deliver course documents, including syllabi and assignments to students, not all students are knowledgeable enough to assess the technology (Kauffman, 2015). In other words, "although students use technology in their everyday activities, they might not necessarily be familiar with or use technology for learning" and "students might use technology more for social or entertainment purposes but not for learning" (Tang & Chaw, 2016, p. 54).

As technology plays a major role in all levels of education, it is expected that students need to obtain a certain level of technology literacy for them to successfully complete coursework. Colleges and universities utilize pretesting and other methods to ensure students are technology literate (Hardy & McKenzie, 2020). According to Rapchak et al. (2015), students need skills that enable them to access and navigate the learning management system. To achieve academic success students must be capable of selecting the appropriate information within the school's learning management system to complete coursework (Hardy & McKenzie, 2020; Rapchak et al., 2015; Tang & Chaw, 2016).

Scholarship, Project Development and Evaluation, and Leadership and Change Scholarship

This project assisted me, as a novice researcher, in developing my research, critical thinking, and scholarly writing skills. I have worked for more than 30 years as a print journalist and have received numerous awards from my peers. Yet, I found myself

struggling to write a research study and position paper. Writing a scholarly research project is far different from writing a newspaper or magazine article. For the research study and position paper, I had to find the literature of others to coincide with the thoughts and ideas shared by those interviewed for the project. Finding adequate literature required hours of research and even more hours of analysis and writing. I often had to read articles several times before I could comprehend them enough to paraphrase the authors' opinions adequately to include in the project. Yet, when the research and writing neared completion, I began to appreciate the hard work and learning experience garnered from the project even more. The literature review allowed me to learn about and read peer-reviewed literature related to a specific problem in higher education and the various approaches that can be used to address the problem. Additionally, I understand and value the use of a rubric in coursework and the capstone development process. The detailed guidelines and tips provided in the rubric kept me on track as I worked to complete the project.

Project Development

Developing a project from data collected and analyzed in my research study was a challenging task. While I have written several research papers throughout my collegiate experience, developing a project has never been one of my course requirements. After learning that a research study and project were required to graduate from Walden University's Doctor of Education (EdD) program, I worked diligently to complete each section in the template provided for a qualitative study. When a position paper was

determined to be the best project, I had to carefully consider the findings and pinpoint ideas that could be used as recommended strategies in the position paper.

In conducting research for this project, I collected data that led to several major themes. The themes concluded with five strategies that were presented in the position papers as recommendations for bridging the gap in instructor support of nontraditional students in the use of technology. I discovered that nontraditional students entering college without adequate technology skills is a national problem after (a) interviewing instructors, (b) reviewing guidelines from the *Policy and Procedure Manual for Distance and Electronic Learning*, (c) reading literature from the student success center, and (d) reviewing research articles, books, and other literature related to the research topic. Research literature also revealed that there is limited support for nontraditional students in the use of technology. Heavy workloads and existing and changing job demand require much of the teachers' time, making it difficult to devote as much time to supporting nontraditional students in the use of technology (Daher & Lazarevic, 2014; Salley & Shaw, 2015). The literature review included these and other issues related to instructor support of nontraditional students' technology needs.

A team of people assisted in completing the project. A transcriber was hired to listen to the recorded interviews and transcribe them in Word documents. I received the documents from the transcriber and placed them in a secured file cabinet where they will be stored for up to five years. A peer debriefer and interviewed instructors participated in the member checking process. These people were helpful in my completing a research study that met the criteria established by Walden University.

Leadership and Change

Personal leadership abilities were seriously tested in developing and completing this project. There were several changes in contacts at the study site during my case study. With the introduction of each new contact, I learned the skills of presenting the need for my study at various levels within the organization. I successfully followed up with designated representatives at the study site, and I used various means of communication and was proactive. The senior levels of the college provided advice and guidance to ensure that the study focused on the organization's needs.

As I communicated with various leaders of the organization, I had to improve my leadership skills and make decisions that assisted me in completing the study. My interaction with college leaders and their feedback to me demonstrated that I was serious about completing the project study. Although there were several delays along the way, these delays were not going to block my progress. My options were to start over and choose another site for my research study or take the initiative and do whatever it took to get the administration at the local college to approve my study.

I possess more knowledge and leadership skills than I did four years ago. I can share my experience with my peers and offer advice to help them avoid some of the obstacles I encountered in the early stages of my research study. Additionally, the research study and in-depth data analysis have increased my knowledge in best practice techniques in supporting nontraditional students that are learning to use academic technology. This study has given me insight into what to expect as a community college instructor and the importance of technology skills for both students and instructors.

This study has also given me a better understanding of challenges college administrators face when trying to implement changes in teaching and learning techniques. Assisting instructors in supporting nontraditional students is a challenging task, especially if instructors are hesitant to use technology in coursework. It is hard to get people to change their way of thinking and their teaching techniques, especially if they have spent years teaching their students a certain way. A change in teaching strategy is inevitable if instructors are to provide effective and adequate support to students as they use technology in their college coursework.

Reflection on Importance of the Work

The position paper for this study provides needed information about the support instructors at a local community college provide for nontraditional students who are not skilled in using academic technology that includes the college's learning management system. The position paper focuses on the importance of instructor support and suggests ways instructors can improve or provide much needed support to students who have difficulty using the college's learning management system and other valuable technology. It is essential for nontraditional students to know how to utilize the technology if they are to complete coursework and achieve academic success. The objective was to develop a convenient, yet effective position paper from which instructors can glean and integrate into their teaching strategy. Therefore, this position paper could bring about social change that will be instrumental in the community college in this study, the other 14 colleges in the state's community college system, and colleges across the globe. The position paper provides recommendations to instructors to ensure that the instructors and students are

equipped with resources that can assist them in achieving success in college and the greater society.

Implications, Applications, and Directions for Future Research

Implications

There is consensus among instructors at the study site that instructor support is vital to the success of students who do not possess the technology skills necessary to complete course assignments. Yet, more than one-half of the instructors admitted they had not provided adequate support to those nontraditional students who did not know how to use technology to complete assignments. Instructors considered time restraints as a major contributor to limited instructor support or no instructor support. Although school administrators discussed the school's learning management system and student access and knowledge of the system in professional development sessions, discussions on instructor support of students that did not know how to use the equipment was not a part of the sessions. Also, even though the college's *Policy and Procedure Manual for Distance and Electronic Learning* provided tips and guidelines for student support, not all instructors used or were familiar with the manual.

This project study offers data and research-based findings of ways instructors can adequately support nontraditional students in using technology to achieve academic success. Instructors are presented a documented plan to address the problem of students being ill equipped to complete coursework that requires using technology. The project also allows instructors and college administrators to examine the resources and guidelines

already in place to promote instructor support of students and provides an opportunity for them to express their opinions and offer recommendations for improvement.

Applications

This project study provides significant recommendations to update the college's current instructor and student support system to include a position paper that suggests strategies instructors can use to support students who lack technology skills learn to maneuver the college learning management system. The results and recommendations in the project can be applied to other colleges and universities that experience similar problems.

Directions for Future Research

Limited literature was found on community college instructor support of nontraditional students who are not skilled in using academic technology. Literature generally focused on partial aspects of the research topic, such as nontraditional students and technology and instructor support, which did not address in detail the problem presented in the study. Future research could attempt to study the impact of community college teacher support of nontraditional students that are not adept in using technology for college coursework. Instructors and students could benefit from studies that provide discussions of the problem and recommend proven solutions. The position paper provided with this study entails recommendations for improving instructor support of nontraditional students in using technology based on literature that gave examples of strategies that have proven to work in supporting and assisting students in the use of technology.

Conclusion

The final section of this project study provides a review of the study's findings and reflections of my experiences and perceptions as the researcher. Study findings suggest that participants believed that while instructors support nontraditional students in the use of technology, in many cases the support is not enough to help them successfully complete coursework and achieve academic success. Further findings suggest that instructors believed a collaboration of resources and strategies is the best way to improve instructor support of nontraditional students using technology.

Although instructors seemed to favor collaborating resources and strategies to improve instructor support of nontraditional students using technology, other alternatives for improving instructors' support were suggested. Among the strategies recommended by instructors was the pretesting the computer knowledge and skills of students prior to the start of classes. Three of the nine participants considered pretesting a good way to make sure students know how to use technology before they enroll in classes. Pretesting could be beneficial in that students would gain awareness of what is expected of them in the classroom, while instructors would have an assessment of each student's technology skills which could be useful during the school term. One instructor went a step further by taking students through a 2-week orientation (a) to explain topics covered in the class, (b) what is expected of students, and (c) the basics of using the learning management system.

A review of the support strategies recommended by instructors led to the development of a position paper designed to provide support strategies for instructors and perhaps create dialogue between instructors, students and college administrators about

the problem and the best remediation strategies. The potential dialogue presents an opportunity for social change by offering a detailed plan for instructors seeking a better and effective strategy for supporting nontraditional students as they use technology.

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Appendix A: The Project

Instructional Support of Nontraditional Students Who Are Novice Technology Users

A Position Paper

Based on research, the following recommendations are made to improve instructor support of nontraditional students in using technology at a small community college in the Southern United States. Globally, colleges and universities largely depend on technology for teaching and learning. Students with inadequate skills in using technology, as well as students who have inadequate support from instructors, could face academic failure if changes are not made. Instructors acknowledge the need and importance of supporting nontraditional students but pointed to a bigger problem of increasing numbers of nontraditional students enrolling in college with inadequate knowledge of technology. Assisting and supporting these students became a problem for instructors who tried to address their needs, as well, as the needs of students who were considered tech savvy. However, instructors believe with assistance from college administrators and other resources, instructors could provide sufficient and effective support to novice technology users. To help improve instructor support of nontraditional students using technology, instructors recommended actions that could establish a far-reaching instructor support of nontraditional students using technology.

Charlotte Graham

April 2021

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Instructor Support of Nontraditional Students Who Are Novice Technology Users

Introduction

An increasing number of nontraditional students who are not knowledgeable in the use of educational technology are enrolling in universities and colleges across the United States. For an academic system that largely depends on technology for teaching and learning, students with limited or no skills in using technology, as well as students who have inadequate support from instructors, could face academic failure. This paper (a) focused on recent research at a small community college in the Southern United States, (b) produced findings on how instructors address the problem of novice technology users, and (c) highlighted services and programs the local college has in place to assist instructors in the support of students using technology.

Instructors acknowledged the need and importance of supporting nontraditional students but pointed to a bigger problem of increasing numbers of nontraditional students enrolling in college with little or no knowledge of technology. Assisting and supporting these students became a problem for instructors who tried to address their needs, as well, as the needs of students who were considered tech savvy. However, instructors believe with assistance from college administrators and other resources, instructors can provide sufficient and effective support to novice technology users. To help improve instructor support of nontraditional students using technology, instructors recommended actions that could establish a far-reaching instructor support of nontraditional students using technology.

Defining Instructor Support

Researchers have varying viewpoints of what is considered instructor support. Fryer & Bovee (2016) identifies instructor support as skills or techniques teachers use to help students feel positive about themselves and in control of their learning experience (Fryer & Bovee, 2016). Instructor support is also defined as connecting with and motivating students; providing specific, constructive, and critical feedback to students for improvement; and showing students you care (Milman, 2017). Although it is commendable to provide such moral support to students, instructor support includes more than moral support. Instructor support also involves focusing on the educational needs of students (Burt et al., 2013; Goddu, 2012; Thota & Negreiros, 2015). Hashim (2015) added that when instructors focus on the needs of students, it leads to a better learning environment, as well as, a better learning experience. All study participants at the local college agreed. In fact, Participant 7 said nontraditional students are uncomfortable in the classroom when they first enter class. However, once instructors walk them through the process of using the technology, they become comfortable and are soon ready to submit their first assignment. “When instructors take the time to address the students’ needs by showing them how to use the technology, they realize things are not as bad as they thought,” continued Participant 7.

Hashim (2015) also stated hat instructors should know the characteristics and educational needs of their students well enough to develop learning modules to provide support and encouragement in their learning experience. Hashim added that instructors are role models in educating and encouraging students and developing activities that help

meet the educational needs of students. Some colleges and universities are assisting instructors' efforts to meet the educational needs of students by offering professional development training and providing special classes on how to use the schools' learning management system.

Study participants commended college administrators for providing training and other resources to help them support students in the use of technology. The training that addressed the needs of nontraditional students was considered extremely helpful. "They want to make sure that we're efficient when we have a student come in and requests help," said Participant 9. Strategies recommended to support nontraditional students in using technology included pretesting computer knowledge and skills, encouraging students to practice using technology, advising students to explore Canvas, encouraging the use of YouTube tutorials, and collaborating with others. Instructors contend that although learning and teaching strategies vary, instructors share the concern and need of providing the best support for students using technology. Their recommendations consist of strategies that have proven successful in their personal support of nontraditional students using technology.

Nontraditional Students as Novice Technology Users

The local college's website identified nontraditional students as those who have been out of high school or college for several years and are returning to further their education. When these nontraditional students were last enrolled in school, e-learning or technology-assisted instruction were not an essential part of the educational system. Likewise, the lack of skills and knowledge in the use of technology did not mean the

possibility of failing a course. Now classes consist of either a blend of technology-based teaching and traditional teaching or technology-based teaching only. For students who are novice computer users, the lack of computer skills could result in academic failure (Chen, 2014; Cherrstrom et al., 2019; Diep, et al., 2019). Nontraditional students need the help and support of instructors if they are to succeed.

Establishing Instructor Support of Nontraditional Students

In a recent study, community college instructors discussed strategies they use to support nontraditional students in using technology. Strategies ranged from using the support system the college had in place or develop personal strategies to support students in using technology. The core ideas presented in the project are a result of the data analyses designed to examine the gap in practice between the need of nontraditional students to use technology for their academic success and instructors' support of nontraditional students using technology for their academic success. Research findings showed that although the community college in this study had a *Policy and Procedure Manual for Distance and Electronic Learning*, only two of the nine participating instructors frequently used it. Participant 4 said she uses the manual a lot because she wants to make sure she is on top of things regarding teaching students using technology. "The manual contains everything like adult-based learning, questions people ask regarding technology, and what our procedures are," said Participant 4, noting that the manual has been in place for about two years. "This manual was a great addition."

Participant 6 added that manual is a great resource because when instructors have problems completing a specific task using technology, the manual provides information

on how to complete the task. “The help is there,” said Participant 6. “You just have to utilize it.” Although these two instructors considered the manual to be a great resource, five of the nine participants considered the manual as irrelevant. For instance, Participant 1 said: “I don’t use the manual because none of the information provided is relevant to my class.” Participant 7 added: “I make sure everything I do is appropriate, but I don’t think that there are rules, guidelines and standard procedures that can be followed exactly in every classroom.” While Participant 1 and Participant 7 were among the instructors who considered the manual irrelevant, two instructors were quick to say they were unaware of the existence of such a manual. In fact, although Participant 5 and Participant 8 stated that they were not familiar with the manual, Participant 8 said she “must check it out. It could prove beneficial.” All instructors emphasized the need for instructor support of nontraditional students in using technology to complete coursework. They all expressed a desire to do whatever they could to survive the support needed to help students achieve academic success.

Recommendations

In this study, instructors suggested a variety of ways of supporting students in using technology. Recommendations from instructors included:

- Pretest students entering college for technology skills and provide support based on pretest
- Email existing support guidelines found in the *Policy and Procedure Manual for Distance and Electronic Learning*
- Take advantage of support resources offered at the Student Success Center

- Create guidelines for supporting students with Canvas.

Instructors contend that although learning and teaching strategies vary, instructors share the concern and need of providing the best support for students using technology. Their recommendations consist of strategies that have proven successful in as they support students in using technology.

Pretest students entering the college for technical skills

Three of the nine instructors participating in the study recommended pretesting students' computer knowledge and skills prior to college enrollment. The instructors contend that both students and instructors could benefit from pretests because the pretest students' ability to navigate Canvas. Spicer-Sutton et al. (2014) agreed with the instructors, stating that pretesting is a good way for instructors to assess students' computer skills. Participants 1, 3 and 5 added that pretesting students prior to college enrollment would help students and instructors know what steps need to be taken to guarantee students have the knowledge and skills needed to complete course assignments. Participant 5 noted the importance of pretesting by stating: "If you are a cold turkey on technology, you are going to be lost in your college course." According to Participant 5, pretests can only enhance students' computer knowledge.

Several suggestions were made to enhance computer knowledge of students who may test poorly and are unfamiliar with the Canvas learning management system. Participant 8, who is a big fan of YouTube, said the social media site is an ideal learning resource for students seeking to develop their technology skills and learn how to navigate Canvas. "There are videos on YouTube to teach you anything you would ever want to

know," said Participant 8. "I've even used it to find out how to make minor car repairs." The instructor said she emails students a document that contains several hyperlinks that they can click on to go directly to YouTube for a specific topic. Participant 9 also uses videos to help students learn different computer skills. "We use a lot of resources from the internet, but a lot of times it's just as simple as a hyperlink," explained Participant 9. "As long as they know to click on what's highlighted, they can go right to it." In addition, Participant 9 personally provided videos that showed students how to format documents and perform other skills such as copy and paste and capitalization.

Not all instructors were YouTube or video fans. Participants 1, 3, and 4 suggested that students attend a computer class before they enroll in courses at the college. While Participant 1 and Participant 4 recommended that all new students enroll in computer classes prior to enrolling in courses, Participant 3 argued that only students over a certain age should be required to enroll in computer classes. Participant 3 added that the classes should be done as a mini session consisting of five weeks of classes. The instructor went on to say students have different skill levels and instructors must reach out to help students regardless of their skills level.

Email Existing Support Guidelines Found in the Policy and Procedure Manual for Distance and Electronic Learning

The local college has a *Policy and Procedure manual for Distance and Electronic Learning* that provides tips and guideline for instructors teaching distance learning and electronic learning courses. Although the manual has been a resource tool at the college for about five years, only two of the nine participants used it regularly. Seven of the

participants in the study did not use the college's *Policy and Procedure Manual for Distance and Electronic Learning*, but the two participants who did use the manual found it helpful. The two instructors pointed out that the manual provides valuable information about teaching and supporting students using technology. One instructor reported being a frequent user of the *Policy and Procedure Manual for Distance and Electronic Learning*. "I frequently use the manual because it has a lot of information we can use to improve our teaching skills, especially when it comes to supporting our students," stated Participant 6. "The manual gives us tips and guidelines to use in our online classes." The instructor explained that the manual aids instructors when they need to help students and do not know how. Yet, although the manual provides specific tips and guidelines on how to help students, Participant 6 admitted not adhering to all the manual's directives. "I would be lying if I told you that I have not strayed beyond the borders of just strictly what they say I need to do," stated Participant 6. "In some cases, I found that improvising the guidelines worked best. But the help is there (in the manual) when I need it."

Researchers describe resources, such as the manual, as personal and official documents. McMillan and Schumacher (2010) explained that official documents are any information that describes functions and values within an organization. McMillan and Schumacher noted that official documents also reveal how various people define organizations by providing the official chain of command and information about leadership styles and values. Based on the descriptions provided by McMillan and Schumacher, the school's *Policy and Procedure Manual for Distance and Electronic Learning* falls in the category of official documents. An entry in the manual stated that

the college would continue to develop, modify, and improve support services for students using technology.

Participant 4 also found the manual to be a valuable tool in improving support services for students using technology. The instructor said the manual is used to answer whatever questions arise about assisting students in the use of technology. The manual contains such as adult-based learning techniques and procedures instructors can use to teach and support these nontraditional students. “This is great because you don’t have to call and bug somebody,” Participant 4 proclaimed. “If you are not sure, you just look in the manual and see if you can find the answer for yourself.”

Still, four of the nine study participants considered the *Policy and Procedure Manual for Distance and Electronic Learning* to be irrelevant. Three instructors were unfamiliar with the manual altogether. Participants 5, 8, and 9 said they were unaware the college develop a manual to help instructors that use technology in courses. Participant 8 said the manual sounds like it could be a beneficial resource. Both Participant 5 and Participant 8 said they would seek more information about the manual to see what information would be helpful in assisting students in the use of technology.

Not all instructors considered the manual helpful. Participant 1 said the manual does not provide information related to the classes she teaches. Although the manual provides guidance for any instructor using technology in their classes, Participant 1 and Participant 3 suggested that the manual is basically for online classes. Participant 2 explained that the *Policy and Procedure Manual for Distance and Electronic Learning* is irrelevant because she does not teach distance learning. “I know we do have some online

courses, but we don't use the manual for help. If students have an issue with that, we send them to someone in e-learning," stated Participant 2.

Another instructor said the *Policy and Procedure Manual for Distance and Electronic Learning* is basically for students and does not provide information for instructors, causing instructors to find other resources. Participant 9 said personal assistance is provided to students who express they are having problems using the college's learning management system. If the students continue to struggle after the instructor's personal assistance, the student is then referred to resources such as the student handbook, e-learning handbook or some other individual that can provide more adept assistance.

With differing opinions about the purpose and usefulness of the manual, I suggest that college officials develop a plan to familiarize all instructors with the *Policy and Procedure Manual for Distance and Electronic Learning* and inform them of support tips and guidelines found in the manual. A good way to inform instructors of the manual's existence is to email guidelines that already exist for instructors in the at the start of the term with advice to review it and provide support the first day of class for new learners. This suggestion comes after Participant 9 stated: "I don't use any (information from the manual) because I didn't know that was available. I think that the manual is neat to have and I will have to check it out." Also, Participant 5 and Participant 8 said they are not familiar with the manual and were anxious to find out more about it.

Take Advantage of Support Resources Offered at the Student Success Center

The local college's Student Success Center is one of the resources instructors recommended for students who need help using technology. Brochures, pamphlets, and flyers from the Student Success Center informed instructors and students of the resources the college has in place to assist people with educational concerns, including help and support for those encountering problems using technology. Researchers categorize the literature from the Student Success Center are categorized as official documents and suitable data for research studies because the brochures, pamphlets, and flyers suggest the college's perspective on various topics, issues, or processes (McMillan & Schumacher, 2010). Collected data provided valuable information about how the Student Success Center has services in place to assist students, as well as instructors, as they support students in the use of technology.

Additionally, the Students Success Center has programs in place specifically designed to support nontraditional students. Participant 1 explained that nontraditional students meet in the student success center at 12:30 p.m. each day to receive help with technology and other coursework problems. Participant 9 added that when students' computer knowledge is limited to just turning the computer on and off, they are encouraged to go the student success center for instructions on how to use Canvas and other technology. "When it comes to teaching students the ins and outs of Canvas, I'm no expert," said Participant 9. "I ask the Student Success Center staff for help." Participant 9 expressed that everyone needs a little help every now and then.

The Student Success Center offers free tutoring service for students that may have problems with technology and academic coursework. Participant 9 said students can call and make an appointment for tutoring, explaining their problems and area of need. Tutors are available to assist students in the use of Canvas and other technology, while counselors are on hand to address technology questions and academic concerns.

Create Guidelines for Supporting Students With Canvas

Since Canvas is the leaning management system used at the study site, guidelines are needed for supporting students with Canvas. students should spend time practicing how to use Canvas as soon as they have access to course material. Local instructors reported that novice technology users are not able to comprehend how to use Canvas on their own and need help. For beginners, Participant 8 suggested that instructors should encourage students to explore Canvas before classes start. The instructor posited that this is a good way to make sure students will not fall behind in coursework because they do not know where to find certain links on Canvas. Participant 8 went on to say that for nontraditional students returning to college after a lengthy absence, using Canvas can be "a steep learning curve to try to get around and negotiate the different platforms that assignments are in."

"I want them to know as much as they can about Canvas and how it is used before, they start classes," stated Participant 8. The instructor went on to say that when students launch into Canvas for the first time, they are advised to click on all the links and menus they see.," said Participant 8. Students have email, along with Canvas courses and assignments they must familiarize themselves with. Participant 8 added that there can

be lots of things to do in a course and not knowing where to look for these things in Canvas could lead to difficulty in the classroom and ultimately failure.

Even though instructors shared their personal thoughts and strategies for supporting students with Canvas, they noted that the college does not have official guidelines for supporting students with Canvas. Having such guidelines in place could make it easier for instructors to support students who are having difficulty using technology.

Conclusion

Instructor support plays a pivotal role in the learning and academic achievement of nontraditional students entering college with limited or no technology skills. In community colleges and universities across the globe, completion of assignments and coursework are required to obtain passing grades. Since integration of technology usage is an integral part of curricula at these colleges and universities, instructor support is vital to nontraditional students who are novice technology users. Instructors at the local college provided several recommendations to enhance instructors' support of nontraditional students in using technology. The recommendations included:

- encouraging students to practice using technology
- advising students to explore Canvas
- encouraging the use of YouTube tutorials
- collaborating with others

Instructors and college administrators can use these recommendations to implement strategies or programs to improve the support of nontraditional students in

using technology. This position paper may serve as a catalyst for discussion among the institution's administrators and lead to the implementation of programs or strategies instructors can use to support nontraditional students in using technology.

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Appendix B: Interview Protocol

Prior to Interview

1. Confirm the identity of the interviewee and the time and location of the interview.
2. Develop at least 8 questions for the interview. These questions may prompt additional questions to help clarify or better understand an answer.
3. Ask permission to audio record.
4. Inform interviewee that I will provide a copy of the transcript for clarification and modification.
5. Check digital recorder and extra batteries.

During Interview

1. Formally introduce myself to the interviewee.
2. Thank interviewee for agreeing to participate in the interview.
3. State: The problem I will address in this proposal is the gap in practice between the need of nontraditional students to use technology for their academic success and instructor support in a local community college.
4. State: The purpose of this study is to investigate community college instructors' support of nontraditional students in using technology and problems instructors observed nontraditional students encountering when using the technology.
5. Re-confirm permission to record the interview, assure confidentiality and transcript to be provided.
6. Check digital audio recorder and conduct voice test.
7. Begin interview by asking "why did you decide to become a community college instructor"?
8. Ask: "Have you always had nontraditional students enrolled in classes you have taught"?
9. What, if any differences have you noticed in nontraditional and traditional college students.

Transition to Interview Questions:

As defined by Burt, Young-Jones, Yadon, and Carr (2013) instructor support is skills or techniques teachers use to "empower students to feel positive about themselves and in control of their environments" (p. 45). The research questions being addressed in this study are what problems do community college instructors observe nontraditional students are encountering when using technology in coursework and how do community college instructors support nontraditional students in using technology in their coursework? I will read each interview question to the interviewee and record answers. Some questions may require follow up questions to clarify or better understand responses of interviewees. I will tape throughout the interview. At the end of the interview, I will request for permission to follow up issues by email, telephone, or face to face if the need arises.

Interview Questions:

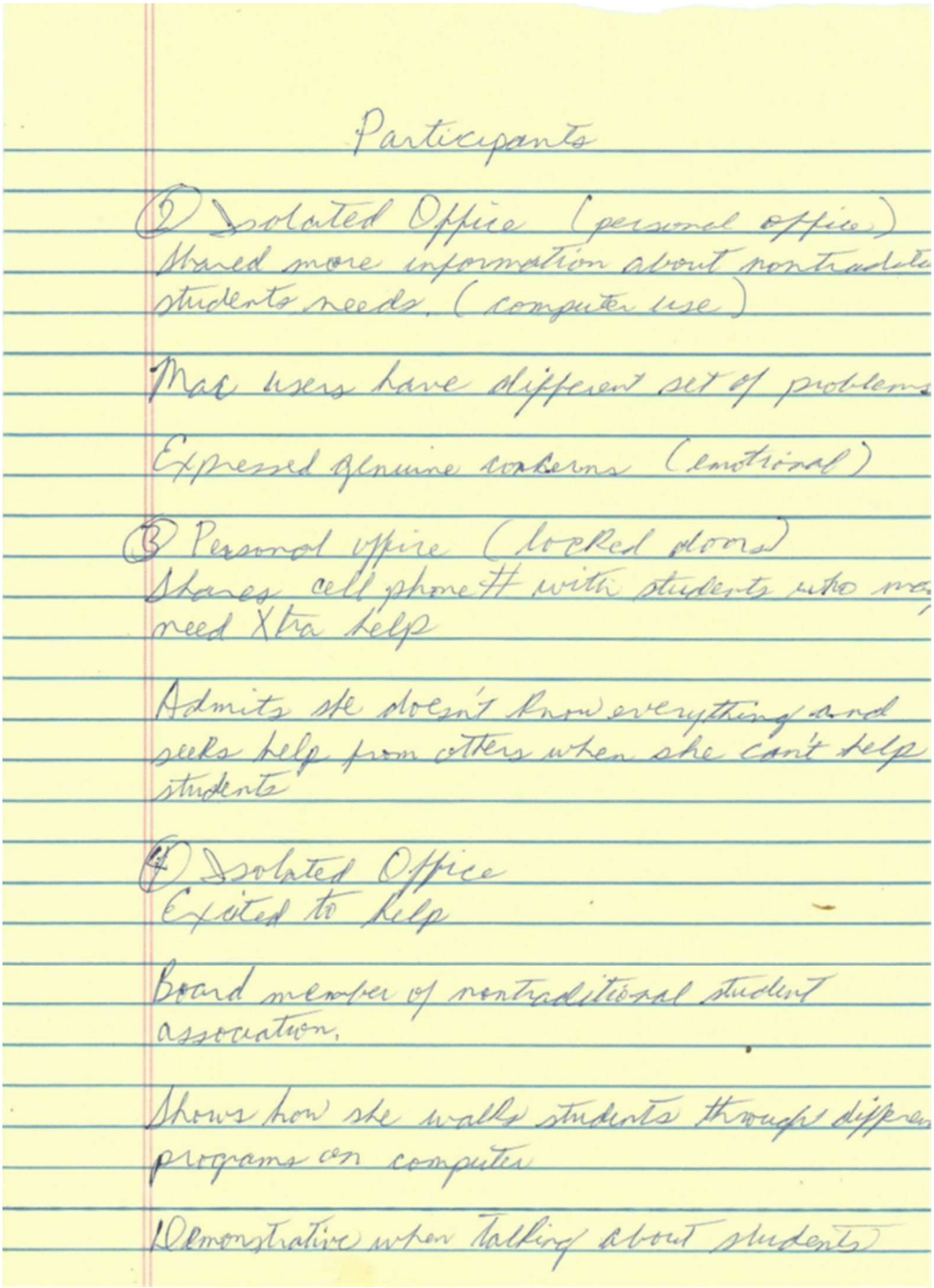
1. What, if any, situation have you experienced when a nontraditional student had difficulty using technology to complete coursework? How did you handle the situation? What were the results of your action?) Can you describe another situation? Another? (RQ1)
2. Describe the plan you have in place to assist nontraditional students who do not have sufficient knowledge in the use of technology to complete coursework? If there is no plan, why not? (RQ2)
3. What would you recommend to make sure nontraditional students can master the school's learning management system (Canvas)? (RQ2)

4. Describe any strategies you use as you need them to assist nontraditional students who do not have sufficient knowledge in the use of technology to complete coursework? (RQ2)
5. How did college administrators prepare you to deal with nontraditional students who may not have adequate skills in using technology for coursework? (RQ2)
6. How much time do you spend helping nontraditional students adjust to using technology? Is any of this time after regular class hours? Explain. (RQ2)
7. What tips or recommendations from the policy and procedure manual for distance and electronic learning do you use to support nontraditional students in the use of technology? If none are used, why not? (RQ3)
8. In what ways does the Nontraditional Student Success Center assist community college instructors in the support of nontraditional students in the use of technology? (RQ4)
9. Describe any strategies you would recommend to better support nontraditional students in using technology in their coursework. (RQ5)

Conclusion of Interview

This concludes the interview. Is there anything we have not talked about that you would like to share? Thank you for agreeing to be interviewed for this study. I will email you a copy of the interview transcripts and notes taken during the interview for your review and verification. I you feel the need to clarify or correct your statement, please do so and note the changes in a return email. I look forward to your feedback and approval to move forward with this project.

Appendix C: Handwritten Notes



Participants

(2) Isolated Office (personal office)
Shared more information about nontradit
students needs. (computer use)

Mac users have different set of problems

Expressed genuine concerns (emotional)

(3) Personal office (locked doors)
Shares cell phone # with students who ma
need Xtra help

Admits she doesn't know everything and
seeks help from others when she can't help
students

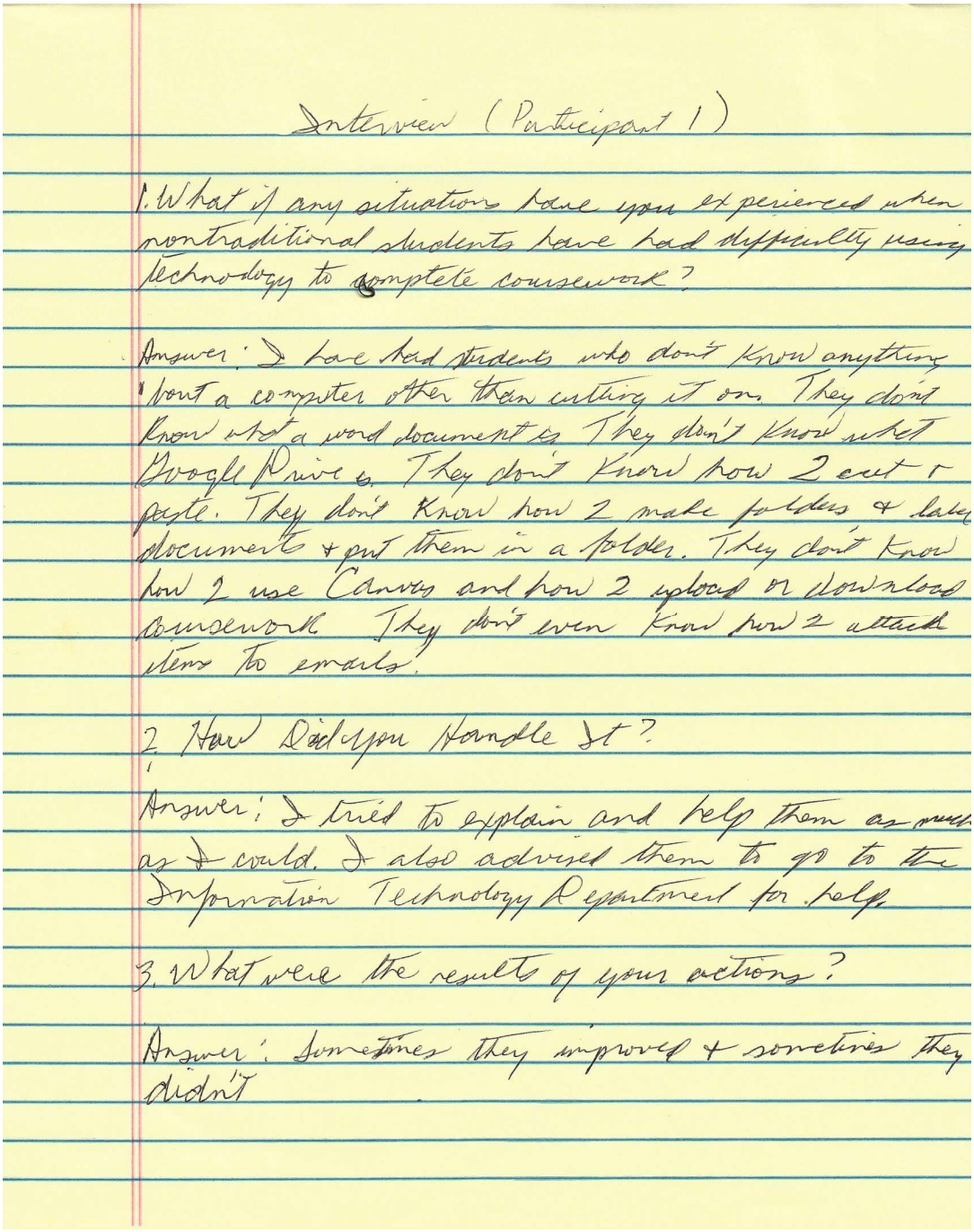
(4) Isolated Office
Excited to help

Board member of nontraditional student
association.

Shows how she walks students through diffe
programs on computer

Demonstrative when talking about students

Appendix D: Interview Notes



Interview (Participant 1)

1. What if any situations have you experienced when nontraditional students have had difficulty using technology to complete coursework?

Answer: I have had students who don't know anything about a computer other than cutting it on. They don't know what a word document is. They don't know what Google Drive is. They don't know how 2 cut + paste. They don't know how 2 make folders & label documents + put them in a folder. They don't know how 2 use Canvas and how 2 upload or download coursework. They don't even know how 2 attach items to emails.

2. How Did you Handle It?

Answer: I tried to explain and help them as much as I could. I also advised them to go to the Information Technology Department for help.

3. What were the results of your actions?

Answer: Sometimes they improved + sometimes they didn't

Appendix E: Sample Transcript

Transcription details:
Date: 27-March-2018
Input sound file: Participant 6- 27-March-2018

Transcription results: [Interview 6]
[background conversation prior to interview]

Interviewer: What, if any, situation have you experienced when a nontraditional student had difficulty using technology to complete coursework? How did you handle the situation? What were the results of your action?) Can you describe another situation? Another?

Interviewee: We live in a rural area and internet access is a big issue. Our campus platform is Canvas and we have a product through ATI (Assessment Technology Incorporated) where they have to do coursework for that and sometimes the internet connection is not good or it will lose their stuff.

Also, not so much now, but a few years ago, maybe 5 to 10 years ago for some of the older students it would just be really difficult for them to pick up the computer skills. But now that has not been an issue much anymore because computers are everywhere, and everyone is using them. We have a computer lab back there where our skills lab is. The college has a computer lab, the library has computers. So we really encourage them now that if you know you have connection problems out in the middle of nowhere where you live, get your stuff done here. We take an opportunity to give them time to get that in. What we do as a department, is respect their time. We know they have a lot to do. I can tell you all kinds of negative about cell phones [laughter]. They are not supposed to have them in class. They don't suppose to take pictures of tests or questions. They know they don't suppose to, but they do because they are students and that's what students do. I don't think so much that they are necessarily trying to get over on us. They are so afraid that they are going to miss something or they think that if I have the picture of this test that it will help me with the final exam or something.

Interviewer: Describe the plan you have in place to assist nontraditional students who do not have sufficient knowledge in the use of technology to complete coursework? If there is no plan, why not?

We have something very special that we call an [redacted]. I named it after one of instructors. She's young; she's my daughter from another mother. She loves technology. It's like we have our own IT person. So, [redacted] will take them at the beginning and tell them how to get into ATI. Most of them already know how to get into Canvas and PeopleSoft. The college gives them good instructions if they just look at them. And if anybody is having trouble one of us goes back there with them and makes sure that they know how to get to something. And if it's something that we can't do, we get [redacted]. But beyond that, again the computer lab across campus, they are good to help them.

Generally, if our students are having difficulties, they are finding that it is something that people across campus as a whole are having problems with. For example, a couple of weeks ago we got an email about how to do this on Canvas to be able to see your schedule and your grade and things. It was just for everyone on campus. I suspect there may have been a couple of questions by someone they were trying to help. They are good to put out tutorials and instruction sheets with pictures and screen shots so that they can go back and make their way through it. Here, there is no good reason for someone not to be able to utilize the technology because there is help everywhere. If we can't do it, we can find somebody who can. But they have to let us know if they are having problems.

Interviewer: What would you recommend to make sure nontraditional students can master the school's learning management system (Canvas)?

Interviewee: We have a coaching system. Where your first-time students can coach. It doesn't matter if they are 18 or if they are 28. So, it means that somebody is watching their grades. Everybody has an advisor. We go to an advisor we go over their schedule and put it in for them. We look at their grades. We hopefully find out what kind of responsibilities they have that is either helping to be successful or that's preventing them from being successful. For example: here, if we have a student that is not as successful in our program, my director likes to leave them with an idea of where they might be effective. Where do they go from here? What is it that you have that you can do. Can you apply what's out there available to you? Sometimes people just don't know what to do, which way to go.

Interviewer: Describe any strategies you use as you need them to assist nontraditional students who do not have sufficient knowledge in the use of technology to complete coursework?

Interviewee: Whoever can help them, helps them.

Interviewer: How did university administrators prepare you to deal with nontraditional students who may not have adequate skills in using technology for coursework?

They make sure we know how to utilize the tools that we have. And if you have difficulty, they give us help. At least once a year they tell us what's new on Canvas because, you know, everything changes so quickly. If you have any difficulty, just pick up the phone and call different people. There are the IT people who want to keep everything up and running and then there are the computer folks who take care of the eLearning folks. So, if you really don't understand something, they make sure that you know how to use it.

Interviewer: [crosstalk 00:8:42] How much time do you spend helping nontraditional students adjust to using technology? Is any of this time after regular class hours? Explain.

Generally, not a lot. I try to send them to someone who can help them. I do find that when they say "I don't know how to do this" or "I don't know how to do that," there is always someone in there that says "I know how to do that and I'll show you how to." But our students are here all the time. They don't go to different classes, they are here all the time. They are here together all day, so they form like a little family group. They help each other.

Interviewee: What tips or recommendations from the policy and procedure manual for distance and electronic learning do you use to support nontraditional students in the use of technology? If none are used, why not?

I use it all the time. When you need to do something and you can't do it, they'll tell you how to do it. Now I would be lying to you if I told you I had strayed beyond the borders of just strictly what I need to do, but it's there. The help is there. You just have to utilize it.

Interviewer: In what ways does the Nontraditional Student Success Center assist community college instructors in the support of nontraditional students in the use of technology?

They offer counseling services. If you have a student who is struggling with something and you feel like they would benefit from a couple of counseling sessions that's a free service to them. They help them with testing. I think they do an ACT Prep. They help them get registered. They do a lot to help the nontraditional students. You have lot of people say I've been out of school five to 15 years, you know. It's a big step coming back

and they kind of ease them into the college a little bit. They give them a little extra support. You know, you don't have to do everything yourself. You don't have to think of everything yourself. We will help you because we know it's a big step.

Interviewee: Describe any strategies you would recommend to better support nontraditional students in using technology in their coursework.

I think the hardest problem is keeping up with all of the machinery. You know funding is always an issue. It's not a complaint, it's not a criticism, but if I could change anything, if I won the lottery tomorrow, I would make sure all of the equipment was up to date, well prepared. They do the best that they can do.

We want to see the students succeed because if they succeed, the college succeeds and the community succeeds. The community benefits because that's somebody else that can get out, that can work. When they get a job, they can pay taxes. It just all comes back.

Appendix F: Letter Requesting Member Checking

Dear _____:

Thank you for agreeing to participate in my research study. Please see the attached document which contains the initial data analysis from your participation in data collection for my study. I have entered codes to the right of your comments to note emerging themes from your comments, as well as from the comments of other participants. The emerging themes helped me decipher findings used to complete the project section for my study.

Please review the information and if you have any concerns or questions, please reply to me via email at charlotte.graham@waldenu.edu. If you have no concerns or questions from the comments recorded from your interview session, please let me know as well. All feedback is welcomed.

Again, thank you for your participation in my research study.

Charlotte Graham

Doctoral Student
Walden University

Appendix G: Member Checking Document

Participant 4

Research Questions	*Response*	*Codes*	*Emerging Codes*
1. What problems do community college instructors observe hat nontraditional students are encountering when using technology in coursework?	They are not familiar with using a computer, don't know how to upload to Canvas, have fears about using technology.	Problems using a computer Problems uploading to Canvas Fears of using a computer	Fear of using a computer Unfamiliarity with Canvas Lack of Internet Access Lack of basic computer skills
2. What support do instructors provide to nontraditional students in using technology?		Provide computer lab help to students Help students with Canvas Help students with Gmail Provide individual help after hours	Provide tips and guidance to students Refer students to additional resources Assist students with Canvas and Gmail use Provide individual help to students Provide supply list of needed resource material and required computer skills

Appendix H: Tracking Form

Tracking Form

RQ1: What problems do community college instructors observe nontraditional students are encountering when using technology in coursework?

Participant	*Response*	*Coding*
1.	Don't know much about Word documents, don't know what Google Drive is, don't know basic computer skills, don't know how to use Canvas	Problems using Word Problems using Google Drive Problems using Canvas
2.	Don't know how to **use a laptop**, don't know how to **use Microsoft Office**, don't know how to **upload papers onto Canvas**	Problems using laptops Problems using Microsoft Office Problems uploading to Canvas
3.	Don't know basic technology skills, don't know anything about **using a computer**	Problems using a computer
4.	Are not familiar with **using a computer**, don't know how to **upload to Canvas**, have **fears about using technology**	Problems using a computer Problems uploading to Canvas Fears of using a computer
5.	Difficulty **uploading to Canvas**	Problems using Canvas
6.	They live in rural areas with **limited Internet access**	Lack of Internet acces
7.	**Uncomfortable using technology**	Problems using a computer
8.	Unfamiliarity with **educational technology**	Problems using Canvas
9.	Unfamiliarity with **educational technology**	Problems using Canvas

Appendix I: Tracking Log

Tracking Log

Participant	*RQ 1 Code*	*RQ 2 Code*	*RQ 3 Code*	*RQ 4 Code*	*RQ 5 Code*
1.	Problems using Word Problems using Google Drive Problems using Canvas	Provide typed material list to students Encourage peer partnering Spend 15 minutes providing individual help	Irrelevant	Provide daily student help sessions	Recommend pre-testing students' computer skills
2.	Problems using laptops Problems using Microsoft Office Uploading to Canvas	Refer students to IT for help Suggest students enroll in an orientation class Refer students to departmental instructors for help Spend 2 hours to provide individual help to students	Irrelevant	Irrelevant	Receive help from programs and staff
3.	Problems using a computer	Recruit help for students Spend an hour a month to provide individual help	Irrelevant	Irrelevant	Require students to take computer class Pre-test students' computer skills

Appendix J: Sample Student Success Center Flyer

STUDENT SUCCESS CENTER

Need help with transferring, tutoring, advising or counseling? Contact us @ [redacted] or visit us in the Student Success Center. The Student Success Center (SSC) is your one-stop resource for information and student support.

The friendly staff at the SSC are available throughout the week to assist incoming freshmen, transfer students, graduating students, and non-traditional students by offering the following services: Registration Assistance Class Scheduling, Academic Advisement and Support, Personal Counseling/Transitioning to College Career, Development Support Tutoring Library and Media Services, Non-traditional Student Assistance, and University Transfer Assistance. Stop by and visit us on the first floor of the library or contact our staff to make an appointment. Your success is important to us!

Student Success Center Mission: The student success center will work with students to help define, clarify, and achieve academic, personal, and professional goals.

Appendix K: Materials and Supply List

Materials and Supplies:

You will need a Personal Computer with Windows 10 operating system and at least a 15- inch screen. Unfortunately, Chromebooks, Macbooks, netbooks, cellphones, and other small devices will not work for this class. This class uses **Microsoft Office 2013, 2016, or Office 365.** Older versions like Office 2007 and 2010 will NOT work.

You can get software FREE, Simply login to this Website---https://login.microsoftonline.com/- with your [redacted] username and password. You can download Office 365 to 5 devices.

Appendix L: Evaluation Form

Evaluation of Position Paper

Title: Instructor Support of Nontraditional Students Who Are Novice Technology Users
Presenter: Charlotte Graham

Please answer the questions regarding the position paper and findings. Detailed and honest responses to the questions are greatly appreciated. Feel free to request additional paper to provide answers if necessary.

1. Did you find the subject matter to be interesting and informative? Why or why not?

2. Where you aware of the problem addressed in the position paper prior to the presentation of the document? Explain.

3. Do you agree with the findings addressed in the study? Explain.

4. Answer Yes or No. Do the recommendations effectively address instructor support of nontraditional students who are novice technology users?

5. What recommendations do you agree or disagree with?

6. How helpful are the instructors' recommendations address instructor support of nontraditional students who are novice technology users?

7. Are you surprised by any of the findings or recommendations found in the position paper? Why or why not?

8. Should the college consider implementing the recommendations of the instructors regarding instructor support of nontraditional students who are novice technology users? Explain.

9. If implementation of the recommendations is improved, what is your suggested timeline? Why?

10. What suggestions would you give the author as a way of improving the position paper?