Walden Dissertations and Doctoral Studies

2018

Confidence in the Use of Technology of Low-Income First-Year College Students' Retention

Irene Marie Hudson
Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Part of the Educational Administration and Supervision Commons, and the Instructional Media Design Commons

Walden University

College of Education

This is to certify that the doctoral study by

Irene Marie Hudson

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Scott Mertes, Committee Chairperson, Education Faculty
Dr. Jennifer McLean, Committee Member, Education Faculty
Dr. Laura Siaya, University Reviewer, Education Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2018

Abstract

Confidence in the Use of Technology of Low-Income First-Year College Students'

Retention

by

Irene Marie Hudson

MA, Strayer University, 2008

BS, Morgan State University, 2005

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Higher Education Leadership

Walden University

June 2018

Abstract

Compared to their peers, low-income students are 90% less likely to graduate within 6 years and are more likely to drop out. At the local site, this problem is also evident in that the retention rate for the Fall 2014-15 cohort was 78.3%, but just 60.2% for those defined as low-income students. The purpose of this study was to gain a better understanding of low-income 1st year college students' perceived confidence in their use of technology and how it influenced their decision to stay in college. Understanding the role technology plays in the decision to stay in college will shed light on ways to offer support to increase retention of these students. The conceptual framework that guided the study was Bruno's confidence based learning methodology. This framework suggests there is a connection between knowledge and confidence. A qualitative descriptive design was used collecting data through a series of 10 open-ended interviews with low-income 1st year college students. The central research question explored how low-income 1st year college students describe their confidence in the use of technology as a factor in their retention. Data analysis consisted of manual coding to identify themes from the interview data. The findings suggested low-income 1st year students do not have confidence in their ability to use technology and remain in college. A policy recommendation to reinstate the information literacy policy for low-income 1st year students could affect social change as additional resources help to raise low-income 1st year college students' confidence using technology and supports them to persist in college.

Confidence in the Use of Technology of Low-Income First-Year College Students'

Retention

by

Irene Marie Hudson

MA, Strayer University, 2008

BS, Morgan State University, 2005

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

June 2018

Dedication

God is the leader and header of my life. I had to keep the faith as a result of all of the obstacles I faced along the way. This dissertation is dedicated to my family who supported me throughout this awesome journey. Their love and encouragement are what kept me inspired and motivated to complete the project. I would also like to dedicate this work to all of my fellow administrators who might benefit from this project.

Acknowledgments

I would like to acknowledge several extremely important individuals. My Doctoral Chairs, Dr. Scott Mertes and Dr. Jennifer McLean, and the University Research Reviewer, Dr. Laura Siaya, for their endless push, dedication, support, and encouraging me to focus on the end goal, to never give up, and cross the finish line. Your well-timed feedback allowed me to realize there was an emerging light at the end of this tunnel. I would like to thank you especially and all who were instrumental in me remaining focused and determined to complete this work.

Last but not least, I would like to thank my late grandmother, Constance Scott, for instilling in me a tenacious attitude, family, and friends for providing never-ending love, support, and encouragement that I certainly needed to believe in myself. For this journey, my focus and dedication have been to accomplish this dream. Thanks, hubby for the numerous venting sessions. Your constant prayer and advice allowed me to regroup and continue to write numerous times. My loving husband and family I really appreciate you for always being there for support, specifically for understanding the difficulties and time that this degree took. Darryl Hudson, Sr., my four children, Darryl Hudson, Jr., Shaneece Gaines, Marquis Hudson, and Jocelyn Hudson, my son-in-law Kevan Gaines, and my grandchildren, Devan, Dorian, and Cameron, my dog Lexi, this is for you for allowing me to follow my dream of completing a doctorate. You were the foundation that kept me strong to finish this journey. For that, I love you all!! A special thank you to Dr. Darrien Davenport and Dr. Pamela Gunter-Smith who believed in me and inspired me to take on this unbelievable journey.

Table of Contents

List of Tables

List of Figures

Section 1: The Problem

The Local Problem

Low-income first-year college student retention is a significant issue today, particularly regarding the financial impact attrition may cause for institutions; therefore, the need to retain students is important (Mangan, 2015). Aljohani (2016) found that institutions need to address retention by identifying policies, systems, and strategies based on research to help deal with their retention challenges. Thieman and Cevallos (2017) reported that low-income students often experience limited access to technology. This lack of familiarity with technology used in college settings may pose barriers to low-income first-year college students' retention. This study will be the first at the Institution Y to address whether retention issues of low-income first-year college students is related to their perceived confidence in their use of technology, and how it might assist them to remain in college.

There is a gap in practice because retention of low-income first-year college students has not been studied at Institution Y. Therefore, this qualitative descriptive study is unique and necessary. The current study could be used at the local level to ascertain whether low-income first-year college students' perceived confidence in their use of technology assists first-year to second-year retention. Additionally, given the local level challenges of keeping students enrolled in college, this study will offer new perspectives on how to potentially combat retention challenges, specifically for low-income first-year college students (see Baéz, Rodríguez & Suarez-Espinal, 2016).

The local site, a private not-for-profit liberal arts college in Central Pennsylvania, serves a small percentage (26%) of students who are considered low-income as determined by their eligibility to receive a Federal Pell Grant (C. Williams, personal communication, June 30, 2016). An administrator in the Office of Institutional Research confirmed that the first-year to second-year retention rate for the Fall 2014-2015 cohort was 78.3%. However, at the same institution, first-year to second-year retention rates of those defined as low-income was only 60.2% (S. Gilmore, personal communication, November 13, 2017). Low retention means a financial loss and a sense of failure for both students and the institutions (Rudd, Budziszewski, & Litzinger, 2014). These data demonstrate that there is a local problem with low-income first-year college student retention at the institution under study (Institutional Research Data, 2014). As a result, low-income first-year college students are more likely to quit following their first-year at the institution (Institutional Research Data, 2014).

The provost and dean of academic affairs have made retention a top priority for the institution and by establishing the Student Success Division (J. Landau, personal communication, November 3, 2017). Leadership has also built retention goals into the college's long-range strategic plan and retention has been discussed at Academic Senate meetings. The associate provost of the Student Success Division affirmed that there are college-wide initiatives in place to address retention challenges (J. Landau, personal communication, November 3, 2017). One way the institution is combating the retention obstacle is with the launch in the fall of 2017 of a pilot program using Hobsons Starfish Student Success and Retention Management System. However, the college-wide

retention initiatives do not target specific subcategories of students such as low-income

first-year college students (J. Landau, personal communication, November 3, 2017). As a

result, there is a gap in practice with no initiatives in place at the institution that targets

the students most at risk of dropping out within their first year, which are low-income

first-year college students (J. Landau, personal communication, November 3, 2017). The

lack of retention initiatives specifically for low-income first-year college students at

Institution Y is what prompted the study. Institution Y refers to a four-year not-for-profit

liberal arts college located in Central Pennsylvania.

This study will be the first at the Institution Y to address whether retention issues

of low-income first-year college students is related to their perceived confidence in their

use of technology, and how it might assist them to remain in college. Thieman and

Cevallos (2017) reported that low-income students often experience limited access to

technology, which creates a lack of familiarity with the kind of technology used in

college settings and poses barriers to low-income first-year college student retention.

Board (2016) found that retention is an issue and affirmed 90% of low-income students

are less likely to graduate within 6 years, are not familiar with unknown curriculum

expectations such as using new technology, and do not know how to practice good

learning. The chief information officer is also concerned about the lack of technology

confidence and the impact it will have later on students. Currently, if a student needs

technology assistance during the academic year, the procedure is for them to request a

tutor from the Academic Success Center. Most often the Academic Success Center is not

able to provide a knowledgeable tutor or faculty for the student; therefore, the student has

turned away with no assistance. This indicates that there may be a gap in low-income first-year college student confidence in their use of technology needed to assist them to be successful in college during their first-year. The chief information officer and director of client services believed that confidence in using technology could be an issue with low-income first-year students and might be related to retention. Additionally, they affirmed that the college does not emphasize the need to increase confidence in using technology, which is critical for success in the first-year of college. The chief information officer affirmed that low-income first-year college students lack confidence in using the variety of technology needed to complete their assignments. Moreover, the chief information officer supports this qualitative descriptive study, is interested in learning the results, and understands that this is the first research of its kind at Institution Y to address retention issues as they relate to confidence in using technology.

For many years now, low-income students have been less likely to enroll in postsecondary education because of the obstacles they face and are least likely to be retained in college because of the same challenges (Thayer, 2000). Cox (2016) found that many of the low-income first-year college students face a variety of complications to meet college expectations. Additional studies showed that low-income students might not have the confidence to use resources such as technology effectively during their learning practices; however, repeated exposure to technology will increase student confidence (Ng'ambi, 2013, Smith & Chipley, 2015). Mouza (2008) discovered that access and limited usage of technology are challenges for low-income students. Furthermore, while not directly related to confidence, students in general, enter college with a

misunderstanding of how to use computers in academic settings, which could affect retention (Mertes & Hoover, 2014).

Several researchers have stated that low-income first-year college students might not have returned because of limited access and usage of technology and might not know how to use technology effectively for academic success. According to the chief information officer at Institution Y, little technology is introduced during new student orientations. The administrator further asserted that the low-income first-year students at Institution Y lack confidence in using the variety of technology programs needed to complete assignments (I. Yakovlev, personal communication, December 15, 2017). Eichelberger and Imler (2015) found that college students have trouble with creating messages using Gmail and struggle with using programs to forward documents. Additionally, Ng'ambi (2013) found that some students might not know how to use technology effectively to remain in college, and Mertes and Hoover (2014) suggested that college students might not understand how to use technology efficiently for academic-related activities. Low-income students experience limited access to technology (Thieman & Cevallos, 2017), which can prevent their retention. Student participation in technological activities might be necessary to positively affect a student's ability to increase confidence, grades, retention, and persistence (Perez, Lopez & Ariza, 2013), meaning a lack of familiarity with technology can affect retention As suggested by several scholars including Tongdee et al. (2017), Billings and Mathison (2012), Ng'ambi (2013), and Perez et al. (2013), the lack of confidence in the effective use of technology might cause barriers for low-income first-year college students to remain in college.

An overview of the project study at the Institution Y is included in this section. The purpose of this qualitative descriptive study was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college because a problem with retention exists at the local level. In this section, I also describe a review of the literature, definitions, the significance of the study, and implications are described in this section.

Rationale

The purpose of this qualitative descriptive study was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college. The U.S. Department of Education encourages higher education institutions, at their local level, to develop federal and state partnerships to study effective retention services to keep students in college (Dervarics, 2009). Moreover, the Urban Institute Education Policy program urges higher education institutions to examine federal and state partnerships to study trends and effective financial services to assist students to remain in college (Baum, 2017). The chief information officer at Institution Y believed that a potential issue for low-income first-year college students is that they enter college with a lack of confidence in using the variety of technologies needed to complete assignments. He trusted that this qualitative research study is necessary, the data would be valuable, and is interested in learning about the results found in this study (I. Yakovlev, personal communication, December 15, 2017). While a specific cause has yet to be uncovered, this local level retention problem could be a matter of low-income first-year college students not having

the confidence to use technology effectively during their academic career to remain in college. College students need technology knowledge to complete assignments such as word processors, database programs, web browsers, development tools, and communication programs (Richards, 2016).

Though technology improves student educational opportunities, students who are low-income and first-year are less likely to participate in these opportunities and use the software on their computers compared to other subgroups of first-year college students (Grundmeyer, 2012). At Institution Y, the information literacy course that was previously required for first-year students no longer exists under the new general education reform that went into effect Fall 2015 (D. Myers, personal communication, December 8, 2017). Moreover, the director of institutional effectiveness affirmed that the former information literacy course was eliminated and not necessary because it was believed that in theory, the technology skill literacies are better taught and integrated within the context of course content. The decision was made to eliminate the stand-alone course by the General Education Adhoc Committee and Library Services (C. Crimmins, personal communication, January 10, 2018). In making this decision, the needs of low-income first-year college students were not considered (C. Crimmins, personal communication, January 10, 2018).

The information literacy course previously mandated for incoming freshmen students is no longer offered as a result of a general education reform and the development of a first-year experience program (D. Myers, personal communication, December 8, 2017). Additionally, there are no preassessment technology skill

measurements in place to assess low-income first-year college student technology abilities, where potential problems with retention might be identified (D. Myers, personal communication, December 8, 2017). It is believed that retention rates went down as a result of this elimination and a technology course for low-income first-year college students is valuable, especially with the variety of technology literacies incoming freshmen need to know to succeed in college today (I. Yakovlev, personal communication, December 15, 2017). This qualitative research study is the first at Institution Y to include the study of retention as it relates to technology. If problems are identified in the self-reported perceptions of low-income first-year college students' confidence in their use of technology that assist them to remain in college, it would indicate some policy changes and interventions would be necessary at the local level to ensure retention among low-income first-year college students.

Although there is no shortage of research related to student retention, one variable that is gaining increased attention is the role of technology. At the institution in this study, the Student Success Division found student retention to be a huge concern and have launched a campus-wide initiative in the fall of 2017 to raise student retention rates (J. Landau, personal communication, November 3, 2017). Tuckman and Kennedy (2011) proposed that the use of technology might have an impact on confidence and retention of first-time college students. Additionally, Tongdee et al. (2017) found that using technology improves student learning and has an impact on their confidence and ability to achieve; therefore, technology can impact retention. Furthermore, confidence in using technology as academic support might have a positive impact on retention (Billings &

Mathison, 2012). Meer and Chapman (2014) found that confidence is necessary for enhancing student retention, which means that it is possible that low-income first-year college students' confidence in the use of technology might assist them to remain in college.

Institution Y serves a small number of low-income students. During the 2014-15 academic school year, 26% of the 5,100 students served were declared low-income as a result of their eligibility to receive a Federal Pell Grant (Financial aid office, unpublished data, 2015). Low-income students at Institution Y are considered a disadvantaged student population based on their eligibility to receive a Federal Pell Grant (Financial aid raw data, 2016). The Financial Aid Office defined low-income student need as the difference between the cost of attendance and the Expected Family Contribution (EFC), as determined by the Federal Application for Federal Student Aid (C. Williams, personal communication, June 30, 2016). Moreover, the most disadvantaged low-income student populations are those with an EFC up to $5,157 (C. Williams, personal communication, June 30, 2016).

The college's retention subcommittee had many discussions about low retention rates on the college campus. Low retention is considered one of the most thought-provoking matters in higher education today, and this problem causes some institutions to struggle with budget pressures and revenue potential (Mangan, 2015). Because of the seriousness of low retention rates, Institution Y has formulated retention committees, initiatives (such as creating a first-year experience program and a writing studio course), and implementation teams to solve retention issues (Bridge to Success, unpublished raw

data, 2013). The initiatives were designed to increase student enrollment, to understand the barriers student's face to remain in college and to provide intervention recommendations (Britton, 2012).

Additionally, the college hired a higher education consulting service to provide a retention analysis and best practices review. The retention analysis and best practices review results provided recommendations on ways to improve retention, address student-related barriers that might impact their retention, establish campus-wide opportunities to study, and address identified retention issues. Moreover, based on the recommendations, goals were established to raise first-year to second-year retention rates to 80% over a 5-year period, but this overall goal does not target subgroups of students such as the low-income first-year college students specifically (C. Seaquist, November 13, 2017).

Marsh (2014) asserted that there are institutional factors and characteristics that affect student retention and higher education institution campuses must find ways to tackle retention challenges. One way to address retention challenges is the access to technology, especially because it is an added benefit to increasing literacy and student learning (Wamuyu, 2017). Students are encouraged to deepen their understanding and integrate their technology with in-class learning (Vajravelu, & Muhs, 2016). Because the retention issue in higher education must be addressed, Tuckman and Kennedy (2011) found a variety of learning strategies for using technology to increase student learning and retention. The use of technology, better thinking, and doing well yields better results for college students (Tuckman & Kennedy, 2011). Ng'ambi (2013) found emerging technologies to transform learning in higher education if used effectively. Black and

Lassmann (2016) found that confidence in using technology as academic support has a positive impact on student success such as retention. Hence, further review of the role of confidence in the use of technology of low-income first-year college students is necessary.

Researchers Rudd et al. (2014) stated that low retention and persistence continues to be a problem throughout higher education, which creates a loss to the institution. This high rate of student loss causes financial problems for students and symbolic failures for institutions, costing U.S. educational institutions billions of dollars per year (Rudd et al., 2014). Draper (2002) discussed that colleges and universities must be innovative in their strategic, curriculum, and programming efforts to combat academic and financial loss. To combat the financial loss and student retention challenges, colleges are encouraged to develop retention models and find meaningful ways to academically integrate their students to increase retention rates (Hongwei, 2015). Because low-income first-year college students are faced with so many factors that influence their retention, a singular cause has yet to be identified (D. Creagh, personal communication, March 27, 2018). As a result, the purpose of this qualitative descriptive study was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college.

Definitions of Terms

Key terms are used in this research study and are defined in this section:

Confidence: What lies within the power of the student to inspire success, outcomes, which is influenced by motivation (Kim, Newton, Downey, & Benton, 2010).

First-year student: A student who has completed less than the equivalent of 1 full year of undergraduate work, which is less than 30 semester hours (in a 120-hour degree program) or less than 900 contact hours (https://budget.psu.edu).

Low-income students: The Financial Aid Office defined low-income student need as the difference between the cost of attendance and the EFC, as determined by the Federal Application for Federal Student Aid (C. Williams, personal communication, June 30, 2016). Moreover, the most disadvantaged low-income student populations are those with an EFC up to $5,157 (C. Williams, personal communication, June 30, 2016).

Retention: Student staying in school and returning the following semester to continue their education until the degree requirements are complete ("The Condition of Education," 2012). Part-time or full-time students who drop out for a term but come back would be considered retained.

Education technology: The use of technology within educational curricula as a supplemental tool to add in the development of knowledge and to transform teaching and learning. Such technologies can include computers, interactive games, videos, one-to-one computers, IPads, online textbooks, electronic tablets, college learning platforms, calculators, Internet, e-mail, software, and application tools. These technologies represent only a small subset of viable education technology tools (National education computing conference, June 24, 2008).

Technology application skills: Knowledge and expertise in the usage of technology programs designed to perform a specific function directly for the user.

Examples of technology include word processors, database programs, web browsers, development tools, and communication programs (Richards, 2016).

Significance of the Study

The purpose of this qualitative descriptive study was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college. After discovering the role of confidence on retention, policies can be developed at the local level to support and address those issues, such as reinstating an information literacy policy. Identifying a problem in the self-reported perceptions of low-income first-year college students' confidence in their use of technology that assists them to remain in college can indicate that some policy changes are necessary at the local level. An initial step would be to develop a clear policy to guide subsequent programs and resources for low-income first-year college students to increase their confidence, use of technology, and retention. Even if problems are not revealed, the policy recommendations and perceptions from the students can be used to improve programs that might already be working well to help low-income first-year students remain in college.

This research project is unique because it addresses the role of confidence in using the technology of low-income first-year college students in the college examined in the study—an issue that to this point has not been addressed at the institution. The results and identified themes from this research study can provide a much deeper understanding of the role of low-income first-year student confidence in the use of technology and the role of confidence in using technology has on retention. Moreover, to support assessment

efforts, college instructors will benefit from providing more opportunities for technology access for students, which can increase their confidence (see Blachowicz et al., 2009) when enrolled in college as well as retention rates.

Today, with declining high school class sizes, retention becomes even more important because there are fewer students attending college. For example, dropout rates for 16-24-year-olds account for 2.6 million high school students who do not obtain a high school diploma (Stark, Noel, & McFarland, 2015). Dropping out, whether it is high school or college, is significant because declining retention rates have profound social and economic consequences (Christle, Jolivette, & Nelson 2007). Alexander, Entwisle, and Kabbani (2001) found that dropping out of school is an impulsive action; however, it is a complex social problem that creates low-income for students, as well as grade retention, academic difficulties, and failure.

Research Question(s)

Research questions are valuable to frame the research study. The research question for this qualitative descriptive study was "How do low-income first-year college students describe their confidence in the use of technology as a factor in their retention?" Little research has been conducted on the issue of what low-income first-year college student's perceptions are of confidence in their use of technology to remain in college, which means that there appears to be a gap in the literature. The purpose of this qualitative descriptive study was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college.

Review of Literature

Conceptual Framework

This qualitative descriptive study was based on Bruno's confidence-based learning (CBL) methodology. Bruno (1993) contended that there is a link between knowledge, confidence, and behavior. Bruno's methodology addressed CBL as an effective method for increasing knowledge and confidence that allows learners from different specialties to achieve mastery in topic despite varying levels of baseline knowledge. As such, the CBL methodology is used to suggest that those who lack confidence in their knowledge may be hesitant to act and be more apt to make poor decisions, express doubt, or hold erroneous beliefs (Bruno, 1993). Bruno's CBL methodology is unique and researchers use this method to discover ways to address issues with confidence and knowledge retention (Adams & Ewen, 2009).

Bruno (1995) examined the problem of confidence and knowledge, finding a way to measure both. Bruno's research findings led to the invention of the confidence-based assessment and learning methodology formally the information reference testing (IRT) model. Figure 1 illustrates the CBL quadrant, which demonstrates how Bruno's methodology gauges both the knowledge scale and confidence metric to verify the material excellence of a student then divides the knowledge appropriately into all quadrants (Adams & Ewen, 2009). Moreover, Bruno's CBL quadrant includes two approaches. First, the model is used to recognize student confidence of knowledge as a vital component, specifically when having to describe a student's knowledge of the topic or information retention (Adams & Ewen, 2009). Secondly, the model includes a method

to examine, score, and understand the test results that assess the confidence a student has

in the material and the accuracy of their response (Adams & Ewen, 2009).
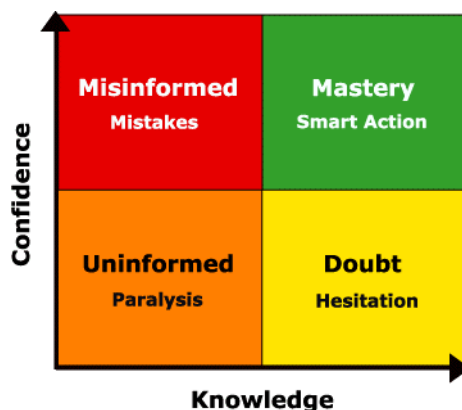
Figure 1. Bruno's confidence based-learning quadrant (Adams & Ewen, 2009).

Bruno's CBL methodology was based on earlier research conducted by Darwin

Hunt, Dieudonne LeClerq, and Emir Shuford. These researchers believed that there was a

connection between knowledge and confidence. However, it was Bruno who combined

the knowledge from the researchers to make it probable for knowledge and confidence to

be measurable (Bruno, 1993).

Bruno's CBL conceptual framework relates to the study approach and supports

the research study and key research question because Bruno contends that students are

more successful in the classroom when confidence is associated with knowledge and

information retention, especially newly learned material such as the using technology that

is needed to be successful in college (Adams & Ewen, 2009). There is a gap in the

practice that connects the impact of confidence to use technology of low-income college

students' first-year to second-year retention. CBL is a methodology that it is used to

gauge the accuracy of an individual's learning (Bruno, 1993). CBL methodology is used

to separate what an individual thinks and what he or she truly knows. The measurement

of CBL permits the generation of a tailored educational strategy for learners. The CBL

methodology measurement would continue until the learner accomplishes complete

mastery. In this context, mastery is demonstrated by 100% accuracy and 100%

confidence in the subject material or information. Finally, mastery would lead to

depositing knowledge into performance (Bruno, 1993). As a result, Bruno's CBL

methodology assisted this qualitative descriptive study because it is a new way to look at

low-income college student retention. Additionally, Bruno's CBL methodology supports

the importance of confidence as it relates to retaining technology literacies and ultimately

the retention of low-income first-year college students.

Review of the Broader Problem

This section and the following combinations of terms were used in the search for

literature: *retention, confidence, technology,* and *low-income students*. To refine the

number of search results received, the following terms and key words were paired with

retention, *confidence, technology,* and *low-income students*: *self-efficacy, first-year to

second-year students, freshman year, self-confidence, financial challenges, college,

higher education, motivation, academic success, personal factors, competence,

achievement, first-year student retention, educational attainment, factors influencing

retention, academic functioning, academic barriers, influence of technology , family

income, demographic factors, usage of technology , affordability, persistence,* and *first

semester.* These terms assisted in identifying relevant materials in the literature to inform

the topic under investigation. The education research databases were engaged through

library services at Walden University databases such as Education Search Complete and ERIC. Themes were formed from the review of the literature and are presented in the categories of theoretical framework and CBL differences in low-income student retention between nonprofit and for-profit colleges.

While researchers have studied retention from many angles, one area absent from the literature is how confidence in the use of technology and low-income first-year college student retention. In this study, I describe low-income first-year college students' perception of confidence in their use of technology that might assist them to remain in college. Extensive literature exists on the research issue, and the literature has been organized in this section into subtopics that best illuminate the research question.

At Institution Y, first-year student retention is a critical issue, especially among low-income first-year college students. A literature search was conducted through the Walden University online library resources. Rudd, Budziszewski, and Litzinger (2014) found that low retention and persistence continues to be a problem throughout higher education. Students need knowledge and expertise in the use of technology such as word processors, database programs, web browsers, development tools, and communication programs to be successful (Richards, 2016).

Technology and Low-Income Students

Goode (2010) defined technology as an invisible academic requirement necessary to the daily routine of college life. D'ambra, Wilson, and Akter (2013) found that learning technology tools and resources, such as eBooks, were potential academic support for increased student learning. Additionally, survey results from 40 colleges in

the United States showed that technological competence regardless of social inequality is a skill that must be exemplified by low-income first-year students because it is critical to their educational achievement (Jones, Johnson-Yale, Millermaier, & Pérez, 2009). Fairlie and Grunberg (2014) discovered that providing free computers assisted low-income college students with access to technology that helped the students to overcome barriers to learning. Additionally, Fairlie and Grunberg found that many low-income students do not have access to computers at home to close the education achievement gap and those who had access to computers achieved better results. The achievement gap negatively impacts low-income first-year college students who enter college with differing technological skills. Therefore, potentially low-income first-year students might need to build their assurance in their technological skills to increase their success and retention (Tuckman & Kennedy, 2011). Buckenmeyer, Barczyk, Hixon, Zamojski, and Tomory (2015) found that the usage of technology to have a positive impact on the student learning development. Additionally, Buckenmeyer et al. (2015) discovered that 94% of college students agree that technology assists learning and 85% of the students felt technology to be central to academic achievement.

Despite institutional goals for technology, access and engagement in technology remains a challenge for low-income students (Mouza, 2008). Darling-Hammond, Zielezinski, and Goldman (2014) found that academic leaders play a significant role in spotting necessary technology integration strategies, access, and training for students on their campuses. Additionally, Clarke and Zagarell (2012) discovered that the digital divide gap is a difficult problem for the United States, and educators are responsible for

creating policies to close the digital-divide gap. Educators need to successfully infuse technology into schools (Clarke & Zagarell, 2012). The way to close the digital divide gap is to provide students with opportunities to successfully engage in technology that currently occurs in colleges and universities (Clarke & Zagarell, 2012). Mouza (2008) uncovered that the issue with poor access lowers the quality of learning opportunities, and low-income students' limited usage of technology negatively impacts their academic experience because they might not know how to use it effectively (Ng'ambi, 2013). Therefore, they may not have the confidence or understand how to use technology efficiently in their academic studies (Mertes & Hoover, 2014). This lack of technology access and the lack of familiarity with the common technology used in college settings might pose negative outcomes for low-income first-year college student retention.

Student participation in technological activities positively impacts students' ability to increase confidence, grades, retention and persistence (Perez et al., 2013). For example, Mouza (2008) found in her technology implementation study that technology access and engagement, specifically for low-income students, enabled their participation in effective learning involvements, increased student engagement with schoolwork, empowered them, produced educational gains in their academic subjects, and enhanced their motivation. Furthermore, low-income students who used laptops increased their learning experiences and educational goals (Mouza, 2008). Additionally, the higher the student's intrinsic motivation was with learning, the student exemplified higher achievement, better perceptions of their academic competence, and less pressure (Mouza, 2008). Student intrinsic motivation is a serious requirement for student success (Lawlor,

Marshall, & Tangney, 2016). Technology is an engagement tool that promotes student intrinsic motivation, produces increased learning, and autonomy for low-income first-year students (Lawlor et al., 2016).

Retention a Primary Concern

For many years, retention has been a critical issue. McKendry, Wright, and Stevenson (2014) found that colleges must be involved in transitioning and cultivating their students and comprehending why they leave. Delen (2012) discovered attrition and student departure to have serious consequences for students and presents financial hardships for higher education institutions. Student attrition and retention heavily impact college rankings, reputation, and financial welfare; therefore, colleges must obtain an understanding of the reason for their attrition challenges (Delen, 2012). Researchers have identified retention as a primary concern for colleges (Wernersbach, Crowley, Bates, & Rosenthal, 2014), and educators see retention as a significant component to the educational and monetary success of their institutions. Wernersbach et al. (2014) found that retention a major worry and used the Motivated Strategies for Learning Questionnaire, online preassessments, and the Learning and Study Strategies Inventory to conclude that higher education institutions need to enhance their effectiveness of services so that students can be positioned for success in their educational goals to persist in higher education.

The Institution Y is consistently trying to figure out ways to meet the financial needs of their students who face dropping out of college following their first year. This issue of retaining students is significant because retaining students leads to college

graduation, which is significantly related to college student first-to-second year preservation (Fike & Fike, 2008). In addition, retention is not easily defined; therefore, retention models and procedures are needed for particular populations of students (Fike & Fike, 2008).

College student first-year retention can be defined as a challenge for higher education administration and is described by a variety of factors that must be tackled by both academic administrators and students (Lau, 2003). Additionally, the Committee on Education and the Workforce (2013) verified that the retention challenges must be revisited and partnerships must be developed to provide innovative ways to meet the needs of the students. Fike and Fike (2008) found that factors impacting the first-year retention are complex and are significant because they impact student performance and persistence. To improve this issue of retention colleges must improve the performance and persistence of their first-year students, including students from various backgrounds (Tinto, 2004; Tuckman & Kennedy, 2011).

Student retention matters, and it has been under scrutiny for many years by public policy makers (Pruett & Absher, 2015). Harder, Czyzewski, and Sherwood (2015) attained that lawmakers, parents, faculty, and college administrators signify that much development is needed regarding retention numbers. In fact, federal policies with recommendations have been designed by both the National Defense Education Act (Bruno, 1971) and the Higher Education Act (Tinto, 2004) to address retention problems. The education acts were necessary to enhance the education of children in disadvantaged families (Bruno, 1971) and to increase their retention so that once students enter college

doors they will stay through completion (Tinto, 2004). Strategy and intervention related to student retention is a top priority of college educators (Pruett & Absher, 2015); therefore, first-year to second-year retention rates are low at some institutions compared to others (Alexandersen, 2017).

First-year Challenges

Low-income student retention is negatively impacted by a variety of personal challenges in their first year of college (Tinto, 1996). Baéz, Rodríguez, and Suarez-Espinal (2016) found that low-income first-year students experience challenges to remain in college past their first year. In a study of 281 low-income first-year college students, researchers found that these students have personal and social experiences that negatively impact their retention (Baéz et al., 2016). This qualitative descriptive study is needed to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college. This research was conducted to define challenges for first-year students as social and mental stress, poor academic preparedness, self-doubt, and the lack of self-efficacy that might negatively impact first-year student's confidence in their use of technology and their first-year to second-year retention.

The first year of college provides social and mental challenges that are stressful for students that affect their performance (Credé et al., 2012; Parker et al., 2004; Tinto, 1996). This challenge can negatively affect a student's ability to succeed in college. Additionally, scholars have defined poor academic performance to negatively influence first-year college performance as well (Terrion & Daoust, 2012). It is the college's

responsibility to ensure that low-income first-year students are prepared for technology and academically rich settings (Ratliff, 2009). Harackiewicz, Barron, Tauer, and Elliot (2002) discovered that being academically prepared is considered one of the best forecasters for undergraduate success. Therefore, students need not be faced with such limitations entering college under prepared (Bragg, Kim, & Barnett, 2006). It might be possible that confidence in their use of technology will combat the issues of students entering college with poor academic preparedness, increase student achievement, eventually retention. Often first-year students arrive at college less academically prepared than their counterparts (Paulsen & Griswold, 2009). This issue must be solved in the student's first-year of college or their probability of persisting from first-year to second-year at the current institution will be diminished (Stewart, Lim, & Kim, 2015).

College readiness and study skills are deemed as other challenges for first-year college students (Cochran, Campbell, Baker, & Leeds, 2014). College readiness skills are defined as factors that significantly link to college student retention. Turner and Thompson (2014) discovered that when first-year college students lack college readiness skills, their freshman year to sophomore year of college is negatively impacted at an alarming rate of 85% to 90%. Developing educational readiness and study skills will positively influence student education attitude and academic persistence (Terrion & Daoust, 2012). Study skills are described as factors (Lau, 2003) that many college students lack that cause them to dropout. This is another challenge that college students need to overcome (Wernersbach et al., 2014).

Braslow, Guerrettaz, Arkin, and Oleson (2012) defined self-doubt as another

challenge for first-year students and it needs to be eliminated to increase student

engagement and completion of tasks. Furthermore, self-doubt has been defined as a

problematic retention issue because it negatively impacts student engagement as they

perform necessary tasks (Braslow et. al., 2012). Braslow et al. also defined self-doubt as

an "Imposter Syndrome" because it causes students to establish doubt. Imposter

syndrome is something students need to avoid altogether because this condition

negatively influences student self-confidence and destructively affects their competence

ability to ensure success (Braslow et al., 2012).

     Furthermore, the imposter feeling can cause students to believe his/her success is

not warranted and leads the student to perceive an incorrect reflection of their ability

level (Clance, 1985). Aubeeluck, Stacey, and Stupple, (2016) found that many college

students feel unintelligent and advocated for this to be addressed by leaders in higher

education today. Additionally, the imposter feeling impacts students undesirably because

doubt comes with a multitude of consequences related to performance that potentially

impacts college student first year to second-year retention, specifically because doubt is

linked to a person's ability to demonstrate talent (Oleson, Poehlmann, Yost, Lynch, &

Arkin, 2000).

     Once a student experiences self-doubt as a result of forthcoming assignments,

he/she is frightened that he/she will flunk (Bandura, 1977). Additionally, self-doubt

causes one to withdraw effort (Lynch, 1998) and negatively manifest itself in one's

concern about his/her ability (Oleson et al., 2000). Moreover, Preez (2013) found that

during a student's first year of college he/she might experience self-doubt relative to their

ability to balance request as well; therefore, students need the confidence to achieve academic success along with self-efficacy.

Self-efficacy is delineated as a retention challenge for college students and a pliability factor that influences the college persistence process (Preez, 2013). Additionally, self-efficacy is often used as a mechanism to cope with and overcome challenges (Wilkins, 2005) for students because it allows them to initiate action, engage and persist with difficult task, and successfully complete it (Preez, 2013). Moreover, Bandura (1997) perceived self-efficacy as a better predictor of intellectual performance than ability, while Zimmerman (1995), contended academic self-efficacy as the student's belief that he/she can successfully finish educational tasks. Students need self-efficacy to aid them in obtaining his/her academic goals while persisting in college (Torres & Solberg, 2001). In addition, self-efficacy challenges student retention because it needed to determine student confidence in their ability to connect and assemble desired educational outcomes (Torres & Solberg, 2001).

Students need self-efficacy to combat the issue of self-doubt that he/she might experience (Bandura, 1986). Self-efficacy allows students to battle self-doubt to positively perform in a given domain, tied to academic success; therefore, retention as one transition (Bandura, 1986). Low-income first-year college students might need confidence in their use of technology to overcome potential challenges such as social, mental, poor academic preparedness, college readiness skills, self-doubt, and self-efficacy to remain in college following their first-year. London, Paster, Servon, Rosner, and Wallace, (2010) found students with higher self-efficacy who engaged in technology

at higher rates, felt empowered, and increased their skill sets and social capital. Barouch-Gilbert (2017) discovered it is the college's responsibility to provide interference to increase self-efficacy of the first-year student to assist them to remain in college.

Low-income Student Retention Challenges

Low-income is defined as students who receive Federal Pell Grants (Financial aid office, unpublished data, 2013) might experience first-year to second-year retention and persistence issues; therefore, drop out of college. Corbett, Hill, and Rose (2008) declared this issue with retention must be addressed because low-income student's lack of finances has a direct impact on retention. There are many problems with low-income students that have been described as to why students might not return to campus (Tinto, 1996). Financial concerns are one (Turner and Thompson (2014) and personal problems are another (Kim, Newton, Downey, & Benton, 2010).

Financial concerns, specifically relative to low-income students, are defined as factors that impact first-year of college retention and are crucial to student academic persistence and retention (Turner & Thompson, 2014). The first year of college is so critical to retention that American College and Testing Program (ACT) reported in the 2016-2017 study an average of 68.8% of freshman students returned to the same college for their sophomore year. DeAngelo (2014) found since the 1980s, student financial challenges have been the focus of attention and the probability of students returning to their second year is about 25%. If the student completes the second year, the probability increases to about 94% (DeAngelo, 2014). Tinto (1994) found that attrition to occur directly following the first year; however, many do not return due to inadequate finances.

Student aid affects student continuance (St. John, Hu, & Weber, 2001).

Other scholars described low-income college students struggle with financial challenges that impact academic their persistence in college (Forbus, Ncwbold, & Mehta, 2011), significantly impacting retention (Cochran et al., 2014). Buszin (2013) found that this evidence shows there is a strong relationship between money and academic achievement. Additionally, Haveman and Wilson (2007) discovered the lack of money is a reason why low-income students are less likely to arrive at college and graduate at a much lower rate than their higher-income peers. Our role as educators is to level the playing field of life chances, but the problem with the lack of financial assistance negatively impacts the possibilities for low-income student's opportunity to attend college (Harder, Czyzewski, & Sherwood, 2015). Financial challenges need to be eliminated because it negatively influences student behavior, is a strong predictor of college failure (Ou & Reynolds, 2008), and pose limitations for low-income students (Bragg et al., 2006) and potential persistence.

Other financial difficulties that negatively impact college student retention is low-income students not having the financial means which prohibits the students from living on campus and cause the students to have to come back and forth to campus. Coming back and forth provides for more difficulty engaging in social, academic support services, and in learning communities to improve low-income student persistence in college. DeAngelo (2014) discovered this form of disconnect becomes an issue, which places the student at an attrition risk. Because of the lack of successful academic engagement and interaction due to financial challenges, low-income students drop out of college (Stuber,

2011).

Student Confidence a Critical Issue

Student confidence might be a key factor. According to Kim et al., (2010), it is critical for institutions to assess factors that assist students with success and provide intervention for factors that cause students to drop out. The same study found that confidence as a significant characteristic that promotes levels of academic performance and expectation. In their study, they used an Academic Self-Efficacy Scale (ASE), 14 items with matrix patterns and coefficients between .73 and .44 to measure confidence. The results of the study measured a manifestation of confidence in student academic ability, their awareness of study effort, and academic prospects related to college execution. For example, students who scored the highest in their confidence abilities were expected to succeed in college, accomplishing their goals, and those who scored the lowest in their confidence abilities were unlikely to achieve college completion (Kim et al., (2010). Newton (2016) reported that there is a direct link to student confidence and accomplishment in college settings.

Furthermore, Kukulu, Korukcu, Ozdemir, Bezci, and Calik (2013) discovered student inner confidence as being a major concern in higher education and determined it a major challenge for students. In their study, they used Akin's (2007) Self-Confidence Scale and a 33-item questionnaire with a maximum of 165 points to measure student self-confidence levels to determine inner confidence and factors that influenced inner confidence as well as the relationship between academic performance and inner confidence. The results of the study concluded student's inner confidence influences

every facet of one's life, impacts their ability to positively persist through difficult times to accomplish tasks and to reach goals. Moreover, inner confidence is a primary trait in regards to one's personal belief that he/she could achieve positive outcomes; however, future studies should be attempted to study discrete abilities and measure confidence in reference to academic achievement (Kukulu et al., 2013).

Moakler and Kim (2014) found that confidence was significantly related to academic performance, major selection, and directly correlated to academic ability in their national freshman survey data. The results from a national freshman survey conducted with the female, African American, Latino, Caucasian and Asian students concluded 67.2% of students reported high levels of confidence in their mathematic academic ability was 10% higher than their peers (Moakler & Kim, 2014). Additionally, females and women and minorities reported lower academic confidence then male and non-minority students (Moakler & Kim, 2014) Therefore, confidence is required to enhance abilities and ambition for students to take on, achieve goals and persist while faced with adversity (Roland & Tirole, 2002). Before students can achieve confidence, some level of knowledge must be attained (Hilgenkamp & Livingston, 2002). Schunk and Pajares (2005, p. 94) found that "no amount of confidence can produce success when prerequisite knowledge and some level of skill are not present." The lack of confidence negatively impacts student persistence.

White (2009) used Walker and Avant's (2005) eight-step theoretical framework to analyze three attributes of student inner confidence. The results of the analysis defined in White's (2009) Model of Concept Analysis, inner confidence positively impacts

awareness of achievement and persistence. Students require both confidence and persistence to face problems to stay in college (White, 2009) while Hutchinson & Mercier (2004) discovered persistence to highly contributes to positive outcomes and critical to student success. Allen and Bir (2012) discovered when confidence is refined with an educational setting, students are more successful, obtained increased GPAs, and remained in school.

Confidence as Motivation

Confidence lies within the power of the student to inspire success, outcomes and influenced by motivation (Kim, et al., 2010). When one does not have the confidence to motivate self, their academic success and retention could be disrupted (Harder et al., 2015). For example, Tuckman and Kennedy (2011) found that in their learning strategies study, confidence in student's need to be built to increase student retention. Students also need confidence for personal motivation to enhance their first-year retention and learning (Tuckman & Kennedy, 2011). The framework used in Tuckman and Kennedy's study included motivational and cognitive components with two sources of influence such as knowledge and belief strategies. Additionally, Tuckman and Kennedy's approach emphasized the premise of social cognitive theory. The social cognitive theory hypothesized an equally interactive relationship among thoughts, actions, and environmental consequences necessitate changes in thoughts to change behavior (Bandura, 1997). Using this framework and strategies can be used to teach students how to meet the goal of overcoming procrastination to increase their motivation (Tuckman & Kennedy, 2011).

Hutchinson and Mercier (2004) found that students need purposeful engagement to enhance their motivation and confidence. Additionally, Ortiz-Ordoñez, Stoller, and Remmele (2015) discovered confidence and motivation are necessary and must be promoted in educational settings to create sustainability of literacies and low-income first-year college students. While Betz and Hackett (1983) found that first-year students need motivation along with the confidence to believe in their ability to obtain high GPA's to be more successful. Usher and Pajares (2008) discovered the importance of higher-level administrators need to find ways to inflate the motivation and confidence of their college student's so that when the students face hardship or hindrances they will continue to persist. Also, when students have motivation and confidence and are approached with assignments, they will tackle the projects with greater assurance (Usher & Pajares, 2008).

Petty (2014) found that when students are faced with challenges; they need increased confidence along with motivation. The role of motivation is an important factor, and colleges need to understand how student's intrinsic and extrinsic factors impact student confidence to continue in college (Petty, 2014). The purpose of the study (Petty, 2014) was to explore the barriers students may face that might impact their college completion and academic success. The theoretical approaches used in the study were both Maslow's Hierarchy of Needs and McClelland's Need for Achievement theories. Both theories provided the further understanding of attitudes and behaviors that impact student motivation. Their findings concluded students who are disadvantaged lacked academic motivation - a needed mechanism for persistence in college (Petty, 2014).

Implications

Not finishing college can cause setbacks for both students and the higher education institution; therefore, the findings and data analysis from this local study could be useful to identify ways to increase low-income first-year college first-year student retention, specifically assist low-income college students with overcoming challenges they might face during their first year. As a result of the research findings and student responses to the interview questions, which supported the themes that lead to the need to develop a policy for Institution Y to reinstate the required information literacy offered to low-income students as a workshop during the new student orientation. This policy recommendation will ensure students receive training in the areas of technology low-income first-year college students need to be successful to remain in college past their first-year. According to Sakamuro, Stolley, and Hyde (2017), a policy recommendation would benefit higher education institutions with recommendations for program enhancement, implementation, future policy development, positive social change, address, assess and resource low-income student potential needs.

Summary

As previously discussed, retention is a major concern that needs to be addressed. To address this issue of retention, higher education institutions are charged with finding ways to retain low-income students (Gardner & Field, 2014). The retention concern causes many higher education institution campus administrators to have to work hard at developing programs and mechanisms for first-year students to engage in to increase their chances of remaining in college (Howard & Flora, 2015). What students do outside of the

classroom, such as using technology effectively, can potentially increase their confidence to remain in college following their first-year.

Because there is a gap in literature on the topic of low-income first-year college student confidence in the use of technology that might assist them to remain in college, this qualitative descriptive study is to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college. This research study is also needed to assist institutions with combating the retention issue, specifically for low-income first-year college students. Higher education administrators might need to find ways to boost student confidence levels in using technology to overcome potential challenges that cause them to not persist in college following their first-year. To combat the retention issue and the student's lack of confidence in their use of technology needed to be successful and remain in college, a policy recommendation project will be developed for Institution Y to adopt to reinstate the information literacy policy during the new student orientation. Next, in Sections 2, 3, and 4 the methodology, the policy recommendation, and reflections and conclusion for this qualitative descriptive study will be discussed.

Section 2: The Methodology

Qualitative Research Design and Approach

In Section 2, I document the methodology for this qualitative descriptive research study. The problem in the current study was low-income first-year college students' confidence in their use of technology and how their confidence in using technology may have assisted them to remain in college at a private, not-for-profit, 4-year college. Currently, there is no information literacy policy available at the Institution Y for students. If a student needs technology assistance during the academic year, the procedure is for them to request a tutor from the Academic Success Center and most often they are not able to provide a knowledgeable tutor or faculty for the student; therefore, the student has turned away with no assistance. Low-income students come to college lacking confidence in using technology, and the college does not emphasize training to increase confidence in using technology (I. Yakovlev, personal communication, December 15, 2017). The chief information officer believed that low-income first-year college students lack confidence in using the variety of technology programs needed to complete their assignments, supporting this qualitative descriptive study and the findings form this research study (I. Yakovlev, personal communication, December 15, 2017). The purpose of this qualitative descriptive study was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college. The research question for this study was "How do low-income first-year college students describe their confidence in the use of technology as a factor in their retention?"

Three research approaches exist to investigate problems in a research study: quantitative, mixed method, and qualitative. Quantitative research is an approach used to describe developments and explain the connection between variables (see Creswell, 2012). Using a quantitative approach was inappropriate for this study because the primary purposes of quantitative research are to test hypotheses, determine strengths of relationships between variables, or test for differences between two or more variables using statistics (see Creswell, 2012). A quantitative approach was not selected because it requires the researcher to have to collect numeric data, explain relationships among variables, and create instruments to obtain data to answer the research question (see Creswell, 2012). Based on the research question, problem, and purpose, the quantitative research method was not appropriate because it is used to summarize the research data using numbers as opposed to a narrative format (Lodico, Spaulding, & Voegtle, 2010). Additionally, a quantitative approach would not align with the research question, which focused on understanding students' perceptions. The research question can best be answered thorough the collection of text data and by hearing directly from the participants when follow-up questions can be asked during the interview process.

A mixed method research is an approach that allows the researcher to gather and analyze data by integrating both qualitative and quantitative methods in a lone study or successions of studies to apprehend the research problem (see Creswell, 2012). A mixed method approach was not appropriate for this descriptive study based on the research question, problem, and purpose of the study because there was no need to collect

quantitative data as text to address the research question. Additionally, quantitative data would go beyond the scope of the study (see Creswell, 2012).

The qualitative research method is a technique that allows the researcher to amass detailed perceptions from participants and analyze the data for descriptions and themes. This method was appropriate for this descriptive study based on the research question, problem, and purpose of the study because the qualitative research method allows the researcher to summarize the data in a narrative format (Lodico et al., 2010). To address the research question, I selected a qualitative design for this study. This methodology is effective when perceptions, inclinations, sensitivities, and sensibilities of the describer are required in minimally theorized ways to answer the research question (Lodico et al., 2010; Sandelowski, 2000). Additionally, I conducted a qualitative descriptive study (versus a quantitative or mixed method research study) to gather perceptions because they allowed me to collect detailed views and draw meaning based on personal reflections to develop themes or patterns from interviews to answer the research question (Lodico et al., 2010). I also used the qualitative design methodology because it provided the best answers to the research question, because it allowed me to present descriptions of the phenomena in a narrative form from the perspectives of the participants to shed light on student beliefs of their confidence in their use of technology that might assist them to remain in college. This allowed me to stay close to the data, words, and events (Sandelowski, 2000).

There are several qualitative research designs that exist for qualitative inquiry: a case study, a grounded theory, and a phenomenological (see Creswell, 2012). The case

study design allows the researcher to study a specific group, program, or event. As a result, the case study design was not appropriate for this qualitative descriptive study because a case study is used to focus on a single unit or bounded systems and is best suited for research that explores a particular structure, occasion, movement, procedure, or individual and is investigated for months about a particular protocol (see Creswell, 2012). A case study design was also not appropriate for this study because it requires the examination of participants' experiences and the use of multiple data sources (see Creswell, 2012). A grounded theory research design was also inappropriate for this qualitative research study because grounded theory is used to generate a new theory about a comprehensive theoretical level, procedure, or dealings around an essential topic (see Creswell, 2012). The phenomenological research design approach is used to look at individual lived experiences (see Creswell, 2012), which was not appropriate for this study because it requires the researcher to collect large amounts of data over time through observations and interactions with study participants (see Creswell, 2012). The descriptive design was selected because it is an approach that allows the participant to describe their experience in their own words in response to the interview questions. Accordingly, the descriptive design allowed me to summarize the data using descriptions to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might have assisted them to remain in college (see Creswell, 2012).

Participants

The setting of this study was a private, not-for-profit, 4-year liberal arts college located in Central Pennsylvania that serves 5,100 students. The institution in this study included 26% low-income students who received Federal Pell Grants, compared to the national average of 33% at other private not-for-profit, 4-year institutions (National center for education statistics, fast fact enrollment data, 2015). Additionally, the ethnic makeup of the institution is 81% Caucasian, 5% African American, 6% Hispanic, 2% Asian, and 6% other. The selected sample included five males and five females between the ages of 18 and 24 years old. All participants were first-year college students who were low-income, as defined as those receiving a Federal Pell Grant.

The small sample size allowed me to gain a better understanding of the issue, provided for increased credibility, and provided manageability of the study being conducted (see Patton, 2015). Purposeful sampling is identified as the most often used in qualitative research because researchers select key informants as their contributors (Lodico et al., 2010). In purposeful sampling, participants are recruited because of their selected characteristics and knowledge related to the research questions (Lodico et al., 2010). In the present study, participants were recruited because of their characteristics of being a low-income first-year college student and having knowledge of technology (see Creswell, 2008). According to Leedy and Ormrod (2014), an appropriate sample size for a qualitative research study is five to 15 participants. Therefore, a sample size of 10 fell within the recommended range.

There are several types of purposeful sampling techniques. I used the homogeneous purposeful sampling technique because the research question addressed a specific age group, background, and interest. Furthermore, homogeneous purposeful sampling allowed me to intentionally select the site as well as to understand the central phenomenon, specifically because the site and sample was information-rich (see Creswell, 2012). A small sample size provided consistency and was very valuable, especially because it supported the purpose of the study. The small sample size also allowed me to gain a better understanding of the issue and provided for increased credibility and manageability of the study being conducted (see Patton, 2015). The specific purposeful sampling strategy afforded me the opportunity to identify the participants and investigate the data (Lodico et al., 2010). In addition, with this homogeneous purposeful sampling approach, I obtained a clear understanding of the themes that emerged from the research (see Creswell, 2008).

Approval to Enter Institution

I obtained approval to enter the site to conduct the research and obtained approval from both Walden University's and Institution Y's Institutional Research Boards (IRBs). Walden University served as the IRB of record and the approval number is # 03-31-17-0369155. I also wrote to the senior level administrator of the IRB committee to introduce myself and explain the nature of my study. I explained to the administrator what the study was designed to do, how it would be conducted, and how it would positively influence the operations of their institution. Additionally, I coordinated a meeting with the IRB coordinator at the Institution Y, completed and submitted an application to the IRB

office, and obtained approval to commence with my research study. I then explained my

professional role at the institution as an administrator in the Student Success Division. I

had no past or current relationship with the student participants that would impact the

data collection.

The IRB process allowed me to establish trust and credibility with the institution

under study with their endorsement to enter the institution to conduct the study. My

initial contact with potential participants occurred when I visited classes of first-year

college students. At that time, I gave the students a handout that introduced myself,

discussed the research project study, and shared my contact information. I asked the

students if they were interested in participating in my study and to e-mail me or contact

my office to discuss the qualifications. The students in the classrooms were informed that

they must meet the criteria in order to participate in the study. Once the student got in

contact with me, I discussed the need to have received a Federal Pell Grant, be over the

age of 18, and a first-year college student. Moreover, I secured a safe place to conduct the

interview, maintained, established, and provided honest communication, a good field

relationship, and was sensitive and nonjudgmental when interacting with the students.

The participants were not given an incentive to participate in the study. However, after

participating in the study, participants were given a $15 bookstore gift card as a way of

thanking for their participation in the study.

Protection from Harm and Confidentiality

Significant steps were taken to protect the participants from harm or risks both

physical and psychological as I became involved with the participants. I ensured that this

research study did not pose questions that might have had an adverse reaction or consequence to ensure protection, confidentiality, and loyalty. Additionally, I ensured that the participants would not intentionally be misled or felt any pressure to participate in the study through the informed consent form outlining the details and purpose of the study and verbally and in writing, noting their rights to stop participation at any time. Furthermore, as the researcher, I took multiple steps to protect my participants in a nonbiased and nondiscriminatory manner to ensure credibility and accuracy by obtaining written approval from the IRB. I made my initial contact with the student participants by visiting classes of first-year students. I followed procedures to ensure confidentiality of the data, stored the data in a locked cabinet to which only I have access, and ensured the research was used for its proposed purpose.

The initial contact with potential participants included the visitation classes of first-year college students to inform and encourage the students to participate in the research study. To gain approval to conduct the informal research, ensure credibility, and adhere to ethical practices of data collection, reporting, and distribution of reports, I prepared a document to introduce myself as the researcher and principal investigator, my qualifications, and contact information, the title of the project and the type of research I was conducting. Furthermore, I wrote a detailed description of the qualitative descriptive research study being conducted and its purpose. This document included a summary of the literature, the research method, significance of the study, and specifics regarding the research site, duration of the study, and type of instrument to be used. I also included in the document my sampling procedures and individual background information.

Moreover, I included an analysis of risks and benefits along with an informed consent document.

Informed Consent

After dual IRB approval was obtained, participants were recruited for the study. Access was obtained from the administrators at the study site. Initial contact was made with potential participants at the study site. Handouts were provided along with my contact information. Participants interested in participating in the study contacted me directly. I provided information about the study criteria, risks, and benefits. If potential participants met the inclusion criteria, an interview date was scheduled.

A participant informed consent form was used and completed to describe the project, any potential for involved risks, the voluntary nature of the study, and a confidentiality statement. Additionally, before each interview, I read the informed consent form to each student participants. I informed the participants of their rights by reading the consent form, the purpose of the study, procedures, and benefits, risks and discomfort, confidentiality, and provided an opportunity for them to ask questions. Methods I used to inform the student participants of their rights was an introductory letter and orally before conducting the interviews. They were also advised that the interview would last approximately 1-2 hours. The interview consisted of a series of questions about how low-income first-year college students view confidence in their use of technology as a factor in their persistence to degree.

Students were also informed that the only direct benefit to them as a research participant before or during the study was the receipt of a $15 bookstore gift card as a

way of thanking them for their participation. Their answers would provide a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college. This research study could be used to address the retention issue. A policy recommendation to provide the college with an evaluation tool to use for examining and designing programs to retain low-income student populations especially because they are less likely to graduate from college. The student participants were advised of the only known risk associated with this study or potential discomfort due to the interview process and sharing of information. If at any point they felt discomfort, they could withdraw from the study. As the researcher, I was prepared to assist any participant in obtaining support services should the need arise.

For reporting purposes, the student was asked to select their own pseudonym. The student participants were advised that the list linking their own pseudonym to their name would be kept in a locked filing cabinet in a locked office separate from the data. The data were recorded and stored on a password-protected computer until it was transcribed. Following transcription, the hard copies were kept in a locked filing cabinet in a locked private office. The pseudonym would be used during the interview, but actual names and institution will not be used. Signed consent forms were kept in another locked filing cabinet. The only people with access to the data are the researchers associated with this project and the IRB. Though the results of this study may be published or presented at professional meetings, the identities of all research participants will remain concealed with the use of a pseudonym.

Students were advised that they may ask any questions concerning this research

and have those questions answered before agreeing to participate in or during the study.

They had the ability to contact the investigators at the phone numbers below. Moreover,

participation in this study was voluntary. The students were told that they could refuse to

participate or withdraw at any time without harming their relationship with me as the

researcher or the college. In no way would the student receive penalty or loss of the $15

bookstore gift card that was promised to the student as a way of thanking them for

participating in the study. The participants were advised that their participation was

voluntary. The student participants were given a copy of the informed consent form to

keep for their records as well as my name and telephone numbers. They signed the

informed consent form and were advised that their signature meant that they voluntarily

agree to participate in this research study and be audio recorded. The participants were

given a copy of the informed consent form.

Data Collection

Data were collected through the use of face-to-face interviews at a private office

over a three-week period. Interviews are the most common form of data collection in

qualitative inquiry (see Creswell, 2012). Data were collected using a self-developed

interview protocol (Appendix B) to guide the interviews to answer the research question.

Interviews were audio-recorded. The interview protocol contained eight probing

questions to solicit feedback from participants on their confidence in their use of

technology and how it might have assisted them to remain in college. I presented eight

open-ended interview questions through the interviews and aligned them with the study's

one research question, which guided the analysis of data to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college.

I gained access to the students by the college's faculty members after IRB approval was obtained. The initial contact with potential participants included visiting classes of first-year college students to inform and recruit students to participate in the research study. I collected the data utilizing a variety of steps to define my role as the researcher, manage the entry in the field, maintain good field relations, collect and analyze the data from the interviews (Lodico et al., 2010). Once I gained entry into the research setting, I became engaged with the participants to develop a close contact with them. The purposeful strategy I used to select the ten student volunteers, five male, and five female students, was to visit 13 First Year Experience classrooms that included first-year college students who were potentially low-income and traditionally-aged (18-24).

I gave a brief introduction about myself and the research project study. Additionally, I explained the purpose of the study, which was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college. I passed out a handout that included my contact information, and qualifications for participation in the study, which stated that to participate, the student must receive a Federal Pell Grant, be a first-year college student between the ages of 18-24. Moreover, I encouraged participation and advised interested participants to contact my office if they would like to find out more about being involved.

Moreover, establishing rapport is significant to the data collection process; therefore, it was important that I built rapport with the participants (see Creswell, 2012). I established rapport to secure permission and ensured that the participants were provided truthful information and completed the information process. Additionally, I built a rapport to allow for greater perspectives from informants because they became more comfortable with me to share their innermost thoughts and reliable data (see Creswell, 2012). I collected the data for this qualitative descriptive study by using self-developed open-ended individual interview questions to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college. The open-ended interviews were conducted in a private conference room on the college campus and lasted for an approximately one hour with five male and five female student participants. As a qualitative researcher, I recorded the open-ended interviews conducted on the campus under review by using a digital voice recorder to document the student conversations in qualitative data analysis (QDA) software (Evers, 2011). QDA software made it feasible for me to sound record and collect the data by using a small digital recorder to directly document the interview of participants whereby allowing them to speak for themselves and to be heard truthfully, therefore improving the quality of the transcript (Evers, 2011).

Data Analysis

Data analysis and coding requires one to extract topics/themes from the collected data (Bogdan & Biklen, 2007). To code the data, I used manual coding, which is an appropriate technique when examining a small amount of data and when you are a novice

researcher (see Creswell, 2012). I transcribed then analyzed the data by reading and reviewing the data to develop themes, patterns, and codes. This process occurred in three phases. Phase I was the transcription phase where I analyzed the open-ended recorded interviews and transcribed them word for word into Microsoft Word. In Phase II I reviewed the transcribed open-ended interviews several times, annotated the interviews by adding comments from the transcripts in the margins of the Microsoft Word document, and coded the open-ended interview responses three times. In Phase III, following the third round of coding all the open-ended interviews, I analyzed the data and patterns, then organized the codes into six major themes that emerged from the study: *essential to academic achievement, motivation and acquiring knowledge, confidence and computer literacy, overcoming distractions and unfamiliarity, pre-college technology programs, and technology proficiency increases success*.

Data analysis assisted me in interpreting the data to identify potential meaningful insight. The data analysis exposed significant meaning perceptions from the interview questions and results from the recorded transcribed researcher interpretations of study participants' responses. Analyzing the data assisted with identifying emergent themes associated with how low-income first-year students perceived their confidence in using technology that might have assisted them to remain in college.

Data analysis further included transcription of all the data, documented under a unique identifier assigned to each participant at the point of data collection. There were many procedures that took place in the data analysis stage which included thematizing, designing, interviewing, transcribing, analyzing, verifying, and reporting. The

thematizing stage relates to the *why* and *what* of the investigation (see Creswell, 2012).

The designing stage involved me planning the design of the study. While the interviewing

stage included me conducting the interviews with the participants following the interview

guide. The transcribing stage involved me organizing the interview information for

analysis. The data analyzing stage refers to me choosing the purpose, the nature, the

topic, and methods of analysis that were applicable. The verifying phase involved me

ascertaining the validity of the interview findings. Finally, reporting phase referred to me

conveying the findings from the study (see Creswell, 2012). The transcriptions were

saved using a participant identifier and stored in an electronic folder. The portable

document format (PDF) files contained the participant's confidential code and a word-

for-word transcription of the interview.

      My role is the Administrator of a program at a not-for-profit, four-year private

college, which is the site in this study. I had no past or current relationship with the

student participants or the related topic that will impact the data collection. As the

researcher, I established the credibility and trustworthiness of my research findings by

using member checking. Member checking is a valuable tool because it allowed me to

check the accuracy of the transcribed data collected from the student participants during

the interviews (see Creswell, 2012).

      Before the open-ended interview session, I formally advised each participant that

they would participate in member checking a crucial technique used to establish the

credibility of the data (see Creswell, 2012). Additionally, I informed them that the

follow-up member checking with participants is required to ensure the interpretations of

the participants and to verify the accuracy of the interview transcripts reflect the

participant perceptions (Chang, 2014). Member checking is also important to give the

participants an opportunity to assess researchers' interpretations and to ensure that

(Chang, 2014). This allowed me to correct any misinterpretations as well as provide

additional information if necessary as well as ensure my portrayal is aligned with the

student participant views. Member checking also allowed for the active participation of

the participants to correct errors, allowed them to potentially challenge what has been

perceived as wrong interpretations, and get the respondents on the record with their

reports (Chang, 2014).

Following the open-ended interviews, I collected each student participant's email

address to send the transcriptions to for member checking, ensure the interpretations of

the participants, and to verify the accuracy of the open-ended interview transcripts

reflected their descriptions. Member checking helps to decrease or eliminate researcher

bias. Each student participant was given two weeks to confirm whether the transcribed

data accurately portrayed their descriptions/responses or not. In two weeks, the student

participants did not report any inaccuracies in the transcribed data. No changes were

made to the transcribed interview data.

Limitations

Polit and Beck (2010) determined limitations must be considered when discussing

qualitative data. The current study included three limitations, which include self-

reporting, time, and researcher bias. The first limitation was the nature of self-reporting.

Self-reporting indicates that responses are based on the truthfulness of the participant's

responses (Leedy & Ormrod, 2014). Additionally, self-reporting is an approach that could have negatively impacted the study because it entails requesting the participants about their opinions or viewpoints (see Creswell, 2003). Self-reporting could have impacted the study because one cannot guarantee that the participant responses will be in agreement with their individual experiences, or perceptions (Polit & Beck, 2010). The next limitation was the allotted time to complete the interviews. This limitation could have impacted the study because the participant interviews needed to be conducted in a short amount of time before the students left campus for the summer. Additionally, the time limitation prevents the opportunity for a more in-depth investigation of the research problem under study. Finally, researcher bias was the third limitation. This limitation could have impacted the study because as the researcher I have my own opinion of what the participants may describe as their confidence in the use of technology. Moreover, researcher bias could have impacted the study because it has the ability to influence the understanding of the interview data (Amalia, Resosudarmo, & Bennet, 2013).

Data Analysis Results

As a qualitative researcher, it is important that the researcher read, re-read and reexamine the data numerous times (Lodico et al., 2010). The first time I coded all the open-ended interviews, I ended up with over 100 codes. The second time I coded all the open-ended interviews I collapsed the codes of all interviews, and eliminated duplicate codes. Moreover, I categorized the data and developed themes using a qualitative content analysis. The qualitative content analysis strategy is designed for qualitative descriptive studies because it is a powerful way to analyze verbal data focused on summarizing the

informational content of that data (Sandelowski, 2000). Furthermore, I represented the data by providing a descriptive summary in an organized fashion in which word frequencies determined the importance of data or identification of essential themes (Sandelowski, 2000). The essential themes emerged from the word frequencies from the participant's responses to the interview questions.

Following the third round of coding all the open-ended interviews, I analyzed the data and patterns, then organized the codes into the following six major themes that emerged from the study: (a) *essential to academic achievement,* (b) *motivation and acquiring knowledge,* (c) *confidence and computer application literacy,* (d) *overcoming distractions and unfamiliarity,* (e) *pre-college technology programs,* (f) *and technology proficiency increases success*. For example, throughout the interviews, and specifically for interview question number one, students mentioned they used technology as a resource to complete assignments, turn in assignments, collect data, conduct research, increase knowledge, create, store and organize documents just to name a few. Because of the similarity in student responses to interview question number one, I coded then analyzed the data to mean that the participants perceived technology as essential to academic achievement, which became a theme. This process was repeated for all responses to the open-ended interview questions and that is what led to the creation of the six strongest themes, which led to the development of the policy recommendation to reinstate the information literacy policy for low-income first-year college students during the new student orientation. The frequency table below is an effective way to summarize the coded data, show the patterns and relationships of the student responses, display the

number of respondents, and demonstrate how the themes were developed (Lodico et al.,

2010).

Table 1

Frequency of Codes that led to six Major Themes

Patterns and Relationships	Strongest Emerged Theme	Word Frequency
Interview question #1: How do you use technology as a resource to support your academic achievement? Responses: • Used technology to complete assignments, turn in assignments, collect data, conduct research, increase knowledge, create, store and organize documents	Theme 1: Essential to academic achievement	10
Interview question #4: How did you overcome challenges with the use of technology? Interview question #6: What challenges with confidence in your use of technology that might prevent you from remaining in college past their first year? Responses: • Seek technical assistance, think critically, use online reference tools, utilizing other technology, eliminating distractions, communicating with professor, inspired motivation, blend knowledge, believe in self, improve skillsets, self-efficacy, have tenacious attitude, confidence to inspire motivation, get rid of doubt, improve skillsets, overcome obstacles, use online reference tools, utilize new technology • Unfamiliarly with web-based applications, learning new technology, unfamiliarity with using college learning platform, lacking proficiency, not seeking assistance, lacking, self-motivation, not using technology correctly, programs not user-friendly	Theme 2: Motivation and acquiring knowledge	10
Interview question #2: In what ways have you applied your technology skills to effectively assist you to remain in college past your first-year? Interview question #5: How confident were you with technology when you entered your first year of college? Responses:	Theme 3: Confidence and computer literacy	10

• Confidence needed in technology use to remain in college, confident with basic technology knowledge; however, not confident with using new technology, not confident with college platform, not confidence on-line learning tools, not confident with college website, confidence was needed to increase literacies to use web-based applications, college websites, desktop, online learning tools, college learning platform	

(table continues)

Patterns and Relationships	Strongest Emerged Theme	Word Frequency
Interview question #3: What are some challenges you have experienced with using technology to complete your academic projects? Responses: • Overcome challenges with temporary distractions with completing assignments on-line, finding data, internet problems, unfamiliarity with navigating college websites, utilizing the college learning platform, learning new s/software, using on-line databases, completing assignments online	Theme 4: Overcoming distractions and unfamiliarity	10
Interview question #7: In what ways can the college help you increase your confidence in the use of technology that might assist you to remain in college. Responses: • Explain technology needed in first-year or first week of school during an orientation program, exposure to technology needed before school, include a freshman course, teach new tools don't assume all know the basics, provide class workshops, learn how to use websites, close the gap, provide deeper learning prior to college specifically for major, address learning curve in the beginning of semester, provide introductory course, place for students to ask questions, help with Moodle, walk through tutorial	Theme 5: Pre-college technology programs	6
Interview question #8: How has your confidence in the use of technology helped you academically? Responses: • Higher the confidence in technology - the better the grades, confidence resulted in good grades, helped them academically, confidence increased proficiency and success, confidence helped stay in control, organized, made task easier, enhanced emotional stability, increased knowledge and skill and increased agency	Theme 6: Technology proficiency increases success	10

Extraction of Themes

Again, the six major themes that emerged from this study are: *essential to academic achievement, motivation and acquiring knowledge, confidence, and computer literacy, overcoming distractions and unfamiliarity, pre-college technology programs, and technology proficiency increases success.* For each theme, a more in-depth discussion is provided below. These themes emerged from the breaking down the coded data and the key words received from the open-ended interview questions to develop a more in-depth analysis of the events and issues presented in the data through the process of abstraction (Lodico et al., 2010). The manual coding process allowed me the ability to identify themes, major concepts or issues that exist in the coded data to interpret and explain what I have learned from the research project study (Lodico et al., 2010). I used word frequencies to help identify emerging essential themes in the interview data (see Creswell, 2012). The coding process included me reading the Microsoft Word transcribed open-ended interviews, individually, three times, and manually a writing letter and word codes in the left margin next to each transcribed open-ended interview question to portray the responses I received from the open-ended interviews.

Additionally, after reading and coding the Microsoft Word transcribed data I ended up with a total of 83 codes that were related to the open-ended interview questions. Typically, after several attempts with going through codes, similar codes are collapsed down into 20-30 codes, but that was not attainable as a result of the diversity of the responses received from the open-ended interviews. Next, I took relatable codes collapsed and combined them into six major themes that are connected to the eight open-

ended interview questions and the guiding research question. The themes emerged from

the word frequencies in the interview data (see Creswell, 2012). The following table

demonstrates how I developed the codes from the key words and how the codes were

combined and collapsed to become six themes from the interview questions related to the

guiding research question. The guiding research question: How do low-income first-year

college students describe their confidence in the use of technology as a factor in their

retention? Tables 2 to 9 provide participant responses to the interview questions, codes

and extracted themes.

Table 2

Interview Question 1

Interview Question #1 Letter Codes (15)	Codes	Emerged Theme #1
CA	Complete assignments	Essential to Academic Achievement
CR	Conduct research	
PA	Post assignments	
TIA	Turn in assignments	
CD	Collect data	
OD	Organize documents	
IK	Increase knowledge	
RT	Reference tool	
AR	A resource	
CT	Complete tasks	
COT	Communicate tool	
SD	Store data	
FD	Forwarding data	
CE	Check emails	
TG	Track grades	

Table 3

Interview Question 2

Interview Question #2 Letter Codes (5)	Codes	Emerged Theme #3
WBA	Web-based applications	Confidence and Computer

		Literacy
CW	College websites	
CLP	College learning platform	
DA	Desktop applications	
OLT	On-line learning tools	

Table 4

Interview Question 3

Interview Question #3 Letter Codes (9)	Codes	Emerged Theme #4
TD	Temporary disruptions	Overcoming Distractions and Unfamiliarity
NCW	Navigating college websites	
CLP	Utilizing the college Learning platform	
IP	Internet problems	
FD	Finding data	
LC	Learning curve: learning new applications/software	
RO	Reading online	
OD	Using online databases	
COA	Completing online assessments	
ED	Eliminating distractions	

Table 5

Interview Question 4

Interview Question #4 Letter Codes (15)	Codes	Emerged Theme #2
STA	Seeking technical assistance	Motivation and Acquiring Knowledge
TC	Thinking critically	
ORT	Utilizing other technology	
UOT	Having a tenacious attitude	
TA	Communicating with professor	
CP	Using a repair service	
RS	Improving skillset	
IS	Having self-efficacy	
SE	Believing in self	
BS	Blending knowledge	
BK	Increased motivation	
IM	Confidence inspired motivation to overcome obstacle	
CM		
GRD	Got rid of doubt	
AA	Academic achievement	

Table 6

Interview Question 5

Interview Question #5 Letter Codes (6)	Codes	Emerged Theme #3
C-UBDA	Confident using basic desktop	Confidence and Computer Literacy
NC-UWBA	Using web based applications	
NC-UNT	Not confident using new technology	
NC-UCLP	Not confident using college platform	
NC-UOLT	Not confident using on-line learning tools	
NC-UCW	Not confident with using college website	

Table 7

Interview Question 6

Interview Question #6 Letter Codes (16)	Codes	Emerged Theme #2
CA	Completing assignments	Motivation and Acquiring Knowledge
UWBA	Unfamiliarity with using web based applications	
LNT	Learning new technology	
UCLP	Unfamiliarity with using College learning platform	
UOLT	Unfamiliarity with using on-line learning tools	
UCW	Unfamiliarity with using college websites	
UBDA	Unfamiliarity with using basic desktop applications	
EI	Emotional instability	
LP	Lacking proficiency	
SE	Lacking self-efficacy	
SA	Seeking assistance	

TTO	Taking test online	
SM	Self-motivation	
AS	Assurance doing the right thing the right way	
UTC	Using technology correctly	
PNUF	Programs that are not user friendly	

Table 8

Interview Question 7

Interview Question #7 Letter Codes (8)	Codes	Emerged Theme #5
OP	Orientation program	Pre-College Tech Programs
IC	Introductory course	
TT	Technology training prior to college or in first-year	
SC	Semester course	
BPS	Better prepare students	
E	Explain	
CNPI	Create new program initiatives	
IFA	Increase faculty accountability	

Table 9

Interview Question 8

Interview Question #8 Letter Codes (9)	Codes	Theme #6
IKS	Increased knowledge and skills	Technological Proficiency increases success
CA	Complete assignments	
SO	To stay organized	
SIC	To stay in control	
EES	Enhanced emotional stability	
MTE	Made tasks easier to complete	
IA	Increased agency	
AA	Academic achievement	
CT	Complete task	

Emerged Themes

Based on the findings in the present study, low-income first-year college students described their confidence as lacking in technology literacies they needed to use to be successful and remain in college. Participants reported confidence was needed to use the new technology required to complete assignments and were essential to their academic success and retention. The data showed, when the low-income first-year college students entered college, they were confident in using the basic Microsoft Office program, but not confident with using new technologies needed to successfully complete their academic assignments.

Additionally, the research data affirmed participants needed confidence and motivation to remain in college to learn new applications, web-based programs, online-learning tools, the college's website, and using basic desktop applications. Participants' responded confidence and advanced computer literacy was necessary for them to learn technology they were unfamiliar with in order to achieve academic success to remain in college. Moreover, student participants shared they needed to use a variety of resources and seek assistance to overcome their lack of confidence, distractions, and challenges they faced with using technology during their first-year of college. One participant made a recommendation that the College provides a pre-college technology program to introduce low-income first-year college students to some of the technology components they will need to use in college because technological proficiency increases academic success.

Participant responses were grouped into themes that were similar responses to the main interview question and other questions that were probing and open-ended. The interview guided 8 questions. The interview questions helped to start the discussion on the perceptions of low-income first-year college students' confidence in their use of technology that assisted them to remain in college. Additional questions were asked based on the response of the participant to the guiding interview question. The interview questions were grouped by topic, which included questions around how low-income first-year college students describe their confidence in the use of technology as a factor in their retention. Below explains how the six essential themes emerged from the interview questions, and how perceptions received from the study participants linked directly to the research question that led to the policy recommendation to reinstate the information literacy policy. The restored policy will require all students participate in the information literacy workshop during the new student orientation.

Confidence in using technology and retention was a problem and was identified in the self-reported perceptions of low-income first-year college students. This problem indicated some changes are necessary at the local level to develop a support program to enhance college retention among low-income first-year college students. I recommend Institution Y adopt the policy recommendation to reinstate the information literacy workshop during the new student orientation to familiarize students with the College's learning platform, technology software, programs, websites, and databases the students will use in Institution Y and increase low-income first-year student confidence with using technology to successfully complete assignments, increase academic success, and remain

in college. In the previous policy's information literacy 2-credit course, the students developed research skills to locate, evaluate, and present information for their courses. The eliminated policy taught students how to use many electronic communication and presentation tools, legal and ethical uses of information in all media formats, and how to navigate Institution Y's network, Library resources, and Internet, which are all challenges low-income first-year college students identified in the study. The removed policy also discussed implications of living in a technological society. Below details, how the six essential themes were developed based on responses received from the study participants that led to the policy recommendation.

Theme 1: Essential to academic achievement. The essential first theme, essential to academic achievement emerged from the interview data based on the participant's responses. All 10 participants (100%) were able to provide at least one description of how they used technology to achieve academically. Participants stated they needed to be technological fluent to use a variety of technology to perform the many tasks needed to succeed in college. I developed this theme because participant Lisa stated, "she used technology for her academic achievement, as a resource for Internet access, to develop research and write papers, to complete online journal searches, and used online databases such as JStor or Google Scholar." One more quote used to support the theme was from participant Arthur who stated, he "probably would not be doing nearly as good in college without using technology." Another quote used to validate the theme was from participant Anna who stated, she "needed to use technology to perform a variety of task, and to store documents." Additionally, Arthur reported, "technology has

helped him because it was an infinite resource that he was always able to go to for help with something he was having trouble with in his classes, to learn something new or to tutor himself – it was a permanent reference." Other terms stated by the participants during the open-ended interviews that were used to develop the theme were technology was required and essential to performing a variety of tasks such as completing assignments, conducting research, posting and turning in assignments, collecting, forwarding, and storing data. Additionally, technology is necessary for organizing documents, increasing knowledge, as a reference and communication tool, resource, to check emails, and track grades.

Theme 2: Motivation and acquiring knowledge. The second essential theme, motivation and acquiring knowledge emerged from the interview data questions 4 and 6 based on the participant's responses. All 10 participants (100%) were able to provide at least one description on how they overcame challenges with the use of technology and what challenges with confidence in their use of technology that might have prevented them from remaining in college past their first year. Supporting this theme, Bob said, he "had to have the motivation to overcome the challenge with using technology, such as using the College's learning platform Moodle to remain in college. By learning how to use the technology he needed motivation to "keep messing around with the technology until he got better at using it, and by figuring out the nooks and crannies, until he made it more personalized to make it easier for himself."

Another quote I used to support the theme is from participant Harry who reported, he "had to try and try again to overcome challenges with technology, such as with using

Microsoft office, until what he wanted to accomplish was actually happening." Other

participants involved in the interviews reported that students' need to do a variety of

things to overcome challenges with the use of technology they might face during their

first-year of college. Additionally, participant Manuel stated, one "needs confidence to

never give up." The participants stated that first-year students need to have increased

inspiration to acquire new knowledge, seek technical assistance, think critically, use

online reference tools, learn and use other technologies they are not familiar with, have a

tenacious attitude, use repair services, improve skillsets, eliminate distractions, have self-

efficacy, believe in one-self, and to blend technology knowledge.

Furthermore, first-year low-income students can overcome challenges with using

technology by communicating their challenges with their Professor, getting rid of the

doubt, and by achieving academically. Participant Ella affirmed, she "had to overcome

challenges by seeking assistance from friends and building good relationships to help him

learn programs and understand how to use them properly." If they do these things, their

confidence will inspire their motivation to overcome the obstacles. Additionally, having

the motivation and acquiring technology knowledge low-income first-year students will

have the stick-to-it to acquire the confidence to not lose motivation to remain in college

past their first year. Also, one participant stated having the inspiration low-income first-

year college students will garner emotional stability to overcome challenges with their

confidence in the use of technology to assist them to remain in college past their first year

to complete their assignments.

Participants interviewed also reported that the unfamiliarity with using needed technology programs negatively influenced their confidence in the use of technology needed to assist them to remain in college. Participant Anna stated "the lack of confidence would definitely make his outlook on life look a lot dimmer and will definitely deter one from staying in college. Additionally, students might find it harder to get work done quicker, remain in classes, and get good grades." As a result, participants stated that low-income first-year students' need to increase their confidence, technological knowledge, learn new technology programs, such as web-based program applications, become familiar with using unfamiliar College learning platforms, College websites, basic desktop applications, and use technology correctly for its intended purposes. Lacking proficiency and self-efficacy with using technology will decrease low-income first-year college students' self-motivation and assurance to complete assignments, and tasks correctly to achieve academic success.

Theme 3: Confidence and computer literacy. The third theme, confidence and computer literacy, emerged from the interview data questions 2 and 5 based on the participant's responses. All 10 participants (100%) were able to provide at least one description on ways they applied technology skills to effectively assist them to remain in college past their first-year and how confident they were with technology when they entered their first year of college. Additionally, all participants stated they "entered their first-year of college very confident with basic computer literacy they learned in high school." However, they lacked confidence with using college web-based applications, college learning platforms, new technology programs, college website, college desktop

applications, and online learning tools required in their college courses." The main quote I used to support the theme was from participant Manuel who stated, the "higher the confidence in using technology, the higher the grades." One other quote I used to come up with the theme was from participant Anna who confirmed, "she had to use a variety of technology literacies with different roles and websites to help her remain in college, get good grades, and pass her first year."

Another quote I used to develop the theme is from participant Harry who indicated he believed "if a student is not really confident in what they're doing, think they are doing something correctly, but don't know if they're doing it right, they might feel less confident in coming back to college and taking more classes, or taking another college course at all. Personally, if he didn't feel confident with using technology at Institution Y, he might not have dropped out of college, but would have transferred somewhere that might have been a bit more user friendly. Specifically, with the website, if he didn't feel confident in using it, he might have transferred to another college." Another participant Ella stated, "increasing her technology literacy and knowing the basics definitely pushed her to learn more about computers and how to better achieve learning them."

Moreover, participants interviewed affirmed, low-income first-year college students' need confidence to apply and blend their technology learned in high school effectively to assist them to remain in college past their first-year. Furthermore, other participants interviewed stated, by having the confidence to learn how to use the necessary web-based applications, college websites, learning platforms, desktop

applications, and online learning tools students will be more successful and the new

learning will definitely help them remain in college. Another quote used to develop the

theme was from participant Ella who advised, if she "hadn't known basic computer

knowledge, it would have been more of a struggle for her to learn how to do more and

push herself to actually learn how to use necessary technology. With the basic

understanding, she was able to get over that hump of learning." One participant stated to

complete projects, students require confidence to be resilient and achieve their academic

goals.

Theme 4: Overcoming distractions and unfamiliarity. The fourth theme,

overcoming distractions and unfamiliarity emerged from the interview data question 3

based on the participant's responses. All 10 participants (100%) were able to provide at

least one description of challenges they experienced with using technology to complete

their academic projects. The quote I used to develop the theme was from participant Bob

who indicated "he had to use technology that was unfamiliar and seemed harder to use

than others. That was a challenge and distraction he experienced with using technology to

complete academic assignments." Another quote I used to come up with the theme was

from participant Lisa who stated technology "malfunctions were a huge distraction,

specifically when assignments were lost. Technology malfunctions demotivated her after

all of the work she did disappeared." Other participants involved in the interviews

reported experiencing challenges with temporary disruptions, unfamiliarity with the use

of technology programs not used in high school, navigating the College's websites,

utilizing the College's learning platform, internet problems, using technology to find

data, using online databases, and completing online assessments. Another distraction

noted was social media notifications, which were also used to come up with the theme.

Participant Tinia vowed, "it was great having all the technology resources, but there was

also that whole extra aspect to it like social media notifications and constant technology

updates that interfered with her completing academic projects in a timely manner."

 Theme 5: Pre-college technology program. The fifth theme, pre-college

technology programs emerged from the interview data question 7 based on the

participant's responses. Six student participants (60%) were able to provide at least one

way in which Institution Y could help low-income first-year college students increase

their confidence in the use of technology that might assist them to remain in college. The

main quote I used to develop the theme was from Lisa who stated, the "College should

have mandatory technology courses in the first year or before college to familiarize

incoming students with the technology they are expected to use in their perspective

majors/programs such as the Applied Computers for Chemist technology program."

Another quote I used to come up with the theme is from Participant Marie who stated the

"College should introduce Freshmen to some of the components that we will be using in

college because it is different than high school; even if it is for 30 minutes." Another

participant that supported the theme from participant Bob who stated that the "College

should create an introductory course not like a whole class, just a quick maybe one-night

course to introduce students to Moodle the College's learning platform to help the

students to understand the technology and to give them an opportunity to ask questions."

Anna added "during orientation the College should definitely have a few things that

better explain the different websites because at orientation. Currently, during the new student orientation all the College does is have the students create a password, tells them alright, there you go. She believes none of the students really know what happens with all the different websites."

One more quote used to come up with the theme was from participant Harry who stated, the "College should make an effort to better prepare students perhaps during the Welcome Week. This would be a great time because there are so many mandatory things that you have to learn, to do, learn the school's policies, security, etc. It would not hurt to put something in the Welcome Week where the College gives the students a refresher course on Microsoft Office and Excel, how to download or find things – they never show you that." One participant recommended that the College create pre-college technology programs to familiarize incoming low-income first-year students with the technology they are expected to use in their perspective majors/programs before college entry. Another student advised that the College should introduce the freshmen to the computer s they will need to use in college, explain how they are different from high school and how to integrate new learning tools, and give them about 30 minutes to familiarize themselves with how the technology works.

Furthermore, participant Marie recommended to "make it a requirement, the first week of college to have all freshmen students meet with their academic advisor as a check-in point just to see if they have any questions about what they don't know or how to do. The student should meet with their academic advisor twice in the first semester to discuss their confidence, questions, and challenges he/she might have with using

technology to assist them with their academic quest and to remain in college, specifically

because they are required to write a lot of papers and turning in a lot of things on

Moodle." Meeting with an academic advisor the first week of college will allow the

advisors to keep up with their students, understand what they are doing in class, and help

increase student confidence with using different types of technology programs needed to

succeed in college.

Participant Anna also advised the "College need to develop new initiatives

perhaps during new student orientation time to better explain their websites, library

database, and Google Docs, instead of the students struggling to learn the new technology

during the semester." Moreover, the College should incorporate during the first week of

college, an opportunity to acquaint new students and faculty with the technology

necessary for student success, such as how to use the college's learning platform, web-

based programs, and to increase faculty accountability. One participant stated that some

faculty lacked knowledge in how to use the technology the students were expected to use

to complete their assignments. Additionally, participant Tinia stated the "College could

help by having the professor work through the applications they expect the students to

use. She believes that would help the students with their learning curve."

Theme 6: Technological proficiency increases success. The sixth theme,

technological proficiency increases success emerged from the interview data question 8

based on the participant's responses. All 10 participants (100%) were able to provide at

least one description on how their confidence in the use of technology helped you

academically. The main quote I used to come up with this theme was from participant

Harry who stated his "confidence in knowing basic technology skills were essential to him completing assignments and definitely helping him achieve academically." Additionally, participant Harry stated "his confidence in the use of technology, assisted him academically by meeting professor expectations, turning in properly formatted papers, and correct assignment.

Another quote I used to come up with the theme was from participant Bob who stated his "confidence in knowing how to use technology was an advantage." Other statements I used to develop the theme were "because of confidence; they achieved academically". One more quote I used to develop the theme was from participant Manuel who stated, "the higher the confidence, the higher the grades and knowing how to use technology applications could definitely boost student's confidence to help them get better grades." Moreover, their confidence in the use of technology helped them to increase academic achievement, their knowledge, and skills, complete assignments, stay organized, maintain their emotional stability, made their task easier, and increased their self-agency. Other participants Anna and Tinia stated confidence "is connected to their achievement, made them believe they could do it, helped them a lot, and took away the worries."

The central research question in the present study was: How do low-income first-year college students describe their confidence in the use of technology as a factor in their persistence to pursue a degree? The six essential themes listed above emerged from the interview questions, and perceptions received from the study participants linked directly to the research question which led to the rationale to develop a policy

recommendation project for Institution Y. Participants in the study stated low-income first-year college students need opportunities to become familiar with the technology they are expected to use in their perspective majors/programs before college entry to increase their confidence in using technology that might assist them to remain in college. According to Paterson and Gamtso (2017), students need assistance and confidence in their information literacy skills, specifically when they need to use technology. The purpose of this study was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might have assisted them to remain in college. Tongdee, Srisawat, Loyd, Temnitithikul, Phumwiriya, and Nimkuntod (2017) found that using technology improves student learning, has an impact on their confidence, and ability to achieve; therefore, retention.

The conceptual framework that guided the study was Bruno's CBL methodology. Bruno's CBL conceptual framework relates to the study approach, supports the research study, and key research question because Bruno contends students are more successful in the classroom when confidence is associated with knowledge and information retention, specifically of newly learned material such as the using technology that is needed to be successful in college (Adam & Ewen, 2009). Moreover, Bruno's CBL methodology backs this qualitative descriptive study because it gives one a new lens and a unique way to look at low-income college student retention. Additionally, Bruno's CBL methodology supports the importance of confidence as it relates to retaining technology literacies, ultimately the retention of low-income first-year college students.

Conclusion

Retention is a serious issue for colleges and universities, specifically for low-income first-year college students and the financial impact attrition may cause for the institution. Newton (2016) found that confidence is needed for student accomplishment in college settings; therefore retention. According to the Education Advisory Board (2016), 90% of low-income students are less likely to graduate within six years, are not familiar with unknown curriculum expectations that support their success in their first-year, and do not know how to practice good learning. The use of a qualitative research study design and self-developed open-ended interviews, allowed me to gain a better understanding of the experiences and perspectives of low-income first-year college students' confidence in their use of technology and how it assisted them to remain in college. I interviewed five male and five female students in Institution Y. The findings of the study were reported in a narrative form that led to themes that led to the policy recommendation for Institution Y to reinstate the information literacy policy. The reinstated policy will require all low-income first-year college students participate in an information literacy workshop during the new student orientation. I recommend Institution Y adopt the policy recommendation to reinstate the information literacy policy to familiarize students with the learning platform, technology software, programs, websites, and databases they will use in Institution Y and increase to low-income first-year student confidence with using technology to successfully complete assignments, increase academic success, and remain in college. Additionally, this reinstated policy will provide Institution Y with a way to introduce their low-income first-year college students to the technology they will need to

use to be successful in college, overcome barriers they might face with their confidence

in the use of technology that might cause them to drop out of college. Furthermore, the

reinstated policy will be used to help retain low-income student populations. Moreover,

this reinstated information literacy policy will benefit higher education institutions with

recommendations for new program enhancement, implementations, future policy

development, for positive social change, to address, assess and provide resources for low-

income first-year student potential needs. The reinstated policy will be changed to a

workshop during the new student orientation. The workshop will be a more effective

basis for the results of the study because students will engage in the technology they need

to be successful in college before college entry.

The reinstated information literacy policy will require all students participate in

an information literacy workshop during the new student orientation. The policy

recommendation will be to administrators who can approve policy and new student

orientation committee members. Currently, there is no information literacy policy

available at the Institution Y for students. This policy recommendation to restore the

information literacy program will be mandated for all students. Presently, if a student

needs technology assistance during the academic year, the procedure is for them to

request a tutor from the Academic Success Center and most often they are not able to

provide a knowledgeable tutor or faculty for the student; therefore, the student has turned

away with no assistance. Indications are evident of a gap in low-income first-year college

students' confidence in their use of technology needed to assist them to be successful in

college during their first-year. It is important that the policy makers take necessary

measures toward making technology literacy for the low-income first-year college students a mandatory component of new student orientations.

I will call a meeting with the senior administrators who could approve policy and the Vice President of Student Affairs where new student orientation programs reside and present the findings using a narrative form and through a visual presentation with bulleted points of the project study. The presentation will include the data collected from the open-ended interview questions, and the policy recommendation to reinstate the information literacy policy to help close the gap with low-income first-year college student confidence in their use of technology that might assist them to remain in college. Each presentation component will follow the typical stream of the research project. A copy of section two of the research study will be given to senior administrators who could approve the policy. The implementation of the policy is presented in section 3.

Section 3: The Project

Introduction

In this qualitative descriptive study, I addressed the problem of low-income first-year college students' confidence in their use of technology and how confidence in using technology may have assisted them to remain in college at a private, not-for-profit, 4-year liberal arts college. Low-income first-year college student retention is a significant issue today, particularly regarding the financial impact attrition may cause for the institution. The purpose of this study was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might have assisted them to remain in college. The conceptual framework that guided the study was Bruno's CBL methodology. The central research question in the present study was "How do low-income first-year college students describe their confidence in the use of technology as a factor in their persistence to pursue a degree?" For this study, data were collected using open-ended interview questions given to low-income first-year college students who volunteered to participate in the qualitative descriptive research project study. Qualitative data, themes, and student responses from the low-income first-year college students justified a problem and the need to develop the policy recommendation project in the form of a white paper (Section 3) for Institution Y to adopt to reinstate the information literacy policy.

Lanning and Mallek (2017) found that information literacy is essential to first-year college student success; college students need information literacy because they enter college with insufficient abilities necessary to conduct university research. As a

result, college students need to understand the essential technology to succeed in college (Lanning & Mallek, 2017). Confidence in using technology is also essential to academic achievement, which was reported in the student findings. Paterson and Gamtso (2017) affirmed that students need assistance and confidence in their information literacy skills, specifically when they need to use technology.

Currently, there is no existing information literacy policy at the studied college. Restoring the policy will require all low-income first-year college students participate in an information literacy program during the new student orientation. This policy recommendation to reinstate the information literacy program (Appendix A) is envisioned as a collaboration between the new student orientation committee and institutional administration. The difference between the two information literacy programs is that the previous policy's information literacy program was required for all incoming first-year students was a semester-long 2-credit course whereas the reinstated program will be offered during the new student orientation. Both programs mandate all first-year college student participation. Moreover, the previous information literacy program included a syllabus and curriculum that details what the students should be able to do at the end of the class schedule, assignments, and assessments. The reinstated policy will require the information literacy be offered in the form of a workshop during the new student orientation to offer low-income first-year college students the opportunity to engage in hands-on learning. I found that low-income income first-year college students need opportunities to engage in the technology they will need to use to be successful in college before they enter college.

The previous program at the college introduced students to opportunities to develop their research skills to locate, evaluate, and present information for their courses, which will be covered in the reinstated information literacy workshop. Like the removed information literacy program, students will engage in hands-on activities on how to use technology for communications and presentations as well as understand the legal and ethical uses of information in all media formats. Students will also understand how to navigate Institution Y's network, library resources, and Internet, which is the same as with the eliminated program. The reinstated information literacy program will be different from the previous information literacy program. The reinstated program will be offered during the new student orientation and will be presented in the form of a noncredit workshop where the activities will be hands-on as opposed to a semester-long course. Low-income first-year college student participants will engage in a brief training on how to use the technology they will need to use to be successful in Institution Y to increase their confidence in using the new technology required to complete assignments. Participants in the study stated that when they entered college they did not believe that their technology skills were adequate to successfully complete college. Additionally, student participants will be introduced to new applications, web-based programs, online learning tools, the college's library website, and the college's learning platform such as Moodle. Participants stated they needed confidence and motivation to remain in college, learn new applications, web-based programs, online learning tools, and learn how to use the college's websites and use basic desktop applications. Motivation is also linked to student disengagement in technology activities, which could be a potential barrier for

students. Liu, Wang, and Tai (2016) discovered that motivation is directly related to disengagement and can cause barriers to learning necessary technology and completing activities. Participants agreed that confidence was necessary to learn technology they were unfamiliar with in order to achieve academic success and remain in college. The reinstated workshop will increase student confidence with using technology necessary to be successful in Institution Y, as student participants shared that they needed to use a variety of resources to overcome their lack of confidence, distractions, and challenges they faced with using technology.

Section 3 includes a description of the policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new student orientation, the goals, and rationale. One way to report research information used in educational settings is through the development of a policy recommendation (see Creswell, 2012). The policy recommendation is always recognized as a persuasive, commanding, detailed report because it provides valuable information to senior administrators at an educational institution (Kolowich, 2014). Moreover, the policy recommendation design acts as a publication and answers particular problems (Sakamuro et al., 2017).

The policy recommendation will provide senior administrators with information to further explore the student retention challenges with intentional goals. The policy recommendation will provide implementable actions for reinstating the information literacy program during the new student orientation for low-income first-year college students. The reinstated information literacy policy will allow the students to participate in an information literacy workshop before college entry to improve low-income first-

year college students' confidence in their use of technology that was raised by the findings of this study in Section 2.

Purpose

The purpose and goal of the proposed policy recommendation project are for Institution Y to reinstate the information literacy policy. The policy recommendation project was informed directly by the findings in the data and the quotes from the students that supported the themes that led to the policy recommendation. For example, participant Anna stated that the "College should develop new initiatives perhaps during new student orientation time to better explain their websites, library database, and Google Docs, instead of the students struggling to learn the new technology during the semester." She also stated that the "College should incorporate during the first week of school, an opportunity to acquaint new students and faculty with the technology necessary for student success, such as how to use their college learning platform, web-based programs."

Additionally, to support the policy recommendation project, evidence from the literature review was conducted on the value of orientation programs, technology barriers for the low-income first-year students, institutional policies, and technology literacy for low-income first-year college students. Soria, Lingren, and Coffin (2013) found that new student orientation programs are a great start and benefit to retaining first-year students. Orientation programs enhance student academic achievement, college knowledge, retention, and freshman persistence rates (Soria et al., 2013). First-year students who participate in orientation programs have better first-year GPAs than those students who

do not; therefore, colleges need to look at ways to develop programs to support the academic success of their first-year students (Chan, 2017).

Based on the findings in the present study, low-income first-year college students described their confidence as being lacking in their use of technology. Participants reported that confidence was needed to use the new technology required to complete assignments. When they entered college, they did not believe that their technology skills were adequate to successfully complete college; they stated that they needed confidence and motivation to remain in college to learn new applications, web-based programs, online learning tools, the college's website, and using basic desktop applications. Participants responded that confidence was necessary to learn technology they were unfamiliar with in order to achieve academic success and remain in college. Keengwe, Schnellert, and Mills (2012) found that unfamiliarity with using technology a concern that needs to be addressed; unfamiliarity with new technology beyond the basic Internet skills are barriers to success in college because of the variety of technologies required to increase student learning and persistence. Black and Lassmann (2016) found that there are many forms of technology students need in the college and university settings is vital to our universe and essential to schooling. According to Frydenberg and VanderClock (2016) students need to be acclimated to the variety of advanced technology responsibilities, especially when using their personal computers or moveable tools to thrive in the digital world and in higher education institutions. Student participants stated that they needed to use a variety of resources to overcome their lack of confidence, distractions, and challenges they faced with using technology. As a result, the findings

created a foundation in which actionable steps for improving low-income first-year college student retention, confidence in the use of technology, and a reinstituted information literacy program during the new student orientation in the form of a noncredit workshop are recommended. The policy recommendation includes actionable steps for improving low-income first-year college students' confidence in their use of technology that might assist them to remain in college.

Through this qualitative descriptive data, I identified low-income first-year college students' perceived confidence in their use of technology that might have assisted them to remain in college past their first year. Based on the data received, I will recommend Institution Y adopt a policy recommendation to reinstate the information literacy program during the new student orientation for the betterment of the low-income first-year college students and their retention. Following the review of the literature, a policy recommendation to reinstate the information literacy program during the new student orientation for low-income first-year college students' will be outlined. A statement of the study's implications for social change and change in the higher educational, academic community completes the section.

<p align="center">**Rationale**</p>

A policy recommendation white paper format is written by the researcher to inform someone about a product or service (Sakamuro & Stolley 2010). The researcher then seeks to persuade participants in this policy recommendation the qualities of the product or service (Sakamuro & Stolley, 2010). A policy recommendation is necessary to address the problem at Institution Y. The policy recommendation will address the

problem because it will offer solutions to the problem with low-income first-year college student confidence in using technology that might assist them to remain in college (see Hoffman Marketing Communications, 2011). The policy recommendation started in the business world, but today it is widely used in the educational field. When composing a policy recommendation, it must include (a) a problem or opportunity, (b) the proof that the problem exists, (c) other problems that might be related to the problem, (d) a basic solution, and (e) any additional data the researcher might want to inform his or her stakeholders (Sakamuro et al., 2017). Additionally, a policy recommendation should have good reference material (Sakamuro et al., 2017).

The policy recommendation project was appropriate for this research study because it provides a timely, authoritative, and informative way to advocate for a change in a program (Sakamuro et al., 2010). Some of the data, specifically in student participants, showed that low-income first-year college students need the college to provide precollege opportunities to better prepare them for the technology needed for specific courses and to succeed in college. To address the problem, the college needs to reinstate the information literacy policy during the new student orientation for low-income first-year college students to ensure they are exposed to the technology they need to know before college entry. If this is done, low-income first-year college student confidence in their use of technology skills can be increased along with their retention. I will deliver the policy recommendation in narrative form and through a visual presentation to senior administrators who can approve programs. A policy recommendation is the most effective tool to communicate the research findings and a

suitable format to present the data collected from the interviews (Sakamuro et al., 2010).

This project will allow me to communicate recommendations to senior administrators in

Institution Y to adopt the policy to reinstate the information literacy program during the

new student orientation to increase retention rates for low-income first-year college

students.

The qualitative data analysis from this study, the descriptive data, and the findings

of my review of the literature laid the foundation for the need to develop a policy

recommendation to reinstate the information literacy program during the new student

orientation. The foundation was laid as a result of the student responses that supported

the themes, which led to the development of the policy recommendation. Sixty percent of

the student participants provided at least one way in which Institution Y could help low-

income first-year college students increase their confidence in the use of technology that

might assist them to remain in college. For example, participant Lisa stated, "College

should have mandatory technology courses in the first year or before college to

familiarize incoming students with the technology they are expected to use in their

perspective majors/programs. Another student participant reported the "College should

introduce freshmen to some of the components that we will be using in college because it

is different than high school; even if it is for 30 minutes." Another participant stated that

the "College should create an introductory course not like a whole class, just a quick

maybe one-night course to introduce students to Moodle the college's learning platform

to help the students to understand the technology and to give them an opportunity to ask

questions." Another student added, "during orientation the college should definitely have

a few things that better explain the different websites because currently at orientation all the college does is have the students create a password, are told alright, there you go. She believes none of the students really knew what happens with all the different websites."

Additionally, a quote that supported the theme that led to the policy recommendation for Institution Y to adopt to reinstate the information literacy program is from a student participant who stated that the

> College should make an effort to better prepare students perhaps during the Welcome week. This would be a great time because there are so many mandatory things that you have to learn to do, learn the school's policies, security, etc. It would not hurt to put something in the Welcome week where the College gives the students a refresher course on Microsoft Office and Excel, how to download or find things they never show you that.

One participant recommended that the college create precollege technology programs to familiarize incoming low-income first-year students with the technology they are expected to use in their perspective majors/programs before college entry. Another student advised that the college should introduce the freshmen to the computer applications they will need to use in college, explain how they are different from high school and how to integrate new learning tools and give them about 30 minutes to familiarize themselves with how the technology works. Another participant advised that the "College needs to develop new initiatives perhaps during new student orientation time to better explain their websites, library database, and Google Docs, instead of the students struggling to learn the new technology during the semester." The college should

incorporate during the first week of college, an opportunity to acquaint new students and faculty with the technology necessary for student success, such as how to use their college learning platform, web-based programs, and to increase faculty accountability. Accordingly, Baran (2016) found that faculty needs mentors to enable them to provide the kind of support students need with regards to technology. Faculty members need to integrate technology into their teaching practices (Baran, 2016). Another participant stated that some faculty lacked knowledge in how to use the technology the students were expected to use to complete their assignments. Additionally, a student stated the "College could help by having the professor work through the applications they expect the students to use. She believes that would help the students with their learning curve."

The reinstated information literacy program will be mandated for all for low-income first-year college students at the institution under study. As one can see from the reported findings in the study and from the student responses, the reinstituted policy recommendation is appropriate for this research project because it provides a timely, authoritative, and informative way to advocate for the development of a new student orientation program (Sakamuro et al., 2017). Some of the data, specifically in student participants, showed low-income first-year college students need the College to provide pre-college opportunities to better prepare them for the technology skills needed for specific courses and to succeed in college. If this is done, low-income first-year college student confidence in their use of technology will be increased as well as retention. Low-income first-year college student participants in the study stated, when they entered

college, they didn't believe they had adequate technology literacies successfully to remain in college.

Additionally, student participants stated they need to be introduced to new applications, web-based programs, on-line learning tools, the College's library website, and the College's learning platform such as Moodle before college entry to increase their confidence in using the technology needed to be successful in college. Participants stated they needed confidence and motivation to remain in college to learn new technology. Participant's also avowed confidence was necessary to learn technology they were unfamiliar with in order to achieve academic success and remain in college. The reinstated policy to reinstate the information literacy program will increase student confidence with using technology necessary to be successful in Institution Y and to remain in college. Moreover, student participants shared they needed to use a variety of resources to overcome their lack of confidence, distractions, and challenges they faced with using technology.

The policy recommendation project and research findings will increase awareness and understanding of low-income first-year college students' perceived confidence in their use of technology and how they might assist them to remain in college. Likewise, this policy recommendation will provide for future program development. Data shows, low-income students who have confidence in their technology are more likely to achieve academic success, reach advanced scholastic ambitions; therefore, remain in college (O'Donnell, Tan, & Kirkner, 2012). The intent of the policy recommendation to return the information literacy program for low-income first-year college students' is to advocate for

low-income first-year college students and to provide implications for a positive social change. This advocacy will provide college administrators with information on new ways to meet the need to improve low-income first-year college students' confidence in using technology appropriately to persist in college, achieve academic success; therefore, retention.

I plan to use the meeting and policy recommendation as a means to expand administrators' knowledge and understanding of low-income first-year college students' perceived confidence in their use of technology, how they might assist them to remain in college. Moreover, I will use the meeting to discuss the need for the College to reinstate the information literacy program during the new student orientation. Reinstating the information literacy program will improve low-income first-year college student's confidence in using technology which will increase retention rates for low-income first-year college student populations. Additionally, I plan to publish the study's findings in a professional journal. I also hope that the findings will influence the work of individuals who might feel the need to build upon the study's findings or further explore research regarding what are low-income first-year college students' perceptions of confidence in their use of technology that might assist them to remain in college.

Review of the Literature

The conceptual framework that guided the study was Bruno's CBL methodology. The CBL methodology backs this study because there is a connection between knowledge and confidence. As a result, Bruno's CBL methodology supports the importance of confidence as it relates to retaining technology literacies, ultimately the

retention of low-income first-year college students. The results of the study findings led to the need to develop a policy recommendation for Institution Y.

In the following section, to support the policy recommendation for Institution Y to adopt to reestablish the information literacy program during the new student orientation for low-income first-year college students, I will provide a review of the literature covering the barriers that hinder low-income first-year college student confidence in the use of technology that prevent them from remaining in college past their first year. I used the following keywords to guide the review of peer-reviewed scholarly articles: *value of orientation programs, pre-college technology programs, introduction to technology, technology orientation, college preparation, confidence and technology barriers, technology and academic achievement, confidence and computer literacy, overcoming distractions with technology, unfamiliarity with technology, motivation and acquiring new knowledge, pre-college technology programs, technology proficiency, and success.* I accessed a variety of databases via Walden University's online library, including Education Research Complete, SAGE Journals Online, Educational Resource Informational Center (ERIC), and ProQuest. The searches resulted in articles and research studies that emphasized the benefits associated with using a policy recommendation as an implementation tool, program evaluation, and development for higher education administrators. Bruno's conceptual framework was used to guide the present study.

Technology Barriers

The literature review indicated there are a variety of barriers that hinder low-income first-year college student confidence in the use of technology that might prevent them from remaining in college past their first year. Liu et al., (2016) found that students are faced with a variety of barriers connected with technologies and educational responsibilities during various stages of learning. Students who enter college with a lack of technology, beyond the basics, pose barriers to their confidence, academic achievement, and retention. It is important that first-year low-income students enter college with advanced literacies in technology above beginner level. Keengwe et al., (2012) argued the value of technology integration and the unfamiliarity with new technology beyond the basic internet skills are barriers to success in College that needs to be addressed because the usage of a variety of technologies are required to increase student learning and persistence. Black and Lassmann (2016) found that there are many forms of technology students need in the college and university settings, is vital to our universe, and essential to one's schooling. Frydenberg and VanderClock (2016) found that students need to be acclimated to the variety of advanced technology responsibilities, specifically when using their personal computers or moveable tools to thrive in the digital world and in higher education institutions.

It is so important that college administrators understand the technology barriers that low-income first-year college students face about their understanding of their technology skill literacies. McMahon (2015) claimed students need a complete understanding of their technology literacy and their limitations. Students need to improve

their basic technology literacy to learn new knowledge. It is important that colleges and universities take steps to improve technology literacy for all students beyond the basics because it is expected of the student to have advanced technology literacy (McMahon, 2015). Novák (2013) argued, one solution to eliminating technology literacy barriers is to provide more teaching time for more practical s to develop necessary skills. Additionally, extra funding needs to be allocated to develop necessary programs to increase student technology learning (Novák, 2013). Specifically, Eichelberger and Imler (2015) found a significant gap in technology skills being a serious issue; one that can effect first-year college student success because these students come to college not understanding the barriers they will face with using unfamiliar technology they are not proficient with and the technology they are expected to know. Many students require assistance with using technology to remove barriers more than they would ever admit (Eichelberger & Imler, 2015).

One more technology barrier is the inability to apply a variety of technologies. McMahon (2015) argued that one common thread that all students' need is to have the technological ability to apply a variety of technology-based constructs to be successful in academia. Many students enter their first-year of college lacking those skills. Barriers need to be eliminated to allow students the opportunity to enhance their confidence levels to use technology effectively to succeed in college. When challenges are removed, students will acquire the ability to apply technology knowledge from one technological platform, word processor, or data base, to another to achieve academic success (McMahon, 2015). The lack of technology proficiency is another issue for low-income

first-year college students that need to be addressed. Rollins and Bailey (2014) argued administrators must develop and align technology educational goals to increase technology literacy. Additionally, those who do not allow additional opportunities for students to engage in technology literacy are not serving the students well on their campuses. However, students must have the support of senior administrators and faculty to lead them in the learning process. The integration of technology literacy to increase proficiency is mandatory, and anything less would lead to professional irresponsibility (Rollins & Baily, 2014).

Additionally, the lack of confidence in the use of technology is a major factor that hinders students from achieving academically. Park, Lawson, and Williams (2012) argued the lack of confidence is a major influence on whether students fail or experience academic challenges. Moreover, increased confidence reduces learning hindrance and barriers (Park et al., 2012). Obstacles such as the lack of technology literacy beyond the basics, technology proficiency, and the inability to apply a variety of technological knowledge hinder student confidence in their use of technology that might prevent them to remain in college. Zielezinski (2016) argued that access is not enough for low-income students. Low-income first-year college students need opportunities to purposefully use a variety of computer technology simulations and s instead of using computer technology for drill and practice.

Moreover, low-income first-year college students' need to have an opportunity to engage in pre-college technology programs to overcome barriers, better prepare them for the technology needed for course completion, and to increase their confidence in the use

of technology that might assist them to remain in college. Participants interviewed stated the College should make an effort to better prepare students. As a result of this qualitative descriptive study, and the barriers discussed above, I am recommending the College adopts the reinstatement of the information literacy policy to offer an information literacy program in the form of a workshop during the new student orientation program for all incoming low-income first-year college students.

Project Description

Researchers Soria et al., (2013) affirmed that new student orientation programs are a great start and benefit to retaining first-year students because it can enhance their academic achievement, college knowledge, retention, and freshman persistence rates. Also, first-year students who participate in orientation programs have better first-year GPA's than those students who do not; therefore, Colleges need to look at ways to develop programs to support the academic success of their first-year students (Chan, 2017). It is the College's responsibility to improve student success and develop orientation programs to enhance student adaptation, transition, and retention (Van & Blaauw, 2012). However, the orientation program must be valued by the College to identify first-year college student transitional challenges. Shankar, Karki, Thapa, and Singh (2012) avowed orientation programs for first-year students are strategic and effective; therefore, must be appreciated by the College. Additionally, orientation programs for first-year students increase student knowledge, recognize student transition barriers and challenges, and are intentional with providing academic preparedness (Shankar et al., 2012). Moreover, Mayo (2013) declared, colleges need to focus their

efforts on providing multiple types of interventions to enhance student retention and learning outcomes for diverse student populations. Additionally, Mayo (2013) affirmed orientation programs should be part of first-year students' first-year programs, are definitely necessary to help them adapt and overcome both academic and intellectual challenges. Shankar et al., (2012) found that new student orientation programs are beneficial to increasing student knowledge and success in different subject areas.

The Liberal Arts College in this study needs to do a better job of educating low-income first-year students and increasing their confidence in their use of technology that might assist them to remain in college. Ellis-O'Quinn (2012) found that orientation programs an indicator to support first-year student achievement and a great way to combat retention challenges. Currently, there is no information literacy program in place or offered during the new student orientation to address the needs identified above for low-income first-year college students. I believe the College in this study needs to develop this information literacy program during the new student orientation to better integrate, expose, and prepare their low-income first-year college students with the ability to blend a variety of technological knowledge. Furthermore, the results from the study identified low-income first-year college students need a program to familiarize them with the technology they are expected to use in their perspective majors/programs before college entry to increase their retention and confidence with using different types of technology programs needed to be successful in college. Harris (2016) argued the educational community and administrators have not focused their attention on the knowledge of technology integration and preparedness of all students. Technology

integration at the academic level is beneficial to students and exposing students, such as low-income first-year students, during a new student orientation program could increase their integration and learning (Androniceanu & Burlacu, 2017).

Stewart, Clifton, Daniels, Perry, Chipperfield, and Ruthig, (2011) argued that colleges need to find ways to reduce the failure rate of first-year students to increase their chances of remaining in college. Conley (2010) affirmed that colleges must help students achieve success past their high school years. An information literacy program during the new student orientation might be one answer. During the information literacy program, low-income first-year college students will be introduced to and understand the new technology they will need to use in college. Participants will understand how to integrate new learning tools, web-based programs and platforms, assessment tools, how the technology used in high school differs from what is needed in college, be given time to familiarize themselves with how some technology works on the college campus, the technology they might need in their major-specific courses, explore the colleges library website, understand the help-desk and technology support processes, and understand why increasing their confidence in their use of technology is required to increase academic success and retention. This will positively enhance student's confidence and reduce the likelihood of failure of low-income first-year college students, allow them to keep up with what they need to accomplish in their classes, and increase their confidence with using different types of technology programs that are required. Stewart, et al. (2011) found in their study that first-year students who participated in an attributional intervention and training showed a reduction course failure. Additionally, attributional

training of first-year students in a variety of educational contexts is a great option for

orientation programs (Stewart et al., 2011). Additionally, intervention is needed to reduce

first-year college student anxiety levels to increase their chances of remaining in college

past their first-year. Hullinger and Hogan (2014) found that orientation programs help

Colleges deal with the huge challenge they face with lowering student anxiety levels,

enhancing student academic success, and retention. Results from the research showed the

College in this study needs to reinstate the information literacy policy to implement an

information literacy program during the new student orientation. The information literacy

program during the new student orientation will increase low-income first-year college

student technology confidence levels, provide them with time to better learn the college's

expected technology, college learning platform, website, library database, and Google

Docs just to name a few. Additionally, during the interviews participant, Rickey stated,

"low-income first-year college students need to know how to use the technology such as

Word, Excel, before they enter college to prevent experiencing anxiety, struggling to

learn the new technology during the semester." Researchers Eichelberger and Imler

(2015) found that first-year students experience gaps with using Excel that needs to be

addressed and having those gaps with using Excel can negatively impact the student's

ability to be successful in their academic coursework.

Moreover, Ratliff (2013) declared first-year college students' need to be equipped

for intense technology educational settings to reduce frustration levels. Gill, Ramjan,

Koch, Dlugon, Andrew, and Salamonson (2011) stated orientation programs reduce stress

and provide academic support for first-year students who might feel like they don't have

the experience or preparation needed to be remain or successful in college. Participant

Rickey stated and confirmed, the "College need to incorporate an opportunity to acquaint

low-income first-year students with one another as a support system during an orientation

program." Bell (2017) affirmed new student orientations benefit the development and

transition of new student learners. Additionally, the new bodies of student learners

develop trust and support of their peers and appreciate being acquainted with them (Bell,

2017). Benavides and Keyes (2016) avowed faculty socialization and relationship

development are other important factors that positively support student success during

orientations. Participants in the study believe low-income first-year college students need

faculty to be more knowledgeable with using the technology the students are expected to

use to complete their assignments and that the faculty actually take time to work through

the technology they want the students to learn. During the information literacy program

during the new student orientation, both the student's and the faculty's confidence in

using technology will be developed.

The current technology policies and new student orientation program of activities

were investigated, and a formal electronic search of the technology policies at the

institution Y was completed to suggest the reinstatement of the information literacy policy

for low-income first-year college students. The reinstituted policy recommendation will

mandate all low-income first-year college students participate in an information literacy

program during the new student orientation. The previous information literacy policy was

a curriculum, activity, and assessment based 2-credit course mandated for all freshmen

students. The eliminated information literacy policy taught students how to use many

electronic communication and presentation tools, legal and ethical uses of information in all media formats, and how to navigate Institution Y's network, Library resources, and the Internet. Reisdorph, Stearman, Kechris, Phang, Reisdorph, Prenni, and Geraci (2013) found that immediate short-term, hands-on workshops produce significant results as opposed to long a term instructional course. Additionally, workshops allow students to instantly apply knowledge (Reisdorph et al., 2013).

In order to reinstate the information literacy program during the new student orientation, utilizing the policy recommendation for low-income first-year college students', a meeting with the orientation committee would need to be created that involves the VP of Student Affairs, and Associate Provost of Student Success, who could approve programs, as well as faculty and staff to ensure that the mission and goal of the reinstate information literacy program during the new student orientation for low-income first-year college students' is aligned with the goals and objectives of the college. The final decision with regards to the policy recommendation involves the College President because more services and resources are needed for the reinstated information literacy program during the new student orientation for low-income first-year college students to increase their academic achievement, success rates in their courses, and confidence in their use of technology needed to remain in college.

The goals and focus of the policy recommendation project for Institution Y to adopt to reinstitute the information literacy program during the new student orientation will be on three objectives for the retention of low-income first-year college students'; (a) recommend all first-year college students participate in information literacy program

during the new student orientation. Participating in the information literacy program will increase student confidence in their use of technology that might assist them to remain in college, (b) create a cohort of new first-year college students each fall semester term who will take part in the information literacy program. This will ensure to reflect the whole population of low-income first-year college students as well as provide a benefit to all students. Additionally, creating a cohort will allow one to track student persistence comparing past fall-to-fall institutional data to present data. One can also use the data to determine if there is a significant difference in those former students who did participate in the information literacy program, and (c) evaluate data and make changes to the information literacy program during the new student orientation for first-year college students' accordingly. All students' first-year college students would benefit from a structured information literacy program to increase their confidence and technology development. If first-year college students understand the technology necessary for success in their specific courses, needed during their first-year of college, they may perform better in their courses and remain in college. Students may also preemptively identify challenges with their confidence in using of technology they might face during their first-year of college, develop the tools and confidence needed to overcome those challenges, and remain in college past their first-year. The policy recommendation to reinstate the information literacy program for first-year college students would increase low-income first-year student confidence, academic achievement, and technology literacies, thus increasing their opportunities for academic success and retention.

The students will be selected to participate in the required reinstituted information literacy program held during the new student orientation by first inviting all students to participate, which would include low-income first-year college students with an EFC (expected family contribution) of zero up to $5,157 (Financial aid office, unpublished data, 2016). The program will be mandated, free of charge, and open to all students. To incentivize participation, each student will receive a 20% discount on a bookstore purchase and a certificate for their participation/completion. Each information literacy program will have a description, timeframe, and process. If positive results are shown after the implementation of the mandated information literacy program to first-year college students, the findings will be presented to all Academic Divisions in hopes of implementing this process on the campus of Institution Y each fall semester term during the new student orientation.

Potential Resources and Existing Support

This policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new student orientation for all first-year college students will require human and capital resources as well existing support of the current new student orientation program faculty, staff, and administrators for successful implementation. Furthermore, the policy recommendation aligns with and supports the academic excellence goals, at the institution under study, which are to be known for the academic excellence of their programs, quality of faculty, and distinctiveness of their students' experiences (College's Strategic Plan, 2016). Additionally, the policy recommendation reinstituted information literacy program for all first-year students during the new student

orientation aligns with the enrollment goals of the institution, which is to achieve a robust undergraduate enrollment and provide for student success. According to the literature review in section 2 of this study, low-income first-year college students experienced several technology literacy deficits that pose barriers and hinder their confidence in their use of technology that led to increased levels of frustration, and potential dropout (Coates, 2016). The institution under study can control portions of these frustrations, by utilizing the policy recommendation to increase opportunities for low-income first-year college students' exposure to technology-elevated education (Ratliff, 2009) such as having those students participate in the information literacy program during the new student orientation. If the low-income first-year college students are not engaged in the reinstated information literacy program, the students could experience struggle and potential dropout because they might not be confident and able to meet the expectations of the technology needed to be successful at the Institution Y (Krieg, 2013). Human resources, funding, computers, and software are needed to support the policy recommendation.

Potential Barriers

Senior administrators, associated committee work with using the policy recommendation for Institution Y to reinstate the information literacy program during the new student orientation for low-income first-year college students might not be read thoroughly, or the policy recommendation might not be followed completely, could cause potential barriers. An additional barrier would include if I do not keep the administrators engaged and promptly follow-up with them within a month of the delivery of the policy recommendation

to address any questions or concerns. Response time and follow-up (potentially using an email) are key factors in the successful implementation of a policy recommendation (McEwen, 2016). Moreover, if the senior administrators decide to change his/her mind and decide not to accept the policy recommendation. Additionally, if senior administrators do not follow-up on the policy recommendation to assess its effectiveness, the timing and format of the reinstated information literacy program during the new student orientation are other potential barriers for the proposed program recommendation.

Also, low-income first-year college students' lack of participation might be a potential barrier. If low-income first-year college students do not participate in the information literacy program recommended during the new student orientation, they could struggle through his/her first-year of courses that require advanced technology beyond the basics. Additionally, the lack confidence in their technology might cause the low-income first-year college students to not be able to meet the expectations of the College and technology-rich learning environments (Krieg, 2013) and may cause them to drop out of college. By making the policy recommendation to reinstate the information literacy program during the new student orientation in Institution Y mandated and available to all first-year college students, not on a volunteer basis could eliminate technology barriers. Students who are not able to attend the information literacy program during the new student orientation will be required to attend a make-up session at another time arranged through the Academic Advising office. Barriers that may be encountered with implementing the project would be lack of financial support, resources needed to develop, teach, and evaluate the project as well as lack of motivation among the students

and time. The steps to take to ensure motivation to attend this free information literacy program would be to provide all students with a certificate and a 20% discount on a bookstore purchase. Other steps will be taken to make sure the information literacy program is well marketed, the students know the program is free, sure the program will be offered multiple times is through partnership developments with the Academic Advising and New Student Orientation offices. Another way to motivate students to participate in the program is to share data results and give them a bookstore gift card as a way of thanking them for participating in information literacy program.

In an interview with an Administrator at the College C. Crimmins (2018), I discovered that the policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new student orientation for low-income first-year college students should be sent to the Associate Provost of the Student Success Division. This is the first step in reinstating the information literacy program for the low-income first-year college students during the new student orientation. Next, the reinstated information literacy policy and the program will be examined by the Associate Provost of the Student Success Division, a review of the already existing technology policy and new student orientation program will take place. If the Associate Provost of the Student Success Division votes in support of the policy recommendation to reinstate the information literacy program and mandate it for all first-year college students during the new student orientation, it will then be forwarded to the VP of Student Affairs. If the VP of Student Affairs supports the policy recommendation to reinstate the information literacy program, a presentation can commence, the policy recommendation can be

submitted, and a committee can be formed for review. It is important to include, senior

administrators, faculty, and staff to assess the proposed policy recommendation to

reinstate the information literacy program during the new student orientation for low-

income first-year college students' implementation plan and determine the best process

for progressing forward (Vella, 2010). At this stage, because the policy recommended

individuals will participate in the committee/engagement are salaried and requested by

the administration to participate in the committee work, no additional budget will be

required for their help.

Proposal for Implementation and Timetable

Once my doctoral study is approved, I will request a meeting with senior

administrators at the local level to deliver my policy recommendation. When I deliver the

policy recommendation paper to the senior administrators, I will allow time for questions.

The policy recommendation and information literacy program presentation to the senior

administrators might take two hours to discuss the data on the low-income first-year

students, and the reinstated information literacy program offered during the new student

orientation for low-income first-year college students. If the Associate Provost of the

Student Success Division does support the proposed policy recommendation, it may take

up to one month to forward, and discuss the policy recommendation initiative with the

campus Vice Presidents'. The Campus Vice Presidents' will have up to one month to ask

questions and give feedback on the policy recommendation before making a decision. If

the Campus Vice Presidents' are in support of the policy recommendation, then the

information literacy program will be reinstated during the new student orientation and

mandated for all first-year students. The program will not be put into place until the

committee work is complete. The total amount of time is one academic year before the

policy recommendation to reinstate the information literacy program for low-income

first-year college students' during the new student orientation can be implemented.

However, the timetable will depend upon how long it takes to design, train, and promote the

program. Once the policy recommendation for the information literacy program has been

implemented for the first-year college students', a comparison of persistence rates will be

reviewed, and the Associate Provost of the Student Success Division can revise the policy

recommendation as needed.

Roles and Responsibilities of Student and Others

My role in implementing the policy recommendation to reinstitute the information

literacy program during the new student orientation for low-income first-year college

students' will be to provide the data from my study. I will recommend that I am part of

the committee that creates the policy recommendation to reinstate the information

literacy program during the new student orientation for low-income first-year college

students' is required. Additionally, I need to be part of the committee to provide the

necessary creative commons and resources that I have found in my study. My expertise is

necessary for developing the information literacy program during the new student

orientation for the low-income first-year college students' success because the

recommendation is based on my research findings, student perceptions, and review of the

literature. Once the policy recommendation to reinstate the information literacy program

during the new student orientation for low-income first-year college students' is

implemented, faculty member roles would be to report technology, and suggestions to the orientation committee on potential changes that might benefit low-income first-year college students. Senior Administrators at the institution under study play an important role in approving the policy recommendation and the committee's role would include coordinating and creating a budget for any costs that may come up in future academic years. The Associate Provost, the Campus Vice Presidents', Academic Advising, and Faculty member participation in presenting the policy recommendation to reinstate the information literacy program during the new student orientation for low-income first-year college students' during the new student orientation in the weeks before the beginning of each semester will be assigned by supervisors and the Associate Provost of Student Success. One option could be that administration reaches out to volunteers. Another option could be student to student or a senior student to work on the project as part of their senior project. An option to train these presenters and new faculty could be a pre-recorded webinar that is built into the new student orientation activities or a professional development session presented by the department of Student Success.

Project Evaluation Plan

The committee should hold meetings after each semester to discuss persistence data obtained from the policy recommendation for the low-income, first-year college students' and compare that data to previous semesters before the reinstated information literacy program during the new student orientation for low-income first-year college students was implemented. After the completion of each semester low-income first-year college students who participated in the information literacy program will be provided

with a survey by a senior administrator and sent the Survey Monkey link by e-mail. This survey will allow low-income first-year college students to give their feedback on whether the policy recommendation to reinstate the information literacy program during the new student orientation exposed them to and helped them understand the technology needed to be successful in their courses, if they experienced an increase in their confidence in their use of technology that might have assisted them to remain in college, and what changes they recommend be made. The sections of the survey should be worded to determine which expectations have been met of the information literacy policy recommendation to increase low-income first-year college students' confidence in their use of technology skill that might have assisted them to remain in college. A survey would be the preferable mode when looking at quantitative data and evaluating the effectiveness of the information literacy program. Because the study showed that low-income first-year college students' need to have exposure to technology before classes begin to increase confidence in their use of technology to assist them to remain in college. The evaluation of the policy recommendation is necessary to determine if the information literacy program during the new student orientation in Institution Y increased low-income first-year college students' confidence and technology skill levels beyond the basics they learned in high school and needed to succeed in their courses.

Culminating semester survey data from the policy recommendation and reinstated information literacy program for low-income first-year college students' will play a key role in committee work. Committee work's key role would be potential new information literacy program improvement during the new student orientation but after a full

academic year. Fall-to-fall persistence data will be the ultimate indicator of whether this

information literacy program during the new student orientation for low-income first-year

college students' is working. This data from the policy recommendation can be obtained

from the institution's existing institutional research department. From the data, it can be

seen if significant differences in persistence of low-income first-year college students'

have occurred with policy recommendation's reinstituted information literacy program

during the new student orientation in Institution Y for the low-income first-year college

students'. Based on these forms of data, the committee should be able to assess whether

the policy recommendation is successful, needs to be modified, or should be nullified.

Because the committee who assisted with the creation of the policy recommendation's

information literacy program during the new student orientation for all first-year college

students' is made up of advisors, student success staff, and faculty members, their insight

and collaboration will also be valuable. After the committee collects feedback from the

surveys provided to the low-income first-year college students at the end of their

semester courses, the committee will discuss the program recommendation data and

create a report recommending any program changes that are based on the findings.

Because the committee cannot make official decisions alone, the survey and persistence

data will be shared with the Associate Provost of the Student Success Division, and the

campus Vice Presidents' to identify successes or potential for program improvement. The

Associate Provost of the Student Success Division, and campus Vice Presidents' are key

stakeholders in this policy recommendation for Institution Y to adopt to reinstate the

information literacy program during the new student orientation for low-income first-year

college students' recommendation. If no improvements are necessary, another academic year of surveys and committee meetings will commence. Because technology is evolving and the low-income first-year college students' skills of technology literacy are increasing, I predict that a time will come to pass when the policy recommendation to institute an information literacy program for low-income first-year college students' will not be needed, specifically during the new student orientation. For these reasons, the survey and retention data from policy recommendation and information literacy program for low-income first-year college students should be kept for at least five years. The data should be kept for five years to analyze progression and to facilitate change as technology progresses.

Project Implications

This program recommendation project for Institution Y addresses students' needs by educating senior administrators about the importance of their participation and understanding of the barriers, perceived confidence in using the technology of the low-income first-year college students' and the impact it has on their retention and academic achievement. In 2013, it took low-income students six-years to graduate from college at an alarmingly low rate of 51% (Butrymowicz, 2015). The policy recommendation implications for a positive social change would be to provide college administrators with information on new ways to improve low-income first-year college student confidence in their use of technology appropriately to persist in college, achieve academic success; therefore, retention.

Additionally, the policy recommendation project implication for a positive social

change is important specifically, because low-income first-year college students are less

likely to graduate from college (Hebel, 2007). By utilizing the policy recommendation

and educating senior administrators about the barriers and suggestions to improve their

participation levels, they will potentially see reduced dropout rates of low-income first-

year college students. This student population will increase confidence, start to develop

academically, and continue to progress in college in both the short and long run. The

policy recommendation project's results might motivate senior administrators, to increase

their participation levels to develop necessary technological programs to increase

confidence and support retention efforts of low-income first-year college students.

Social change should occur in the following ways from the policy

recommendation project. First, the number of low-income first-year college students'

dropout rates will decrease, and more students will be retained in college because of the

improvement in their academic grades, confidence, and technology literacies. By

providing this policy recommendation project and the support of implementing an

information literacy program, during the new student orientation for low-income first-

year college students' in Institution Y, the College will increase their retention and

graduation rates. Second, the policy recommendation and impact of the information

literacy program will benefit the community because low-income first-year college

students' graduating from college will be more confident with using technology, more

technologically literate, and job ready to compete in the global economy. Lastly, social

change would occur as a result of the policy recommendation project and by increasing

senior administrator's understandings to provide recommendations and initiatives for

program enhancement, future program development, implementation, address, advocate, assess, and provide resources for their low-income first-year college students' potential needs. This policy recommendation will also reduce the financial and societal burdens that a community endures from low-income college student dropouts. The low-income college student graduates will contribute to the future development of our society and the community they live in.

In the larger context, this program recommendation project will contribute to the body of knowledge in several ways. First, because there is a gap in the literature on the topic of low-income first-year college students' confidence in their use of technology that might assist them to remain in college, this qualitative descriptive study is needed to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college. Higher education administrators might need the policy recommendation to find ways to boost low-income first-year students' confidence levels in using technology to overcome potential challenges that cause them to not persist in college following their first-year. Furthermore, the policy recommendation and the findings of this study indicated barriers that hindered low-income first-year college students mirrored the ones documented in the literature review. Finally, the policy recommendation to senior level administrators offers suggestions on how to overcome the barriers of low-income first-year college students' retention. This policy recommendation may prompt other researchers to explore this phenomenon further.

Moreover, the policy recommendation and data show students who participate in the use of technology effectively should increase their technology literacy. Research also shows that when students persisted past their first-year, their chance of graduating from college is increased. If those same students are provided with opportunities to succeed in a course the first time taken, it can be assumed that students will have a better chance of succeeding in their programs (Mansfield, Webb, & O'Leary, 2011; Stewart, Lim, & Kim, 2015). Upon graduation, low-income first-year college students' can enter society as productive members providing for their families and community. However, the policy recommendation on a larger scope, if this information literacy program during the new student orientation for low-income first-year college students' in Institution Y is evaluated as suggested, and another qualitative study is implemented, it could lead to other institutions following in their footsteps, leading the charge to a greater influence on the development of an information literacy program. Also, with the policy recommendation, other colleges may change the way they look information literacy programs and new student orientations for low-income first-year college students' and their confidence in their use of technology on an international level.

Conclusion

In this qualitative study, I gathered data by conducting open-ended interviews with five male and five female low-income first-year college students at a 4-year private not-for-profit medium-sized college. The methodology used in this study allowed me to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college.

The results of the study provided relevant information regarding the gap in the literature regarding low-income first-year college students' confidence in their use of technology that might assist them to remain in college. This provides a framework for a policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new student orientation for low-income first-year college students'.

The goal of the policy recommendation project for Institution Y to adopt is to increase senior administrators understanding of low-income first-year college students' perceived confidence in their use of technology and how they might have assisted them to remain in college. Additionally, share the findings from the study, student responses that supported the theme, which resulted in the reinstituted information literacy program for low-income first-year college students during the new student orientation. This policy recommendation and information literacy program for low-income first-year college students' will increase their confidence in their use of technology that might assist them to remain in college, academic success, retention and persistence rates in the institution under study. The policy recommendation project, proposed information literacy program, and results from this study outlines the key issues for the need to create the reinstituted information literacy program initiative for low-income first-year college students' that mandates their participation. Furthermore, this policy recommendation for the information literacy program for the first-year college students' is an ongoing implementation. With that stated, I encourage program developers at the Institution Y to review often as the technology needed for college success changes every year. Moreover, additional exploration regarding low-income first-year college students' confidence in

their use of technology, retention, and persistence, should also be included. In Section 4, I

outline limitations and strengths of this policy recommendation for Institution Y to adopt

to reinstate an information literacy program offered during the new student orientation for

low-income first-year college students', along with my scholarly considerations, and

reflections on potential future research.

In section 3 of this study, I discussed the goals, rationale, implementation, as well

as the evaluation of my policy recommendation project that is addressed to senior

administrators at the local college. In this section, I also reported the literature on the

barriers that hinder low-income first-year college student confidence in their use of

technology that might prevent them to remain in college and the value of orientation

programs. I additionally posited the implications for social change on the low-income

first-year college students, the local community, and the broader community. In Section

4, I will reflect on the project, my conclusions, and future research.

Section 4: Reflections and Conclusions

Introduction

Section 4 is a reflection on the policy recommendation project for Institution Y to adopt to reinstate the information literacy program during the new student orientation for low-income first-year college students in the institution's existing new student orientation that was proposed in Section 3. I also present my scholarly development, implications for a social change, and recommendations for future information literacy programs during new student orientations for low-income first-year college students at the Institution Y as well as all other institutions.

For many years, I have been passionate about supporting low-income first-year college student populations, student success, retention, and persistence. I was one of those students who struggled with persistence, entered my first-year of college as a low-income first-year college student with a lack of resources, and was not familiar with programs needed to be successful in college. Additionally, I entered college underprepared, under-resourced and was placed into precollege programs and developmental courses. This study motivated me to become a change agent in my community to make a difference in the lives of low-income first-year college students. I believe all students can graduate from college if given the resources, guidance, and support. I designed this qualitative descriptive study to gain a better understanding of how low-income first-year college students' perceived confidence in their use of technology might assist them to remain in college. The policy recommendation policy for Institution Y to adopt to reinstate their information literacy program during the new

technology orientation program that was proposed as a result of this study should

increase low-income first-year college students' confidence in their use of technology to

assist them to remain in college past their first year. My self-reflection is a result of my

research and experiences as a scholar and student success leader in my institution.

Project Strengths and Limitations

The policy recommendation project for Institution Y to adopt to reinstate the

information literacy program has the potential to benefit the study site. This policy

recommendation could precipitate action toward the development of an information

literacy program during the new student orientation to increase low-income first-year

college students' confidence in their use of technology skills that might assist them to

remain in college before entering the classroom. During this transitional process of

implementing the information literacy program for low-income first-year college

students, I foresee some limitations that would need to be reviewed before the next term.

One limitation is that students who are low-income and first-year might not

participate in the information literacy mandated program during the new student

orientation. Because the policy recommendation's information literacy program will be

offered only during the new student orientation, students who have applied to the college

and are identified as low-income and first-year might choose not to attend the new

student orientation before entering the classroom. For those who did not attend the

information literacy program, they would not benefit from the program during the

orientation program. Because the policy recommendation's proposed information literacy

program will be offered during the new student orientation, a limited number of faculty

members and staff participants might be available to coordinate, facilitate, and participate. Therefore, timing may conflict with student schedules, thus preventing them from completing the reinstituted information literacy program.

<center>**Recommendations for Alternative Approaches**</center>

One suggestion to close the gap of low-income first-year college students' confidence in their use of technology that they need to be successful in college is to implement the policy recommendation for Institution Y to adopt to return the information literacy program during the new student orientation. The reinstated information literacy program will include before college experiences and time to orient the students to advanced technologies beyond the basic skills learned in high school that they will need to succeed in college. This type of information literacy alternative and recommendation to the suggested institution's existing new student orientation might not close the gap completely; however, Institution Y needs to provide more opportunities to increase low-income first-year student confidence in their technology that might assist them to remain in college. If low-income first-year college students are exposed to opportunities to increase their confidence in their technology before they enter college classrooms, the objectives may increase retention rates and the future challenges might become obsolete in the institution under study and the information literacy program during the new student orientation might not be needed in the future. In this case, I would recommend that the policy recommendation committee continue to add the information literacy program during the new student orientation for low-income first-year college students to ensure the technology literacy needs for low-income first-year college students are reflective of

what is needed. Another solution might be to have the student success committee members directly recommend an information literacy program during the new student orientation for low-income first-year college students in their first-year courses to meet the objectives, competencies, and close the gaps found in this qualitative descriptive study and review of the literature.

The policy recommendation for Institution Y to adopt to reinstate the information literacy program includes low-income first-year students' mandated participation during the new student orientation to improve their confidence in technology that is needed to be successful in their college courses and retention. This policy recommendation's reinstituted information literacy program for low-income first-year college students might require further research investigation in college and community resource allocation, thus improving the institutional goals of student success and retention for low-income first-year college students. In the student participant open-ended interview results, I found a perceived gap in the low-income first-year college student's confidence in their use of technology that might have prevented them to remain in college. Student participants identified barriers that hindered their ability to remain in college, suggesting several areas in expected confidence and technology exposure, skills, and literacy development is required to prepare them for the technology needed to succeed in college. Additionally, improving the entrance process for low-income first-year college students by providing the necessary information literacy skills development during the new student orientation is consistent with Bruno's CBL methodology that laid the foundation for this

investigation. Bruno contended that there is a link between knowledge, confidence, and behavior (Bruno, 1993).

The policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new student orientation for low-income first-year college students can increase student confidence to overcome barriers with technology, provide technology exposure, access, and literacy development for those students. Additionally, the policy recommendation's information literacy program during the new student orientation low-income first-year college students would identify student participants who are low-income and in their first year of college who need increased confidence in their use of their technology that might assist them to remain in college. In the age of changing technology, a policy recommendation for Institution Y to adopt could also enhance academic success, classroom learning, and retention.

Increasing low-income first-year college students' technology usage, literacy, exposure, and availability through the policy recommendation's information literacy program during the new student orientation before students enter the classroom has been found to be successful in a variety of modalities. Perrine and Spain (2009) found that precollege programs have concealed benefits on academic success and retention. Moreover, McKendall, Simoyi, Chester, and Rye (2000) affirmed that low-income first-year students need to engage in precollege programs to learn technology literacies to enable them to be successful and persist in college.

A solution to possible limitations would be to offer the policy the information literacy program during the new student orientation for low-income first-year college

students before classes begin. Cooper and Johnson (2013) affirmed that colleges need to support the implementation of alternative opportunities for program delivery that are necessary to ensure student success. Alternative modalities include exposure to technology literacies required for specific courses, online learning platforms, and websites. This could be limiting and cumbersome if the low-income first-year college students lack basic computer literacy, confidence, and technology usage during the information literacy program during the new student orientation. Holding an extra 2-hour information literacy program during the new student orientation may put undue burdens on faculty members, administrators, and staff.

The policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new student orientation for the low-income first-year college students relies on the associate provost of the Student Success Division and campus vice president's decisions for approval. Various approval levels need to take place to move forward with committee work and to implement the information literacy program. Because the administration has to approve, this policy recommendation for Institution Y to adopt to reinstitute the information literacy program during the new student orientation is limited in what implementations can be put into place. I suggest adding an addendum on to the policy recommendation's information literacy program during the new student orientation for low-income first-year college students. Should the campus associate provost for student success and vice president object to it, the feedback will be documented and communicated back in the recommendations and a time frame for a second draft including the changes requested.

Scholarship, Project Development, and Leadership and Change

The combination of independent knowledge, reviewing the literature, and interdependence allowed me to progress as a student to an academic scholar. Applying research techniques to create a qualitative study that addressed a local problem was necessary. Additionally, research techniques were necessary for developing the policy recommendation for Institution Y and recommending the reinstatement of the information literacy program during the new student orientation for low-income first-year college students, thinking through, and implementing necessary processes. There were several challenges that I faced in meeting the institutional standards of the Ed.D Program and conducting qualitative research while protecting the interests of the institution where I am employed. This study has strengthened my collegiate capabilities by allowing me to learn higher educational leadership components through course work and research. Recognizing that being a qualitative researcher requires a person to watch my biased tendencies while conducting open-ended interviews, obtaining student perceptions, and interpreting data in a scholarly way has allowed me to grow both intellectually and personally.

This policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new orientation program for low-income first-year college students was a direct result of the data obtained from the qualitative research study I conducted to understand a local problem. I learned that developing a policy recommendation to reinstate a program must be discussed at many levels of institutional hierarchy. Conducting a literature review and developing inter-institutional collaborations

on student success/retention is valuable and significant; however, there is still a process a researcher must go through to explore how to implement a strategy to approach a local or national, issue. The amount of time it takes to implement a policy recommendation and reinstate a program is greater than what a researcher's determined thoughts might be. It takes time, effort, and scholarly inquiry to develop a new solid policy recommendation as well as patience to conduct continuous reviews to reinstate and implement an information literacy program due to unforeseen challenges

As a student success administrator in Institution Y, I believe that having study results and research to back my claims about the understanding of low-income first-year college students' perceived confidence in their use of technology and how it might assist them to remain in college has created a dialogue that can encourage collaboration with other student success divisions and orientation programs to facilitate increased student retention, success, and persistence for low-income first-year students. Moreover, I learned that I have a voice in leadership. When interviewing administration on the processes of reinstating the information literacy program during the new student orientation, the administration was open to ideas of implementing research-based decisions to implement and reinstate the information literacy program for low-income first-year college students to increase student success practices. Creating change within an institution and achieving goals takes time and dedication. It also takes a lot of support from the senior administrators, faculty, and staff that work in the institution. Building relationships and understanding other colleague's strengths, and using those strengths to implement change, is a major part of leadership. Through leadership, an individual can

create change for the betterment of the institution and their students. My research and development of a policy recommendation for the institution to adopt to reinstate an information literacy program during the new student orientation for the low-income first-year college students have contributed to my leadership skills. I say this because this process required my knowledge of best practices, student success, retention, persistence, theory-based processes, and qualitative research practices to address a college's problem.

Reflection on the Importance of the Work

Locally, a problem existed with regard to retention at Institution Y. Being a student the educational track that I have succeeded in has amplified my divergent thinking processes in the analytical portion of this study. Interdependence and perseverance have been my strength, and during this lengthy process, I have learned to take recommendations from those who are experts in the community and those who have been through the doctoral program. Overcoming adversity and challenges were valuable lessons that I have learned. Despite personal challenges that I encountered during this process, the determination, leadership, guidance, motivation, and support of my chair and committee member have helped increase my confidence and motivation during this scholarly process to succeed in this enormous accomplishment.

Throughout the literature review, I have gained a deeper level of understanding as to how changes can be made based on inquiry and qualitative data analysis. I have had an authentic qualitative research experience that allowed me to expand my knowledge of low-income first-year college students' confidence in their use of technology that might have assisted them to remain in college, and to apply future research techniques for

problems that may occur within any institution that I may want to study in the future. It is

enlightening to know that my research can affect institutions on a national and potentially

global level. Throughout the literature review, I enhanced my knowledge and found that

there was a gap in the literature. Other institutions might have similar issues but do not

have the scholarly research to back up program recommendations or solutions. Scholastic

growth is extremely valuable to me as I continue to research and publish my findings

after obtaining my degree.

 As a student success leader and higher administrator practitioner in a college

setting, this qualitative study, the findings, and the new student orientation

recommendation process has expanded my knowledge of the expectations of the

associate provost of the Student Success Division, the campus vice president, faculty, and

staff members. More importantly, I have gained more knowledge of the current

technology skill levels of the low-income first-year college students and their confidence

with their use of technology coming into the college for the first time and in their

classroom. In interviewing low-income first-year college students and studying

institutional student success technology barriers, I was able to obtain a view of how the

information literacy program during the new student orientation for low-income first-year

college students could aid or hinder retention depending on processes that are in place on

college and university campuses. It was educational for me as a practitioner to combine

the components of scholarly inquiry to make policy recommendation for Institution Y to

adopt to reinstate the information literacy program during the new student orientation for

low-income first-year college students. Collaborations with senior administrators, campus

vice presidents, faculty, staff, and student services are key to raising awareness and consciousness of the low-income first-year college students' perceived confidence in their use of technology and how they might have assisted them to remain in college.

Creating a policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new student orientation for the low-income first-year college students' does not happen quickly. Constructing a policy recommendation to reinstate a policy required the qualitative research, findings from the study, strategically planning with the development of goals, projected time frames, suggested implementations, literature review, and processes for approval. I learned that building trust and relationships with senior administrators, faculty, and the staff is very important to creating change within an institution, especially when a reinstating a policy that mandates student participation, for a specific population of students, such as those who are low-income and first-year. Giving control over the information literacy policy during the new student orientation for low-income first-year college students', the participation processes, the IRB process, and data collection was a lesson that was necessary for me to learn objectivity and integrity to develop my scholarship.

The importance of the work I did as a scholar by using a qualitative descriptive study was to gain a better understanding of low-income first-year college students' perceived confidence in their use of technology and how it might have assisted them to remain in college enabled me to identify a gap in literature, become an agent of social change, make a difference in this society and on my college campus. I identified barriers low-income first-year college students' face with their confidence in technology that

hinders their success in college, which might prevent them from returning the next year. Additionally, low-income first-year college students' make an important contribution to the institution that could have a lasting impact. The information and findings from the study along with the policy recommendation disseminated locally, through a wider scope, is supported by educational research. The educational research presents the potential for collaborating with leadership to create new policies and programs for low-income first-year college students. Additionally, the research presents an opportunity to improve student success and the technology confidence of low-income and first-year college student retention. By using the findings from the qualitative study to create a policy recommendation for Institution Y to adopt to reinstate the information literacy policy during the new student orientation for low-income first-year college students' provides the potential for impacting social change at a local level. The reinstatement of the information literacy policy is necessary because low-income first-year college students affirmed they need a pre-college information literacy program to acquire necessary technology literacies to increase their confidence to complete their courses successfully, thus reducing dropout rates, and increase persistence. Because there was limited literature on this subject and very few research projects implemented regarding low-income first-year college students' confidence in their use of technology, how their confidence in using technology may have assisted them to remain in college, and information literacy programs during new student orientations, the assumption could be made that other institutions nationally and globally are experiencing identical challenges; therefore, this research has the potential to impact social change in a wider scope.

Implications, Applications, and Directions for Future Research

The implications of this research study findings and the policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new student orientation are important for low-income first-year college students', where their confidence in their use of technology may not match the expectations of their college course requirements. I learned that timing might influence results in a scholarly study. Because of the IRB approval processes, I was able to conduct the open-ended interviews after the last day of their first-year of college. It is my position that my study should be repeated, but only with new low-income first-year college students, and the open-ended interviews should be given to them after the completion of their first-year of classes or over the week after their final exams are done. Such a study would more accurately depict the whole population or those who are at risk of dropping out at a later time. Repeating this study could give more accurate data, giving better support for the request to reinstate the information literacy program during the new student orientation for low-income first-year college students'. The research I completed, findings, and recommendations made to reinstate the information literacy program during the new student orientation for low-income first-year college students', support the confidence low-income first-year college students' need in their use of technology to succeed past their first year of college.

Additionally, as a result of the qualitative study findings and obtaining an understanding the perceptions of low-income first-year college students' role of confidence in their use of technology on retention, it is suggested to bring additional

awareness to technology needed to succeed in college, that are being used regularly, and technologies that are not being used regularly for student success and retention. An open-ended interview with low-income first-year college students could also identify technology that does not need to be included in the information literacy program during the new student orientation. Moreover, an open-ended interview with low-income first-year college students could identify additional technology needed that may not be recommended in the information literacy program during the new student orientation program. In the interview process, open-ended questions regarding any self-perceived inadequacies in the institution that hinders student success could also open the door for additional conversation outside of low-income first-year college student confidence in their use of technology that might assist them to remain in college; therefore, expanding my qualitative study and aiding in the review process of the information literacy program during the new student orientation recommendation.

The findings in my research imply that low-income first-year college students' perceived confidence in their use of technology and how they might have assisted them to remain in college confirmed the need to reinstate the information literacy program during the new student orientation for low-income first-year college students' is needed to increase and address some of the barriers causing low-income first-year students to fail; therefore drop out of college. This reinstated information literacy program during the new student orientation for low-income first-year college students' will expose them to the technology they need to use in college, beyond the basic skills they learned in high school, before college entry. Additionally, technology literacy is ever changing;

therefore, future research should be done to keep current with the latest trends in higher education. Moreover, as higher education institutions continue to incorporate more technology s in their classrooms, the evolving needs of low-income first-year college students' will need to be reviewed, and modifications to institutional information literacy and new student orientations will need to be made. A qualitative study should be explored to continue to understand low-income first-year college students' perceived confidence in their use of technology and how they might have assisted them to remain in college as well as to discover other areas of low-income first-year college student barriers and possible solutions to the barriers with confidence and technology they might face to remain in college.

Conclusion

Findings in my qualitative study indicated, there are barriers that hinder low-income first-year college students' confidence in their use of technology that could cause them to not return to college. Low-income first-year college students interviewed, reported they need to have exposure to a variety of technology used in their classes before the beginning of the semester term to be successful, remain in college, and to meet course expectations. Moreover, findings from the study showed low-income first-year college students' need exposure and training in the technology used in their college courses such as web-based programs, online learning platforms, online assessment technology, library websites, college websites, to increase their chances of academic success and retention. Also, the same students reported they need to learn how to use technologies beyond the basics they were taught in high school, learn how to use

unfamiliar technology needed to access online classroom/materials, organize documents, increase their knowledge, use as reference and communication tools, to use as a resource, to check emails, track grades, and complete assessments. Additionally, as a result of the research findings, I have created a policy recommendation for the institution to adopt to reinstate their information literacy program during the new student orientation to senior administrators who could approve policy/programs. The information literacy program during the new student orientation to remove barriers that hinder low-income first-year college students' face with their confidence in their use of technology that might prevent them from remaining in college past their first year of college. Additionally, to encourage senior administrators to play a more active role in the same students' academic achievement, increased technology literacies, confidence; therefore retention.

This qualitative study and findings successfully addressed a local institutional problem of low-income first-year college students' confidence in their use of technology that might assist them to remain in college, which was implicated as a possible reason for the low retention rates of low-income first-year college students'. The small sample size and the open-ended interview questions did not provide for any limitation on the scope. I was able to conduct the interviews with the low-income first-year college students at the completion of their first year of college classes. At this time, there are no alternative solutions because the qualitative study and data analysis were conducted in a timely manner. While there are a variety of ways to implement change within the institution under study, low-income first-year college student confidence in their use of technology and retention was an under-researched topic among low-income first-year college

students' and needed further exploration. The policy recommendation for Institution Y to adopt to reinstate the information literacy program during the new student orientation can be developed to provide opportunities for low-income first-year college students to increase their confidence in their use of technology skills that might assist them to remain in college, thus potentially increasing their academic success in their first-year of college where expectations of technology literacies are high. The evolving use of technology in the classroom for low-income first-year college students' make future research in this field important for increasing student success and retention rates.

References

ACT National Collegiate Retention and Persistence to Degree Rates. (2014). Retrieved

from http://www.act.org/research/policymakers/pdf/ret

Adams, C. (2013). Report: For many students, 'college-ready' isn't enough. *Education

Week*, *32*(35), 5. Retrieved from

https://www.edweek.org/ew/articles/2013/06/12/35report-b1.h32.html

Adams, T. M., & Ewen, G. W. (2009). The Importance of Confidence in Improving

Educational Outcomes. Retrieved from

http://ticc.mines.edu/csm/wiki/images/3/3c/ConfidenceBasedLearning.pdf

Alexander, K. L., Entwisle, D. R., & Kabbani, N. S. (2001). The dropout process in life

course perspective: Early risk factors at home and school. *Teachers College

Record*, *103*, 760-823. doi:10.1111/0161-4681.00134

Alexandersen, C. (2017). Which Pennsylvania colleges have the best and worst

four-year graduation rates? Retrieved from

http://www.pennlive.com/news/2017/03/which_pa_college_have_the_wors.html

Aljohani, O. (2016). A comprehensive review of the major studies and theoretical models

of student retention in higher education. *Higher Education Studies*, *6*(2), 1-18.

doi:10.5539/hes.v6n2p1

Allen, D. D., & Bir, B. (2012). Academic confidence and summer bridge learning

communities: Path analytic linkages to student persistence. *Journal of College

Student Retention: Research, Theory & Practice*, *13*(4), 519-548.

doi:10.2190/CS.13.4.f

Amalia, M., Resosudarmo, B. P., & Bennett, J. (2013). The consequences of urban air

pollution for child health: What does self-reporting data in the Jakarta

metropolitan area reveal? *Working Papers in Trade and Development, 2013*(9), 1-

8. Retrieved from

https://crawford.anu.edu.au/acde/publications/publish/papers/wp2013/wp_econ_2

013_09.pdf

Androniceanu, A. A., & Burlacu, S. S. (2017). Integration of educational technologies in

universities and students' perception thereof. *Elearning & Software for*

Education, 226-32. doi:10.12753/2066-026x-17-090

Atieno, O. P. (2009). An analysis of the strengths and limitation of qualitative and

quantitative research paradigms. *Problems of Education in the 21St Century, 13*,

13-18. Retrieved from

http://www.scientiasocialis.lt/pec/files/pdf/Atieno_Vol.13.pdf

Aubeeluck, A., Stacey, G., & Stupple, E. J. (2016). Do graduate entry nursing student's

experience 'Imposter Phenomenon'?: An issue for debate. *Nurse Education in*

practice, 19, 104. doi:10.1016/j.nepr.2016.06.003

Baéz, A., Rodríguez, V., & Suarez-Espinal, C. (2016). College student inventory overall

risk and persistence for first year students in college discovery program at Bronx

Community College. *HETS Online Journal*, 7,2-20. Retrieved from

https://hets.org/tag/hets-online-journal/

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.

    Retrieved from https://books.google.com/books?hl=en&lr=&id=eJ-PN9g_o-

    EC&oi=fnd&pg=PR7&dq=Bandura,+A.+(1997).+Self-

    efficacy:+The+exercise+of+control.+New+York,+NY:+Freeman.&ots=zyIKGZh

    9Yj&sig=viwedByQpCP33Cdqb13JF42WiLE#v=onepage&q&f=false

Baran, E. (2016). Investigating faculty technology mentoring as a university-wide

    professional development model. *Journal of Computing in Higher*

    Education, *28*(1), 45-71. https://doi.org/10.1007/s12528-015-9104-7

Barouch-Gilbert, A. (2017). Dominican students during academic probation: Experiences

    and self-efficacy enhancement in a four-year college in Santo Domingo. *Alberta*

    Journal of Educational Research, *63*(2), 214-218. Retrieved from https://eds-a-

    ebscohost-

    com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=3&sid=07f6b665-

    539a-4dd8-a205-c702f5e38c6a%40sessionmgr4010

Barry, C. L., & Finney, S. J. (2009). Can we feel confident in how we measure college

    confidence: A psychometric investigation of the college self-efficacy

    inventory. *Measurement and Evaluation in Counseling and Development*, *42*(3),

    197-222. doi:10.1177/0748175609344095

Baum, S. (2017). Urban Institute: Examining the Federal-State Partnership in Higher

    Education. Retrieved from

    https://www.luminafoundation.org/files/resources/examining-the-federal-state-

    partnership-in-higher-education.pdf

Bell, B. J. (2017). Trust in college transitions. *Journal of Outdoor Recreation, Education & Leadership*, *9*(2), 248. doi:10.18666/JOREL-2017-V9-I2-8263

Benavides, A. D., & Keyes, L. (2016). New-Student Orientations: Supporting success and socialization in graduate programs. *Journal of Public Affairs Education*, *22*(1), 107-125. Retrieved from https://digital.library.unt.edu/ark:/67531/metadc1010748/

Betz, N. E., & Hackett, G. (1983). The relationship of mathematics self-efficacy expectations to the selection of science-based college majors. *Journal of Vocational Behavior, 23*, 329-345. doi:10.1016/0001-8791(83)90046-5

Billings, E. S., & Mathison, C. (2012). I get to use an iPod in school? Using technology - based advance organizers to support the academic success of English learners. *Journal of Science Education and Technology*, *21*(4), 494-503. doi:10.1007/s10956-011-9341-0

Black, B., & Lassmann, M. E. (2016). Use of technology in college and university English classrooms. *College Student Journal*, *50*(4), 617-623. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=2&sid=de341525-784f-4a17-931d-ae5625277b65%40sessionmgr4010

Bragg, D. D., Kim, E., & Barnett, E. A. (2006). Creating access and success: Academic pathways reaching underserved students. *New Directions for Community Colleges, 2006, 135*, 5-19. doi:10.1002/cc.243

Braslow, M. D., Guerrettaz, J., Arkin, R. M., & Oleson, K. C. (2012). Self-doubt. *Social & Personality Psychology Compass*, *6*(6), 470-482. doi:10.1111/j.1751-9004.2012.00441.x

Britton, S. (2012). Retention efforts at BGSU-Firelands: The retention initiatives implementation team's deliberations and first year initiatives. *AURCO Journal*, *1*(8),1-12. Retrieved from http://www.aurco.net/Journals/AURCO_JOUR_2012_body_vol_%2018.pdf

Bruno, J. E. (1987). Admissible probability measurement in instructional management; *Journal of Computer Based Instruction, 14*(1), 95-107. Retrieved from http://ticc.mines.edu/csm/wiki/images/3/3c/ConfidenceBasedLearning.pdf

Bruno, J. E. (1993). Using testing to provide feedback to support instruction: A re-examination of the role of assessment organization. In D. Leclercq & J. Bruno (Eds.), Item bank: Interactive testing and self- assessment (pp. 190-209). Berlin: Springer Verlag. https://doi.org/10.1007/978-3-642-58033-8_16

Bruno, J. E. (1995). Information reference testing (IRT) in corporate and technical training programs. Los Angeles, CA: UCLA. Retrieved from http://enacademic.com/dic.nsf/enwiki/8608304

Buckenmeyer, J. A., Barczyk, C., Hixon, E., Zamojski, H., & Tomory, A. (2015). Technology 's role in learning at a commuter campus: The student perspective. *Journal of Further and Higher Education*, 1-20. doi:10.1080/0309877X.2014.984596

Buszin, J. S. (2013). Beyond school finance: Refocusing education reform litigation to realize the deferred dream of education equality and adequacy. *Emory Law Journal*, *62*(6), 1613-1657. Retrieved from http://law.emory.edu/elj/content/volume-62/issue-6/comments/beyond-school-finance.html

Butrymowicz, S. (2015). An unprecedented look at Pell Grant graduation rates from 1,149 schools. Retrieved from http://hechingerreport.org/an-unprecdented-look-at-pel-grant-graduation-rates-from-1149-schools/

Chan, M. (2017). Have you been oriented? An analysis of new student orientation and e-orientation programs at U.S. Community Colleges. *College & University*, *92*(2), 12-25. Retrieved from https://eds-b-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=8&sid=517e4977-0a1b-4bc3-b490-649ec2037745%40sessionmgr104

Chang, D. F. (2014). Increasing the trustworthiness of qualitative research with member checking. *PsychEXTRA Dataset, 12*(4), 6-15. doi:10.1037/e530492014-001

Clarke, G. S., & Zagarell, J. (2012). Technology in the classroom: Teachers and technology-a technological divide. *Childhood Education*, *88*(2), 136-139. doi:10.1080/00094056.2012.662140

Choy, S., & Bobbitt, L. (2000, March). National Center for Education Statistics (NCES): Low-income students: Who they are and how they pay for their education. Retrieved from http://nces.ed.gov/

Christle, C. A., Jolivette, K., & Nelson, C. M. (2007). School characteristics related to

    high school dropout rates. *Remedial & Special Education, 28*(6), 325-339.

    doi:10.1177/07419325070280060201

Chuang, N-K., Goh, B. K., Stout, B. L., & Dellmann-Jenkin, M. (2007). Hospitality

    undergraduate students' career choices and factors influencing commitment to the

    profession. *Journal of Hospitality & Tourism Education, 19*(4), 28-

    37. https://doi.org/10.1080/10963758.2007.10696902

Clance, P. R. (1985). The impostor phenomenon: Overcoming the fear that haunts your

    success. Atlanta, GA: Peachtree Publishers. Retrieved from

    http://paulineroseclance.com/impostor_phenomenon.html

Coates, H. (2016). Disadvantaged youth in southern Scotland experience greater barriers

    to information access resulting from poor technology skills, information literacy,

    and social structures and norms. *Evidence Based Library & Information Practice*,

    11(4), 75-78. doi:10.1108/JD-05-2015-0060

Cochran, J., Campbell, S., Baker, H., & Leeds, E. (2014). The role of student

    characteristics in predicting retention in online courses. *Research in Higher

    Education*, *55*(1), 27-48. doi:10.1007/s11162-013-9305-8

Committee on Education and the Workforce. (2013). Hearing on "keeping college within

    reach: Improving access and affordability through innovative partnerships."

    Retrieved from

    https://edworkforce.house.gov/news/documentsingle.aspx?DocumentID=350038

Conley, D. T. (2010). *College and career ready: Helping all students succeed beyond high school*. John Wiley & Sons. Hoboken, NJ. Retrieved from https://www.avid.org/dl/res_research/research_collegeandcareerready.pdf

Cooper, C., Taft, L. B., & Thelen, M. (2004). Examining the role of technology in learning: An evaluation of online clinical conferencing. *Journal of Professional Nursing*, 20, 160-166. doi:10.1016/j.profnurs.2004.04.003

Cooper, T., & Johnson, C. (2013). Web 2.0 Tools for constructivist online professional development. *Proceedings of World Conference on Educational Media and Technology* (pp. 1923-1926). Retrieved from https://www.editlib.org/noaccess/112231

Corbett, C., Hill,C., Rose, A.S., (2008).Where the girls are: The facts about gender equity in education. *American Association of University Women.* Washington, DC. Retrieved from https://www.aauw.org/research/where-the-girls-are/

Cox, C. (2009) The digital divide: Information competency, computer literacy, and community college proficiencies. *Academic Senate for California Community Colleges.* Retrieved from: http://www.asccc.org/content/digital-divide-information-competency-computer-literacy-and-community-college-proficiencies

Cox, R. D. (2016). Complicating conditions: Obstacles and interruptions to low-income students' college 'choices'. *Journal of Higher Education*, (1), 1. https://doi.org/10.1080/00221546.2016.11777392

Credé, M., Niehorster, S. (2012). Adjustment to college as measured by the student adaptation to college questionnaire: A quantitative review of its structure and relationships with correlates and consequences. *Educational Psychology Review, 24,* 133-165. https://doi.org/10.1007/s10648-011-9184-5

Creswell, J. W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches* (Laureate custom 3rd ed.). Thousand Oaks: CA: SAGE Publications.

Creswell, J. W. (2012*). Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (Laureate custom ed.). Boston, MA: Pearson Education.

D'ambra, J., Wilson, C. S., & Akter, S. (2013). Application of the task-technology fit model to structure and evaluate the adoption of E-books by Academics. *Journal of The American Society for Information Science & Technology*, *64*(1), 48-64. doi:10.1002/asi.22757

Darling-Hammond, L., Zielezinski, M. B., & Goldman, S. (2014). Using technology to support at-risk students' learning. *Alliance for Excellent Education*. Retrieved from https://edpolicy.stanford.edu/sites/default/files/scope-pub-using-technology-report.pdf

DeAngelo, L. (2014). Programs and practices that retain students from the first to second year: Results from a national study. *New Directions for Institutional Research*, *2013, 160,* 53-75. doi:10.1002/ir.20061

Definition of Educational Technology [Updated]. (2010). Retrieved from

 https://Itlatnd.wordpress.com/2010/09/17/difinition-of-educational-technology/

Delen, D. (2012). Predicting student attrition with data mining methods. *Journal of*

 College Student Retention: Research, Theory & Practice, 13(1),17-35.

 https://doi.org/10.2190/cs.13.1.b

Dervarics, C. (2009). Obama agenda focuses on degree completion: advocates applaud

 $2.5 billion college retention proposal but say insufficient financial aid is barrier

 to degree completion. *Diverse Issues in Higher Education*, (5), 6. Retrieved from

 http://diverseeducation.com/article/12435/

Donahue, P. L., Finnegan, R. J., Lutkus, A. D., Allen, N. L., & Campbell, J. R. (2001).

 The nation's report card: Fourth-grade reading 2000.

 https://nces.ed.gov/nationsreportcard/pubs/main2000/2001499.asp

Draper, S.W. "Tinto's Model of Student Retention." Retrieved from

 http://www.psy.gla.ac.uk/~steve/localed/tinto.html

Eichelberger, M., & Imler, B. B., (2015). "How do I send an Email?": Technology

 challenges for first-year students in the college library. *Library Hi Tech*, (3), 329.

 doi:10.1108/LHT-03-2015-0027

Ellis-O'Quinn, A. (2012). An ex post facto study of first-year student orientation as an

 indicator of student success at a community college. *Inquiry*, *17*(1), 51-57.

 Retrieved from

 https://commons.vccs.edu/cgi/viewcontent.cgi?referer=https://www.google.com/

 &httpsredir=1&article=1005&context=inquiry

Evans, R. (2007). Student learning outcomes in a cyberspace age. *Diverse: Issues in Higher Education*, *24*(11), 85. Retrieved from

http://ezp.waldenulibrary.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsgea&AN=edsgcl.166989075&site=eds-live&scope=site

Everett, J. B. (2015). Public community colleges: creating access and opportunities for first-generation college students. *Delta Kappa Gamma Bulletin*, *81*(3), 52-58. Retrieved from

http://ezp.waldenulibrary.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=101823318&site=eds-live&scope=site

FAFSA Free for Federal Student Aid. (2016). Retrieved July 11, 2016, from

https://fafsa.ed.gov/

Fairlie, R. W., & Grunberg, S. H. (2014). Access to technology and the transfer function of community colleges: Evidence from a field experiment. *Economic Inquiry*, 52(3), 1040. doi:10.1111/Ecin.12086

Fike, D. S., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Review*, *36(*2), 68-88. First-Year Students. (2017). Retrieved November 13, 2017, from

http://admissions.psu.edu/info/future/firstyear/

Financial Aid Data (2013). [Pell Grant] Unpublished Data.

Financial Aid Data (2016). [Pell 14-14] Unpublished Data.

Forbus, P. R., Newbold, J. J., & Mehta, S. S. (2011). First-generation university students: Motivation, academic success, and satisfaction with the university experience. *International Journal of Education Research, 6*(2), 34- 55. Retrieved from https://www.thefreelibrary.com/First-generation+university+students%3A+motivation%2C+academic+success%2C...-a0299759787

Frydenberg, M., & VanderClock, W. (2016). Acclimating students to technology in the first-year college experience. *Information Systems Education Journal*, *14*(1), 28-34. Retrieved from http://isedj.org/2016-14/n1/ISEDJv14n1p28.html

Gesell, I. (2007). Am I talking to me? The power of internal dialogue to help or hinder our success. *Journal for Quality & Participation*, *30*(2), 20–21. Retrieved from https://search-proquest-com.ezp.waldenulibrary.org/docview/219092547?accountid=14872

Gill, B., Ramjan, L., Koch, J., Dlugon, E., Andrew, S., & Salamonson, Y. (2011). A standardized orientation program for first year undergraduate students in the college of health and ccience at UWS. A practice report. *The International Journal of The First-Year in Higher Education*, (1), 63. doi:10.5204/intjfyhe.v2i1.48

Goldrick-Rab, S. (2016). What colleges can do right now to help low-income students succeed. Retrieved August 29, 2016, from http://www.chronicle.com/article/What-Colleges-Can-Do-Right-Now/237589

Goode, J. (2010). Mind the gap: The digital dimension of college access. *Journal of Higher Education*, 81(5), 583-618. https://doi.org/10.1353/jhe.2010.0005

Grundmeyer, T. A. (2012). *A qualitative study of perceptions of first-year college students regarding technology and college readiness* (Order No. 3539365). Available from ProQuest Dissertations & Theses Global. (1095398675). Retrieved from http://search.proquest.com.ezp.waldenulibrary.org/docview/1095398675?accountid=14872

Hagedorn, L.S. (2006). How to define retention: A new look at an old problem, transfer and retention of urban community college students. Retrieved from http://eric.ed.gov/?id=ED493674

Harackiewicz, J., Barron, K., Tauer, J., and Elliot, A. (2002). Predicting success incollege: A longitudinal study of achievement goals and ability measures as predictors of interest and performance from freshman year through graduation. *Journal of Educational Psychology 94*(3), 562-75. https://doi.org/10.1037//0022-0663.94.3.562

Harder, J. T., Czyzewski, A., & Sherwood, A. L. (2015). Student self-efficacy in a chosen business career path: The influence of cognitive style. *College Student Journal*, *49*(3), 341-354. Retrieved from https://eds-b-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=1&sid=62bf1f16-c196-4d4f-ae96-07f3275eb34c%40pdc-v-sessmgr01

Harris, C. C. (2016). The effective integration of technology into schools'
curriculum. *Distance Learning*, *13*(2), 27-37. Retrieved from https://eds-b-
ebscohost-
com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=1&sid=d3c8b76b-
8960-47dc-9b58-105423c34f80%40sessionmgr104

Harris, D. N. (2013). Is traditional financial aid too little, too late to help youth succeed in
college? An introduction to the degree project promise scholarship experiment.
New Directions for Youth Development, *140,* 99-116. doi:10.1002/yd.20080

Haveman, R., & Wilson, K. (2007). Access, matriculation, and graduation. Chapter 2. In
S. Dickert-Conlin & R. Rubenstein (Eds.), *Economic inequality and higher
education* (pp. 17-43). New York, NY: Russell Sage Foundation. Retrieved from
https://www.russellsage.org/publications/economic-inequality-and-higher-
education-1

Hebel, S. (2007) Retention rates among colleges that serve low-income students. *Gifted
Child Today*, *30*(3), 7th series. Retrieved July 10, 2017. Retrieved from
https://eds-b-ebscohost-
com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=4&sid=b15537a4-
6786-43d0-8261-5a0fe2421919%40sessionmgr101

Henson, A. R. (2014). The success of nontraditional college students in an IT
world. *Research in Higher Education Journal*, *25.* Retrieved from
https://eric.ed.gov/?id=EJ1055315

Hilgenkamp, K. D., & Livingston, M. M. (2002). Tomboys, masculine characteristics, and self-ratings of confidence in career success. *Psychological Reports*, *90*, 743–749. https://doi.org/10.2466/pr0.90.3.743-749

Hill, J. B., Macheak, C., & Siegel, J. (2013). Assessing undergraduate information literacy skills using project SAILS. *Codex: The Journal of the Louisiana Chapter of the ACRL*, *2*(3), 23-37. Retrieved from http://acrlla.org/journal/index.php/codex/article/view/77

Hoffman Marketing Communications (2011). How to write a white paper: A closer look at white paper definition. Retrieved from http://www.hoffmanmarcom.com/what-is-a-white-paper.php

Hollins, T. J. (2009). Examining the impact of a comprehensive approach to student orientation. *Inquiry*, *14*(1), 15-27. Retrieved from https://files.eric.ed.gov/fulltext/EJ833916.pdf

Hongwei, Y. (2015). Student retention at two-year community colleges: A structural equation modeling approach. *International Journal of Continuing Education & Lifelong Learning*, *8*(1), 85-101. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=1&sid=3a1ea791-4ac2-4fd3-8645-452aca725dd7%40sessionmgr4008

Howard, J. S., & Flora, B. H. (2015). A comparison of student retention and first year

    programs among liberal arts colleges in the mountain south. *Journal of Learning*

    in Higher Education, *11*(2), 67-84. Retrieved from https://eds-a-ebscohost-

    com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=10&sid=d7f9aff3-

    5464-4063-b97d-addc135bd8d6%40sessionmgr4007

Hullinger, M., & Hogan, R. L. (2014). Student anxiety: Effects of a new graduate student

    orientation program. *Administrative Issues Journal: Education, Practice, And*

    Research, *4*(2), 27-34. doi.org/10.5929/2014.4.2.3

Hunt, D. (2003). The concept of knowledge and how to measure it. *Journal of*

    Intellectual Capital, 2003. https://doi.org/10.1108/14691930310455414

Hutchinson, G. E., & Mercier, R. (2004). Using social psychological concepts to help

    students. *Journal of Physical Education, Recreation & Dance*, *75*(7), 22–26.

    https://doi.org/10.1080/07303084.2004.10607269

Institute for College Access & Success (2013). Strengthening Cal Grants to Better Serve

    Today's Students: Analysis and Recommendations. Retrieved from

    https://ticas.org/sites/default/files/pub_files/Cal_Grant_Issue_Brief.pdf

Jaggars, S. S., & Columbia University, C. C. (2011). Online learning: Does it help low-

    income and underprepared students? CCRC Working Paper No. 26. Assessment

    of Evidence Series. Retrieved from

    https://ccrc.tc.columbia.edu/media/k2/attachments/online-learning-help-

    students.pdf

Jones, E. E. (1989). The framing of competence. *Personality and Social Psychology Bulletin*, 15, 477–492. https://doi.org/10.1177/0146167289154001

Jones, S., Johnson-Yale, C., Millermaier, S., & Pérez, F. S. (2009). U.S. college students' internet use: Race, gender and digital divides. *Journal of Computer-Mediated Communication, 14*(2), 244–264. https://doi.org/10.1111/j.1083-6101.2009.01439.x

Jones, S. W. (1985). *How to Sell Your Institution on EEO/Retention*. https://files.eric.ed.gov/fulltext/ED259767.pdf

Keengwe, J., Schnellert, G., & Mills, C. (2012). Laptop initiative: Impact on instructional technology integration and student learning. *Education & Information Technologies*, *17*(2), 137. doi:10.1007/s10639-010-9150-8

Kim, E., Newton, F. B., Downey, R. G., & Benton, S. L. (2010). Personal factors impacting college student success: Constructing college learning effectiveness inventory (Clei). *College Student Journal*, *44*(1), 112-125. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/detail/detail?vid=1&sid=ccf53ceb-abc2-4ded-94b4-f8a581e75727%40sessionmgr4006&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=edsgcl.221092143&db=edsgea

Kolowich, L. (2014). What is a Whitepaper? Retrieved from https://hubspot.com/marketing/what-is-whitepaper-faqs

Krieg, D. (2013). High expectations for higher education? Perceptions of college and

    experiences of stress prior to and through the college career. *College Student*

    Journal, *47*(4), 635-643. Retrieved from

    http://www.ingentaconnect.com/content/prin/csj/2013/00000047/00000004/art000

    08#expand/collapse

Kukulu, K., Korukcu, O., Ozdemir, Y., Bezci, A., & Calik, C. (2013). Self-confidence,

    gender and academic achievement of undergraduate nursing students. *Journal of*

    Psychiatric & Mental Health Nursing, *20*(4), 330-335.

    doi:10.1111/j.1365-2850.2012.01924.x

Kumar, S., & Jagacinski, C. (2006). Imposters have goals too: The imposter phenomenon

    and its relationship to achievement goal theory. *Personality and Individual*

    Differences, *40*, 147–157. Retrieved from https://www-sciencedirect-

    com.ezp.waldenulibrary.org/science/article/pii/S0191886905002333?via%3Dihub

Lanning, S. L., & Mallek, J. J. (2017). Factors influencing information literacy

    competency of college students. *Journal of Academic Librarianship*, *43*(5), 443-

    450. doi:10.1016/j.acalib.2017.07.005

Lau, L. K. (2003). Institutional factors affecting student retention. *Education*, *124*(1),

    126-136. Retrieved from

    https://www.uccs.edu/Documents/retention/2003%20Institutional%20Factors%20

    Affecting%20Student%20Retention.pdf

Lawlor, J., Marshall, K., & Tangney, B. (2016). Bridge 21—Exploring the potential to

    foster intrinsic student motivation through a team-based, technology -mediated

    learning model. *Technology, Pedagogy and Education*, *25*(2), 187-206.

    doi:10.1080/1475939X.2015.1023828

Leedy, P. D., & Ormrod, J. E. (2014). *Practical research planning and design*. Harlow,

    Essex: Pearson.

Lefever, R., & Currant, B. (2010). *How can technology be used to improve the learner*

    experience at points of transition? Bradford, West Yorkshire BD7 1DP UK:

    University of Bradford. Retrieved from

    http://technologyenhancedlearning.net/files/2010/04/ELESIGliteraturereviewFIN

    AL240210.pdf

Liu, C., Wang, P., & Tai, S. D. (2016). An analysis of student engagement patterns in

    language learning facilitated by Web 2.0 technologies. *Recall: Journal of*

    Eurocall, *28*(2), 104-122. doi:10.1017/S095834401600001X

Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). *Methods in educational*

    research: from theory to practice. San Francisco: Jossey-Bass.

London, R. A., Pastor, M., Servon, L. J., Rosner, R., & Wallace, A. (2009). The role of

    community technology centers in promoting youth development. *Youth & Society,*

    *42(*2), 199-228. doi:10.1177/0044118x09351278

López-Pérez, M., Pérez-López, M., Rodríguez-Ariza, L., & Argente-Linares, E. (2013). The influence of the use of technology on student outcomes in a blended learning context. *Educational Technology Research & Development*, *61*(4), 625-638. doi:10.1007/s11423-013-9303-8

Lucas, T., & Robinson, J. (2002). Promoting the retention of prospective teachers through a cohort for college freshmen. *High School Journal*, *86*(1), 3-14. Retrieved from https://doi.org/10.1353/hsj.2002.0019

Lynch, M. E. (1998). *Self-handicapping and overachievement: Two strategies to cope with self-doubt*. Unpublished doctoral dissertation, The Ohio State University. Retrieved from http://ezp.waldenulibrary.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1999-95008-245&site=eds-live&scope=site

Manee, F., Khoiee, S., & Eghbal, M. (2015). Comparison of the efficiency of self-awareness, stress management, effective communication life skill trainings on the social and academic adjustment of first-year students. *Research in Psychology and Behavioral Sciences,* 18-24. doi:10.12691/rpbs-3-2-1

Mangan, K. (2015). The challenge of the first-generation student: Colleges amp up efforts to retain them, but hurdles remain. *Chronicle of Higher Education*, (36), 4. Retrieved from https://www.chronicle.com/article/The-Challenge-of-the/230137

Mansfield, M. (2017). "The Impact of the Digital Divide on First-Year Community College Students." Retrieved from http://scholarworks.waldenu.edu/dissertations/3532/

Mansfield, M., Webb, S., & O'Leary, E. (2011). Retention in higher education: Faculty and student perceptions of retention programs and factors impacting attrition rates. *ERIC.* Retrieved from http://www.eric.ed.gov/PDFS/ED521416.pdf

Marsh, G. (2014). Institutional characteristics and student retention in public 4-year colleges and universities. *Journal of College Student Retention: Research, Theory & Practice*, *16*(1), 127-151. https://doi.org/10.2190/cs.16.1.g

Mayo, T. (2013). First-year course requirements and retention for community colleges. *Community College Journal of Research & Practice*, *37*(10), 764-768. doi.org/10.1080/10668921003723292

McCracken, J. E. (2015). *College retention connections with multiple influencing factors* (Order No. 3719993). Available from Dissertations & Theses @ Walden University. (1718200139). Retrieved from http://ezp.waldenulibrary.org/login?url=https://search.proquest.com/docview/1718200139?accountid=14872

McEwen, L. F. (2016). My white paper was downloaded, now what? Retrieved from https://www.pinpointe.com/blog/my-white-paper-was-downloaded-now-what

McKendall, S. B., Simoyi, P., Chester, A. L., & Rye, J. A. (2000). The health sciences and technology academy: utilizing pre-college enrichment programming to minimize post-secondary education barriers for underserved youth. *Academic Medicine: Journal of the Association of American Medical Colleges*, *75*(10): S121-S123. https://doi.org/10.1097/00001888-200010001-00039

McKendry, S., Wright, M., & Stevenson, K. (2014). Why here and why stay? Students'

   voices on the retention strategies of a widening participation university. *Nurse

   Education Today*, *34*872-877. doi:10.1016/j.nedt.2013.09.009

McMahon, M. (2015). Information Technology Literacy (ITL). *Research Starters:

   Education (Online Edition)*. Retrieved from https://eds-b-ebscohost-

   com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=17&sid=73806f8a-

   2edf-44b9-b0a3-13c413cd71da%40sessionmgr101

Meer, N. M., & Chapman, A. (2014). Assessment for confidence: Exploring the impact

   that low-stakes assessment design has on student retention. *International Journal

   of Management Education*, *12*186-192. doi:10.1016/j.ijme.2014.01.003

Mertes, S. J., & Hoover, R. E. (2014). Predictors of first-year retention in a community

   college. *Community College Journal of Research and Practice*, *38*(7), 651-660.

   https://doi.org/10.1080/10668926.2012.711143

Miller, M. T., & Pope, M. L. (2003). Integrating technology into new student orientation

   programs at community colleges. *Community College Journal of Research &

   Practice*, *27*(1), 15. doi:.org/10.1080/713838080

Moakler, M. W., & Kim, M. M. (2014). College major choice in STEM: Revisiting

   confidence and demographic factors. *Career Development Quarterly*, *62*(2), 128-

   142. doi:10.1002/j.2161-0045.2014.00075x

Moll, M. (2014). 5 Must-have tech skills for college students. Retrieved from

   http://www.usnews.com/education/blogs/college-admissions-

   playbook/2014/01/27/5-must-have-tech-skills-for-college-students

Mouza, C. (2008). Learning with laptops: Implementation and outcomes in an urban, under-privileged school. *Journal of Research on Technology in Education (International Society for Technology in Education)*, *40*(4), 447-472. https://doi.org/10.1080/15391523.2008.10782516

Nachazel, T., & Yohn, C. (2012). The condition of education 2012. Retrieved from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012045

National Center for Education Statistic (2015): Fast facts enrollment data. *Department of Education.* Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=31

National Educational Computing Conference (2008). Symposium conducted by ISTE, International Society for Technology in Education, San Antonio, TX. Retrieved from https://conference.iste.org/2018/?gclid=EAIaIQobChMInp-k0b2N2gIVQx6GCh1vdwsyEAAYASAAEgKbR_D_BwE

Newton, P. (2016). Academic integrity: A quantitative study of confidence and understanding in students at the start of their higher education. *Assessment & Evaluation in Higher Education*, *41*(3), 482-497. doi:10.1080/02602938.2015.1024199

Ng'ambi, D. (2013). Effective and ineffective uses of emerging technologies: Towards a transformative pedagogical model. *British Journal of Educational Technology*, *44*(4), 652-661. https://doi.org/10.1111/bjet.12053

Novák, J. (2013). The influence of the educational reform in Slovakia on educational contents and technology in pre-college economic education. *Social Technologies/Socialines Technologijos*, *3*(2), 288. doi:10.13165/ST-13-3-2-04

O'Donnell, J., Tan, P. P., & Kirkner, S. L. (2012). Youth perceptions of a technology -

focused social enterprise. *Child & Adolescent Social Work Journal*, *29*(5), 427-

446. doi:10.1007/s10560-012-0268-y

Oleson, K. C., Poehlmann, K. M., Yost, J. H., Lynch, M. E., & Arkin, R. M. (2000).

Subjective overachievement: Individual differences in self-doubt and concern

with performance. *Journal of Personality*, *68*(3), 491-524.

https://doi.org/10.1111/1467-6494.00104

Olwell, R., & Stevens, A. (2015). "I had to double check my thoughts": How the reacting

to the past methodology impacts first-year college student engagement, retention,

and historical thinking. *History Teacher, 48*(3), 561-572. Retrieved from

https://eds-b-ebscohost-

com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=2&sid=c1c2fa32-

74d2-4b36-99b2-dadab9d34f03%40sessionmgr104

Ortiz, M. L. (n.d.). Welcome to the University Budget Office. Retrieved from

https://budget.psu.edu/

Ortiz-Ordoñez, J. C., Stoller, F., & Remmele, B. (2015). Promoting self-confidence,

motivation and sustainable learning skills in basic education. *Procedia-Social and*

Behavioral Sciences, *171*(5th ICEEPSY International Conference on Education &

Educational Psychology), 982-986. doi:10.1016/j.sbspro.2015.01.205

Ou, S., & Reynolds, A. J. (2008). Predictors of educational attainment in the Chicago

longitudinal study. *School Psychology Quarterly, 23*(2), 199-200.

doi.org/10.1037/1045-3830.23.2.199

Park, H., Lawson, D., & Williams, H. E. (2012). Relations between technology, parent education, self-confidence, and academic aspiration of Hispanic immigrant students. *Journal of Educational Computing Research*, *46*(3), 255-265. doi.org/10.2190/ec.46.3.c

Paterson, S. S., & Gamtso, C. C. (2017). Information literacy instruction in an English capstone course: A study of student confidence, perception, and practice. *Journal of Academic Librarianship*, *43*(2), 143-155. doi:10.1016/j.acalib.2016.11.005

Paulsen, H., & Griswold, J. (2009). Understanding the impacts of socioeconomic status on first-generation students: A case study. In T. H. Housel & V. L. Harvey (Eds.), The invisibility factor: Administrators and faculty reach out to first-generation college students (pp. 71-90). Boca Raton, FL: Brown Walker Press. Retrieved from

https://books.google.com/books?hl=en&lr=&id=4Tg6rDGQdFQC&oi=fnd&pg=P R7&dq=Understanding+the+impacts+of+socioeconomic+status+on+first-generation+students:+A+case+study&ots=AJerEua-Kg&sig=vxJjkR0bc5XwdhMJjm7-OL_wtcY#v=onepage&q=Understanding%20the%20impacts%20of%20socioeco nomic%20status%20on%20first-generation%20students%3A%20A%20case%20study&f=false

Perrine, R. M., & Spain, J. W. (2009). Impact of a pre-semester college orientation program: hidden benefits. *Journal of College Student Retention: Research, Theory & Practice*, *10*(2), 155-169. https://doi.org/10.2190/cs.10.2.c

Petty, T. (2014). Motivating first-generation students to academic success and college completion. *College Student Journal*, *48*(2), 257-264. Retrieved from https://eds-b-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=12&sid=c1c2fa32-74d2-4b36-99b2-dadab9d34f03%40sessionmgr104

Poirier, T. I., Santanello, C. R., & Gupchup, G. V. (2007). A student orientation program to build a community of learners. *American Journal of Pharmaceutical Education*, *71*(1), 1-11. doi.org/10.5688/aj710113

Polit, D. F., & Beck, C. (2006). Essentials of nursing research: Methods, appraisal, and utilization (6th ed.). New York: Lippincott Williams & Wilkins. Retrieved from https://eds-b-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=16&sid=c1c2fa32-74d2-4b36-99b2-dadab9d34f03%40sessionmgr104

Polivy, J., & Herman, P. (2002). It at first you don't succeed: False hopes of self-change. *American Psychologist*, *57*, 677–689. doi.org/10.1037//0003-066x.57.9.677

Preez, J. (2013). Student self-efficacy narratives: A collaborative co-constructive method. *Australian Journal of Psychology*, *65*(2), 107-114. doi:10.1111/ajpy.12001

Price, D. V., & Tovar, E. (2014). Student engagement and institutional graduation rates: Identifying high-impact educational practices for community colleges. *Community College Journal of Research and Practice*, *38*(9), 766-782. doi:10.1080/10668926.2012.719481

Pruett, P. S., & Absher, B. (2015). Factors influencing retention of developmental education students in community colleges. *Delta Kappa Gamma Bulletin*, *81*(4), 32-40.

Ratliff, V. (2009). Are college students prepared for a technology-rich learning environment? *Journal of Online Learning and Teaching*, *5* (4). Retrieved from http://jolt.merlot.org/vol5no4/ratliff_1209.htm.

Reisdorph, N., Stearman, R., Kechris, K., Phang, T. L., Reisdorph, R., Prenni, J., & Geraci, M. (2013). Original research: Hands-on workshops as an effective means of learning advanced technologies including genomics, proteomics and bioinformatics. *Genomics, Proteomics & Bioinformatics*, *11*368-377. doi:10.1016/j.gpb.2013.10.002

Review Committee (2013). [Bridge to Success]. Unpublished raw data.

Rhoades Jr., J. G., & Hartsell, A. (2008). Marketing first impressions: Academic libraries creating partnerships and connections at new student orientations. *Library Philosophy & Practice*, 1-11. Retrieved from http://link.galegroup.com.ezp.waldenulibrary.org/apps/doc/A193183359/EAIM?u =minn4020&sid=EAIM&xid=203b7cfe

Richards, L. (2016). Necessary computer skills for college students. Retrieved from http://www.mapcon.com/neccessary-computer-skills-for-college-students

Rollins, R., & Bailey, A. (2014). A study of integrating technology with educational goals in public schools. *Global Education Journal*, *2014*(2), 32-51. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=3&sid=df650ae0-3861-498e-981e-6a061017c967%40sessionmgr4007

Rudd, D. P., Budziszewski, D. E., & Litzinger, P. (2014). Recruiting for retention: hospitality programs. *ASBBS Ejournal*, *10*(1), 113-122. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=5&sid=df650ae0-3861-498e-981e-6a061017c967%40sessionmgr4007

Sakamuro, S., & Stolley, K. (2010). White paper purpose and audience. *Purdue Online Writing Lab*. Retrieved from http://owl.english.purdue.edu/owl/resource/546/1/

Sakamuro, S., Stolley, K., & Hyde, C. (2017). Welcome to the purdue owl. Retrieved from https://owl.english.purdue.edu/owl/owlprint/546

Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health, 23*(4), 334-340. doi:10.1002/1098-240x(200008)23:43.0.c0;2-g

Schunk, D. H., & Pajares, F. (2005). Competence perceptions and academic functioning. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 85–104). New York: Guilford Press. Retrieved from https://books.google.com/books?hl=en&lr=&id=YclXAQAAQBAJ&oi=fnd&pg= PA85&dq=related:k0RPaaCC7auQBM:scholar.google.com/&ots=faHBmxb1_O &sig=AB-KJYY0Kh426MHLaZqBg2N0MVw#v=onepage&q&f=false

Shankar, P. R., Karki, B. S., Thapa, T. P., & Singh, N. (2012). Orientation program for first year undergraduate medical students: knowledge, attitudes and perceptions. *Education in Medicine Journal*, *4*(1), e57-e63. doi:10.5959/eimj.v4i1.10

Sherry, A. C., & Sherry, F. T. (1997). The influence of computer confidence on retention in the community college. *Journal of Research on Computing in Education*, *29*(3), 298-314. https://doi.org/10.1080/08886504.1997.10782200

Shinde, G. S. (2010). The relationship between students' responses on the national survey of student engagement (NSSE) and retention. *Review of Higher Education & Self-Learning*, *3*(7), 54-67. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=4&sid=a6c04d7c-fbf0-4eff-aaa1-11f063484ccc%40sessionmgr4006

St. John, E., Shouping, H., & Weber, J. (2001). State policy and the affordability of public higher education: The influence of state grants on persistence in Indiana. *Research in Higher Education, 42,* 401-428. doi:10.1023/a:1011002808866

Smith, S., & Chipley, L. (2015). Building confidence as digital learners with digital support across the curriculum. *Journal of Educational Technology Systems*, *44*(2), 230-239. doi:10.1177/0047239515617469

Soria, K., Lingren Clark, B., & Coffin Koch, L. (2013). Investigating the academic and social benefits of extended new student orientations for first-year students. *Journal of College Orientation and Transition*. The University of Minnesota Digital Conservancy. Retrieved from http://hdl.handle.net/11299/150089

Stark, P., Noel, A., & McFarland, J. (2015). Trends in high school dropout and completion rates in the United States: 1972-2008. Retrieved from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2011012

Stebleton M. J., & Soria, K. M. (2012). Breaking down barriers: Academic obstacles of first-generation students at research universities. *Learning Assistance Review (TLAR), 17(2),* 7-19. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=1&sid=df0c182c-b35c-4bdc-a928-c4ac836eaa8f%40sessionmgr4009

Stewart, S., Doo Hun, L., & JoHyun, K. (2015). Factors influencing college persistence for first-time students. *Journal of Developmental Education*, *38*(3), 12-20. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=11&sid=df650ae0-3861-498e-981e-6a061017c967%40sessionmgr4007

Stewart, S., Lim, D. H., & Kim, J. (2015). Factors influencing college persistence for

first-time students. *Journal of Developmental Education*, *38*(3), 12. Retrieved

from

http://search.proquest.com/openview/3ace7b132f04306f1b2cfa3d2207eafe/1?pq-

origsite=gscholar&cbl=47765

Stewart, T., Clifton, R., Daniels, L., Perry, R., Chipperfield, J., & Ruthig, J. (2011).

Attributional Retraining: reducing the likelihood of failure. *Social Psychology of

Education*, *14*(1), 75-92. doi.org/10.1007/s11218-010-9130-2

Stuber, J. M. (2011). Integrated, marginal, and resilient: Race, class, and the diverse

experiences of white first-generation college students. *International Journal of

Qualitative Studies in Education, 24(1),* 117- 136,

doi:10/1080/09518391003641916

Tavani, C. M., & Losh, S. C. (2003). Motivation, self-confidence, and expectations as

predictors of the academic performances among our high school students. *Child

Study Journal*, *33*(3), 141-151. Retrieved from https://eds-a-ebscohost-

com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=13&sid=df650ae0-

3861-498e-981e-6a061017c967%40sessionmgr4007

Terrion, J. L., & Daoust, J. (2012). Assessing the impact of supplemental instruction on

the retention of undergraduate students after controlling for motivation. *Journal of

College Retention, Research, Theory and Practice*, *13(*3), 311-

327. https://doi.org/10.2190/cs.13.3.c

Thayer, P. B. (2000). Retention of students from first generation and low income

   backgrounds. *Journal of the Council for Opportunity in Education*. Retrieved

   from

   http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED446633

The Education Advisory Board (2016) 90% of low-income, first-generation students

   don't graduate on time. But colleges can change that. Retrieved from

   https://www.eab.com/daily-briefing/2016/03/16/90-percent-of-low-income-first-

   gen-students-dont-graduate-on-time-but-colleges-can-change-that

The Condition of Education (2012). Retrieved from

   https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012045

Thieman, G. Y., & Cevallos, T. (2017). Promoting educational opportunity and

   achievement through 1:1 iPads. *International Journal of Information & Learning

   Technology*, *34*(5), 409-427. doi:10.1108/IJILT-06-2017-0047

Tinto, V., & Pell Institute for the Study of Opportunity in Higher, E. (2004). Student

   retention and graduation: Facing the truth, living with the consequences.

   Occasional Paper 1. *Pell Institute for The Study of Opportunity in Higher

   Education*. Retrieved from https://files.eric.ed.gov/fulltext/ED519709.pdf

Tinto, V. (1994). *Leaving college: Rethinking the causes and cures of student attrition*

   (2nd ed.). Chicago, IL: The University of Chicago Press. Retrieved from

   https://books.google.com/books?hl=en&lr=&id=YclXAQAAQBAJ&oi=fnd&pg=

   PA85&dq=related:k0RPaaCC7auQBM:scholar.google.com/&ots=faHBmxb1_O

   &sig=AB-KJYY0Kh426MHLaZqBg2N0MVw#v=onepage&q&f=false

Tinto, V. (1996). Reconstructing the first year of college. *Planning for Higher Education*, *25*, 1–6. Retrieved from https://eric.ed.gov/?id=EJ558395

Tinto, V (1999). *Taking student retention seriously: Rethinking the first year of college.* Syracuse University. https://doi.org/10.12930/0271-9517-19.2.5

Tongdee, P., Srisawat, S., Loyd, R. A., Temnitithikul, B., Phumwiriya, T., & Nimkuntod, P. (2017). Leopold's maneuver mobile learning technology for facilitating knowledge and self-reported confidence of preclinical medical students. *Suranaree Journal of Science & Technology*, *24*(1), 99-103. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=3&sid=df0c182c-b35c-4bdc-a928-c4ac836eaa8f%40sessionmgr4009

Torres, J. B., & Solberg, V. S. (2001). Role of self-efficacy, stress, social integration, and family support in Latino college student persistence and health. *Journal of Vocational Behavior, 59,* 53-63. https://doi.org/10.1006/jvbe.2000.1785

Tuckman, B. W., & Kennedy, G. J. (2011). Teaching learning strategies to increase success of first-term college students. *Journal of Experimental Education*, *79*(4), 478-504. doi:10.1080/00220973.2010.512318

Turner, P., & Thompson, E. (2014). College retention initiatives meeting the needs of millennial freshman students. *College Student Journal*, *48*(1), 94-104. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=6&sid=df0c182c-b35c-4bdc-a928-c4ac836eaa8f%40sessionmgr4009

Understanding self-doubt, ownership of learning – Office of Superintendent of Public
Instruction, Government Agency. (2014). Retrieved from
http://www.k12.wa.us/SecondaryEducation/CareerCollegeReadiness/CareerGuida
nceWA/Grade10/10-13_UnderstandingSelfDoubt.docx

Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of
the literature and future directions. *Review of Educational Research*, *78*(4) 751–
796. https://doi.org/10.3102/0034654308321456

Vajravelu, K., & Muhs, T. (2016). Integration of digital technology and innovative
strategies for learning and teaching large classes: A calculus case
study. *International Journal of Research in Education and Science*, *2*(2), 379-395.
https://doi.org/10.21890/ijres.67867

Van Zyl, A. a., & Blaauw, P. (2012). An integrated project aimed at improving student
success. *Africa Education Review*, *9*(3), 466-484.
doi:10.1080/18146627.2012.741342

Wallace, P., & Clariana, R. (2005). Perception versus reality-determining business
students' computer literacy skills and need for instruction in information concepts
and technology. *Journal of Information Technology Education: Research*, *4*(1),
141-151. Retrieved from http://www.jite.org/documents/Vol4/v4p141-
151Wallace59.pdf

Wamuyu, P. K. (2017). Bridging the digital divide among low income urban
communities. Leveraging use of Community Technology Centers. *Telematics and
Informatics*, doi:10.1016/j.tele.2017.08.004

Wernersbach, B. M., Crowley, S. L., Bates, S. C., & Rosenthal, C. (2014). Study skills course impact on academic self-efficacy. *Journal of Developmental Education*, *37*(2), 14-33. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=14&sid=df0c182c-b35c-4bdc-a928-c4ac836eaa8f%40sessionmgr4009

White, J. (2005). Creating the perfect white paper. Retrieved from http://paper.ezinemark.com/ creating-the-perfect-white-paper-172a5fb9258.html ezinemark.com 2005

White, K. A. (2009). Self-confidence: A concept analysis. *Nursing Forum*, *44*(2), 103-114. doi:10.1111/j.1744-6198.2009.00133x

Why does increasing the sample size lower the variance? (2016). Retrieved from http://stats.stackexchange.com/questions/129885/why-does-increasing-the-sample-size-lower-the-variance

Williams, C. (2016). [Financial aid data]. Unpublished raw data.

Wissman, L. (2017). 2017 Federal Poverty Level Guidelines. Retrieved from https://www.zanebenefits.com/blog/2017-federal-poverty-level-guidelines

Zajacova, A., Lynch, S., Espenshade, T. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education, 46(6),* 677-706. doi:10.1007/slll62-004- 4139-z O

Zielezinski, M. B. (2016). What research tells us about... using technology to support

    underserved students. *Education Digest*, *82*(3), 30-34. Retrieved from https://eds-

    a-ebscohost-

    com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=17&sid=df0c182c-

    b35c-4bdc-a928-c4ac836eaa8f%40sessionmgr4009

Zimmerman, B. J. (1995). *Self-efficacy and educational development.* In A. Bandura

    (Ed.), Self-efficacy in changing societies (pp. 202-231). New York, NY:

    Cambridge University Press. https://doi.org/10.1017/cbo9780511527692.009

Appendix A: Policy Recommendation Project

Policy Recommendation Project

for Institution Y to Adopt to

Reinstate the Information Literacy Program

for

Low-Income First-Year College Students

During the New Student Orientation

Irene M. Hudson, Ed.D., Researcher

July 2018

Policy Recommendation Project

Introduction

 In Spring 2017, I conducted a research project to gain a better understanding of low-income first-year college students perceived confidence in their use of technology and how they might assist them to remain in college. My research project determined the barriers that hinder low-income first-year confidence in their use of technology that might prevent them from remaining in college past their first year. A policy recommendation evolved from the research that was part of my doctoral work at Walden University. According to Sakamuro et al., (2017) a policy recommendation would benefit higher education institutions with recommendations for program enhancement, implementations, future program development, positive social change, address, assess and resource low-income student potential needs.

 At the current institution first-year to second-year retention rates, for bachelor's degree-seeking undergraduates are low. The Office of Institutional Research confirmed the fall 2014-2015 first-year to second-year overall cohorts of student retention rates was 78.3%. However, retention rates of those defined as low-income based on the Federal Pell Grant guidelines was much lower at 60.2% (S. Gilmore, personal communication, November 13, 2017). Low retention means a financial loss and a sense of failure for both students and the institutions (Rudd, Budziszewski, & Litzinger, 2014). This data demonstrates that there is a local problem with low-income first-year college student retention at the institution in this study (S. Gilmore, personal communication, November 13, 2017). As a result, low-income first-year college students are less likely to not return

to college following their first-year at the institution in this study compared to the overall cohort of students (S. Gilmore, personal communication, November 13, 2017).

Findings in my qualitative study indicated, there are barriers that hinder low-income first-year college students' confidence in their use of technology that could cause them to not return to college. Low-income first-year students interviewed at Institution Y, reported they needed exposure to a variety of technology used in their classes before the beginning of the semester term to be successful, remain in college, and to meet course expectations. Moreover, findings from the study showed low-income first-year college students need exposure and training in the technology used in their college courses such as web-based programs, learning platforms, online assessment technology, library websites, college websites, to increase their chances of academic success and retention. Also, the same students reported they need to learn how to use technologies beyond the basics they were taught in high school, learn how to use unfamiliar technology s needed to access online classroom/materials, organize documents, increase their knowledge, use as reference and communication tools, to use as a resource, to check emails, track grades, and complete assessments. Additionally, as a result of the research findings, I have developed a policy recommendation to senior administrators who could approve programs to reinstate the information literacy program during the new student orientation. The policy recommendation's reinstituted information literacy program is developed to remove barriers that hinder low-income first-year college students face with their confidence in their use of technology s skills that might prevent them from remaining in college past their first year of college. Additionally, the policy recommendation is

designed to encourage senior administrators to play a more active role in the same students' academic achievement, increased technology literacies, confidence; therefore retention.

This qualitative study and findings successfully addressed a local institutional problem of low-income first-year college students' confidence in their use of technology that might assist them to remain in college, which was implicated as a possible reason for the low retention rates of low-income first-year college students. The small sample size and the open-ended interview questions did not provide for any limitation on the scope. I was able to conduct the interviews with the low-income first-year college students at the completion of their first-year of college classes. At this time, there are no alternative solutions because the qualitative study and data analysis was conducted in a timely manner. While there are a variety of ways to implement change within the institution under study, low-income first-year college student confidence in their use of technology and retention was an under-researched topic among low-income first-year college students and needed further exploration. The policy recommendation to reinstate the information literacy program during the new student orientation for low-income first-year college students' to increase their confidence in their use of technology that might assist them to remain in college, thus potentially increasing their academic success in their first-year of college where expectations of technology literacies are high. The evolving use of technology in the classroom for low-income first-year college students make future research in this field important for increasing student success and retention rates.

Policy Recommendation Goals

The main goal of this policy recommendation is to communicate recommendations that will help senior administrators participate more effectively to enhance their understanding of low-income first-year college students' perceived confidence in their use of technology and how it might have assisted them to remain in college. Additional goals are to present the literature that documents the positive impact of senior administrator's involvement on low-income first-year college students' retention and to share with senior administrators the findings of my research project. The focus of the policy recommendation to reinstitute the information literacy program during the new student orientation will be on three objectives for the retention of low-income first-year college students; (a) recommend all first-year college students participate in information literacy program during the new student orientation. Participating in the information literacy program will increase student confidence in their use of technology that might assist them to remain in college, (b) create a cohort of new first-year college students each fall semester term who will take part in the information literacy program. This will ensure to reflect the whole population of low-income first-year college students as well as provide a benefit to all students. Additionally, creating a cohort will allow one to track student persistence comparing past fall-to-fall institutional data to present data. One can also use the data to determine if there is a significant difference in those former students who did participate in the information literacy program, and (c) evaluate data and make changes to the information literacy program during the new student orientation program for first-year college students accordingly. All first-year college students would

benefit from a structured information literacy program to increase their confidence and technology development. If first-year college students understand the technology necessary for success in their specific courses, needed during their first-year of college, they may perform better in their courses and remain in college. Students may also preemptively identify challenges with their confidence in using of technology they might face during their first-year of college, develop the tools and confidence needed to overcome those challenges, and remain in college past their first-year. The policy recommendation to reinstate the information literacy program for first-year college students would increase low-income first-year student confidence, academic achievement, and technology literacies, thus increasing their opportunities for academic success and retention.

Senior administrators need to ensure that the college provides low-income first-year college students with opportunities to enhance their technology by reinstating the information literacy program during the new student orientation for the low-income first-year college students to have opportunities to learn and become familiar with new technology programs that they are unfamiliar with before entering college or during the first week of college to ensure academic success and retention. Jaggars and Columbia University (2011) confirmed students need technology orientation support to assist low-income students to prepare for and comprehend the academic demands of the technology need to be successful in their classes. This will increase student confidence to succeed in college. Park et al., (2012) argued the lack of confidence is a major influence on whether students fail or experience academic challenges. Moreover, increased confidence reduces

learning hindrance and barriers. (Park et al., 2012). Cooper, Taft, and Thelen (2004) argued that unfamiliarity with new technology beyond the basic skills is a barrier to success in college that needs to be addressed because the usage of a variety of technologies are required to increase student learning and persistence. Of the study participants reported unfamiliarity and lack of confidence with new technology programs as a distraction to them completing their academic projects. Participants interviewed also reported that the unfamiliarity with using needed technology programs negatively impacted their confidence in the use of technology needed to assist them to remain in college. Participants also stated that they need to increase their technological knowledge, learn new technology programs, such as web-based program applications, become familiar with using unfamiliar College learning platforms, College websites, basic desktop s, and use technology correctly for its intended purposes. Lastly, lacking proficiency using new technology decreased their self-motivation and assurance to complete assignments, and tasks correctly to achieve academic success.

Low-income first-year college student's confidence in computer literacy and proficiency beyond their basic skills learned in high school is a necessity. McMahon (2015) claimed students need to have a complete understanding of their technology literacies and limitations. Furthermore, Evans (2007) argued colleges must develop educational goals to increase technology proficiency by allowing additional opportunities for students to engage in to matriculate on the college campus. Students need to improve their basic technology literacy and proficiency to learn new knowledge. It is important that colleges and universities take steps to improve technology literacy for all students

beyond fundamentals because it is expected that students have advanced technology knowledge (McMahon, 2015). Novák (2013) argued one solution to eliminating technology literacy barriers is to provide more exposed teaching time for more practical s to develop necessary skills. Additionally, extra funding needs to be allocated to develop necessary programs to increase student technology learning (Novák, 2013). In the study, participants reported that they entered their first year of college confident with basic technology literacy they learned in high school. However, they lacked confidence with using college web-based s, college learning platforms, new technology programs, college website, college desktop s, and on-line learning tools required in their college courses.

An Overview of the Research Study

I undertook a qualitative descriptive study to address the question, how do low-income first-year college students describe their confidence in the use of technology s as a factor in their retention? I collected data through using self-developed interview questions and by conducting interviews with a sample of 10 low-income first-year college students. The policy recommendation that evolved from the research study presents my recommendations to help low-income first-year college students overcome the barriers they identified.

A Brief Literature Review

Students who enter college with a lack in technology beyond the basics can pose barriers to their confidence, academic achievement; therefore retention, specifically for low-income first-year college students. Cooper, Taft, and Thelen (2004) argued the unfamiliarity with new technology beyond the basic skills is a barrier to success in

College that needs to be addressed because the usage of a variety of technologies are required to increase student learning and persistence.

Another barrier is the lack of technology literacy. McMahon (2015) claimed students need to have a complete understanding of their technology literacy and their limitations. Students need to improve their basic technology literacy to learn new knowledge. It is important that colleges and universities take the steps to improve technology literacy for all students beyond the basics because it is expected that student have (McMahon, 2015). Novák (2013) argued, one solution to eliminating technology literacy barriers is to provide more teaching time for more practical s to develop necessary skills. Additionally, extra funding needs to be allocated to develop necessary programs to increase student technology learning (Novák, 2013).

One more barrier is the inability to apply a variety of technologies. McMahon (2015) argued one common thread that all students need to have is the technological ability to apply a variety of technology-based constructs to be successful in academia. Wallace and Clarianna (2005) found that student test scores dropped when they were pre-assessed in technology skills, which means low-income first-year college students may lack necessary technology skills to remain in college without some type of computer literacy training. Additionally, many students do enter their first-year of college lacking those skills. Barriers need to be eliminated to allow students the opportunity to enhance their confidence levels to use technology effectively to succeed in college. When challenges are removed, students will acquire the ability to apply technology knowledge

from one technological platform, word processor, or data base, to another to achieve academic success (McMahon, 2015).

Moreover, technology proficiency is another issue for low-income first-year students. Cox (2009) affirmed college administrators' need to be reminded that many students enter college without the technology skills they need to engage in the digital age. Evans (2007) argued, Colleges must develop educational goals to increase technology proficiency by allowing additional opportunities for students to engage in to matriculate on the College campus. However, students must have the support of senior administrators and faculty to lead them in the learning process. The integration of technology literacy to increase proficiency is mandatory and anything less would lead to professional irresponsibility (Evans, 2007).

Additionally, the lack of confidence is a major factor that hinders students from achieving academically. Park et al., (2012) argued the lack of confidence is a major influence on whether students fail or experience academic challenges. Moreover, increased confidence reduces learning hindrance and barriers. In conclusion, obstacles such as the lack of technology literacy beyond the basics, technology proficiency, the inability to apply a variety of technological knowledge, hinder student confidence in their use of technology that might prevent them to remain in college. Zielezinski (2016) argued that access is not enough for low-income students. They need opportunities to purposefully use a variety of computer technology simulations and s instead of using computer technology for drill and practice.

Study's Findings

The results of this study identified six major themes that emerged from the study: essential to academic achievement, motivation and acquiring knowledge, confidence and computer literacy, overcoming distractions and unfamiliarity, pre-college technology programs, and technology proficiency increases success. For each theme, a more in-depth discussion is provided below.

Theme 1: Essential to academic achievement. Essential to academic achievement referred to one needing to be technology fluent to use a variety of technology to perform the many tasks needed to succeed in college. Participants involved in the interviews reported that technology is required and essential to performing a variety of task such as to completing assignments, conducting research, posting assignments, turning-in assignments, collecting, forwarding, and storing data. Additionally, technology is necessary for organizing documents, increasing knowledge, as a reference and communication tool, resource, to check emails, and track grades.

Theme 2: Motivation and acquiring knowledge. Motivation and Acquiring Knowledge referred to low-income first-year students needing to have the motivation and ability to obtain new knowledge to overcome the challenges with confidence and with the use of technology that will prevent them from remaining in college past their first year.

Participants involved in the interviews reported that students need to do a variety of things to overcome challenges with the use of technology they might face during their first-year of college. The participants stated that first-year students need to have increased inspiration to acquire new knowledge, seek technical assistance, think critically, use

online reference tools, learn and use other technologies they are not familiar with, have a tenacious attitude, use repair services, improve skillsets, eliminate distractions, have self-efficacy, believe in one-self, and to blend technology knowledge.

Furthermore, first-year low-income students can overcome challenges with using technology by communicating their challenges with their Professor, getting rid of the doubt, and by achieving academically. If they do these things, their confidence will inspire their motivation to overcome the obstacles. Additionally, having motivation and acquiring technology knowledge low-income first-year students will have the stick-to-it to acquire confidence to not lose motivation to remain in college past their first year. Also, one participant stated having the inspiration low-income first-year college students will garner emotional stability to overcome challenges with their confidence in the use of technology to assist them to remain in college past their first year to complete their assignments.

Participants interviewed also reported that the unfamiliarity with using needed technology programs negatively impacted their confidence in the use of technology needed to assist them to remain in college. As a result, participants stated that low-income first-year students need to increase their technological knowledge, learn new technology programs, such as web-based program s, become familiar with using unfamiliar College learning platforms, College websites, basic desktop s, and use technology correctly for its intended purposes. Lacking proficiency and self-efficacy with using technology will decrease low-income first-year college students' self-motivation and assurance to complete assignments, and tasks correctly to achieve academic success.

Theme 3: Confidence and computer application literacy. Confidence and computer application literacy referred to the low-income first-year college students entering their first-year of college very confident with basic computer application literacy they learned in high school. However, they lacked confidence with using college web-based s, college learning platforms, new technology programs, college website, college desktop s, and on-line learning tools required in their college courses. Furthermore, participants shared low-income first- year students need confidence to learn new technology programs.

Participants interviewed affirmed, low-income first-year college students need confidence to apply and blend their technology learned in high school effectively to assist them to remain in college past their first-year. Furthermore, participants interviewed stated, by having the confidence to learn how to use the necessary web-based s, college websites, learning platforms, desktop s, and online learning tools students will be more successful and the new learning will definitely help them remain in college. One participant stated to complete projects, students will require confidence to be resilient and achieve their academic goals. He also shared that without confidence one might not know where to start; therefore, drop out or transfer to another school.

Theme 4: Overcoming distractions and unfamiliarity. Overcoming distractions and unfamiliarity referred to the challenges low-income first-year college students experienced and had to overcome while using technology to complete their academic projects. Participants involved in the interviews reported experiencing challenges with temporary disruptions, unfamiliarity with the use of technology programs not used in

high school, navigating the College's websites, utilizing the College's learning platform, internet problems, using technology to find data, using online databases, and completing online assessments.

Theme 5: Pre-college technology programs. Pre-College Technology Programs referred to ways the college could help low-income first-year college students increase their confidence in the use of technology that might assist them to remain in college. Participants interviewed stated the College should make an effort to better prepare students. One participant recommended that the College create pre-college technology program to familiarize incoming low-income first-year students with the technology they are expected to use in their perspective majors/programs before college entry. Another student advised that the college should introduce the freshmen to the computer s they will need to use in college, explain how they are different from high school and how to integrate new learning tools, and give them about 30 minutes to familiarize themselves with how the technology works.

Furthermore, make it a requirement for the students to meet with their academic advisor twice in the first semester to discuss their confidence, questions, and challenges the student might have with using to assist them with their academic quest and to remain in college, specifically because they are required to write a lot of papers and turning in a lot of things on Moodle. This will allow the students to keep up with what they are doing in class, increase their confidence with using different types of technology programs.

Participants also shared that the College develop new initiatives perhaps during new student orientation time to better explain their websites, library database, and Google

Docs, instead of the students struggling to learn the new technology during the semester. Moreover, the college should incorporate during the first week of college an opportunity to acquaint new students with the technology necessary for student success, such as how to use their college's learning platform, web-based programs, and to increase accountability. One participant stated that some faculty lacked knowledge in how to use the technology the students were expected to use to complete their assignments. Additionally, participants recommended that the faculty actually take time to work through the s they want the students to learn.

Theme 6: Technological proficiency increases success. Technological proficiency increases success referred to how low-income first-year college student confidence in the use of technology helped them academically. Participants interviewed stated because of their high level of confidence; they achieved academically. Moreover, their confidence in the use of technology helped them to increase academic achievement, their knowledge, and skills, complete assignments, stay organized, maintain their emotional stability, made their task easier, and increased their self-agency.

Recommendations

The policy recommendation provided is a direct result of the study findings. The policy recommendation aims to increase senior administrator's understanding of low-income first-year college students' perceived confidence in their use of technology and how they might assist them to remain in college, educate and influence senior administrators program decision-making at the local institution about the barriers that hinder low-income first-year college student's confidence in the use of technology that

might prevent them from returning past their first year, and provide a recommendation to offer a recommendation to overcome those barriers.

This finding is reflected in the literature review indicated there are a variety of barriers that hinder low-income first-year student confidence in the use of technology that might prevent them from remaining in college past their first year. Thus, I present solutions to the barriers that hinder low-income first-year college student's confidence in their use of technology that might prevent them from remaining in college past their first year. The policy recommendation is based on the six major themes that emerged from the study (essential to academic achievement, motivation and acquiring knowledge, confidence, and computer application literacy, overcoming distractions and unfamiliarity, pre-college technology programs, and technology proficiency increases success).

Policy recommendation. Senior administrators who could approve policy need to ensure that the college provides low-income first-year college students with opportunities to enhance their technology by reinstating the information literacy program during the new student orientation for the low-income first-year college students to have opportunities to learn and become familiar with new technology programs that they are unfamiliar with before entering college or during the first week of college to ensure academic success and retention. Jaggars and Columbia University (2011) confirmed students need technology orientation support to assist low-income students to prepare for and comprehend the academic demands of the technology need to be successful in their classes. This will increase student confidence to succeed in college. Park et al., (2012) argued the lack of confidence is a major influence on whether students fail or experience

academic challenges.

Moreover, increased confidence reduces learning hindrance and barriers. (Park et al., 2012). Cooper, Taft, and Thelen (2004) argued that unfamiliarity with new technology beyond the basic skills is a barrier to success in college that needs to be addressed because the usage of a variety of technologies are required to increase student learning and persistence. Of the study participants reported unfamiliarity and lack of confidence with new technology programs as a distraction to them completing their academic projects. Participants interviewed also reported that the unfamiliarity with using needed technology programs negatively impacted their confidence in the use of technology needed to assist them to remain in college. Participants also stated that they need to increase their technological knowledge, learn new technology programs, such as web-based program s, become familiar with using unfamiliar College learning platforms, College websites, basic desktop s, and use technology correctly for its intended purposes. Lastly, lacking proficiency using new technology decreased their self-motivation and assurance to complete assignments, and tasks correctly to achieve academic success.

Low-income first-year college student's confidence in computer application literacy and proficiency beyond their basic skills learned in high school is a necessity. McMahon (2015) claimed students need to have a complete understanding of their technology literacies and limitations. Furthermore, Evans (2007) argued colleges must develop educational goals to increase technology proficiency by allowing additional opportunities for students to engage in to matriculate on the college campus. Students need to improve their basic technology literacy and proficiency to learn new knowledge.

It is important that colleges and universities take steps to improve technology literacy for all students beyond fundamentals because it is expected that students have advanced technology knowledge (McMahon, 2015).

Novák (2013) argued one solution to eliminating technology literacy barriers is to provide more exposed teaching time for more practical s to develop necessary skills. Additionally, extra funding needs to be allocated to develop necessary programs to increase student technology learning (Novák, 2013). In the study, participants reported that they entered their first year of college confident with basic technology literacy they learned in high school. However, they lacked confidence with using college web-based applications, college learning platforms, new technology programs, college website, college desktop applications, and on-line learning tools required in their college courses.

Conclusion

The policy recommendation for Institution Y to adopt to reinstate the information literacy policy will assist senior administrators with the need to develop ways enable low-income first-year college students the opportunity to apply and blend a variety of technology knowledge to be successful in college. Mansfield (2017) affirmed first-year students need technology literacies to be successful in college. Additionally, McMahon (2015) argued that one common thread is that all students need is to have the technological ability to apply a variety of technology-based constructs to be successful in academia. Many students enter their first-year of college lacking those skills. Barriers need to be eliminated to allow students the opportunity to enhance their confidence levels to use technology effectively to succeed in college. Zielezinski (2016) argued that access

is not enough for low-income first-year students. They need opportunities to blend knowledge and purposefully use a variety of computer technology simulations and s instead of using computer technology for drill and practice (Zielezinski, 2016).

This policy recommendation provided a brief overview of the literature on the effect of senior administrator participation increased their understanding of low-income first-year college students' perceived confidence in their use of technology and how it might have assisted them to remain in college. The recommended policy to reinstate the information literacy program during the new student orientation for low-income first-year college students' was essential based on the qualitative descriptive study's findings. The results indicated that low-income first-year college students need confidence in their use of technology to perform a variety of tasks, access on-line learning classrooms, complete assignments, post assignments, turn-in assignments, conduct research, to collect data, forward, and store data just to name a few.

Additionally, the research reported technology is necessary for the low-income first-year college student to organize documents, increase their knowledge, use as a reference and communication tool, to use as a resource to check emails, track grades, and complete assessments. Moreover, I have provided the policy recommendations that senior administrators could adopt and implement to assist low-income first-year college students' confidence in their use of technology to overcome barriers and play a more active role in the same students' academic achievement, increased technology literacies, confidence; therefore retention.

Policy Recommendation Feedback and Evaluation Form

"Policy Recommendation to reinstate the information literacy program during the new student orientation"

Thank you so much for taking the time to provide me with your valuable input to complete this feedback evaluation form.

To answer the questions, please use the space below to respond to and reflect on the policy recommendation project.

1. The policy recommendation effectively communicated the recommendation that will help me to participate more effectively in low-income first-year college student confidence in their use of technology that might assist them to remain in college.

2. The policy recommendation effectively presented research that documented the positive impact senior administrator's participation could make on low-income first-year college student retention and academic success.

3. The researcher effectively shared in this policy recommendation the results of the research project that she undertook at the local level.

Appendix B: Interview Guide

Interview Guide

This interview guide will contain the following materials:

1. Approval to enter the Institution
2. Protection from Harm and Confidentiality
3. Participant Recruitment E-mail
4. Participant Recruitment Phone Call Script
5. Interview Questions
6. Wrap Up and Data Presentation Strategy

Approval to Enter the Institution

I will obtain approval to enter site under study to conduct the research by

obtaining approval from both Walden University's and the institution under study's

Institutional Research Boards. I will also create a written correspondence directed to the

senior level administrator of the Institutional Review Board committee to introduce

myself and explain the nature of my study. I will also explain to the administrators what

the study is designed to do, how it will be conducted, and how it will positively influence

the operations of their institution. Additionally, I will coordinate a meeting with the IRB

Coordinator at the Institution Y to complete and submit an application to the college's

IRB office to obtain approval to commence with my research study. I will then, as the

researcher, explain my professional role at the institution as the Director of a Program

located in the Student Success Division. My role is the Administrator of a program at a

not-for-profit, four-year private college, which is the site in this study. I had no past or

current relationship with the student participants or the related topic that will impact the

data collection. Furthermore, the IRB process will allow me to establish trust and

credibility with the institution under study. Moreover, I will secure a safe place to conduct the interview, maintain, establish and provide honest communication, good field relations, and be sensitive and non-judgmental when interacting with the students.

Protection from Harm and Confidentiality

Significant steps will be taken to protect the participants from harm or risks both physical and psychological, specifically as I become involved with the participants. I will ensure that this research study will not pose questions that might have an adverse reaction or consequence in an effort to ensure protection, confidentiality and loyalty. Additionally, I vow that the participants will not intentionally be misled or feel any type of pressure to participate in the study. The student participants will also be administered an informed consent form and their rights will be verbally discussed during the interview and shared in written form in my introductory letter.

Furthermore, as the researcher, I will take multiple steps to protect my audience in a non-bias and non-discriminatory manner at the highest level to ensure anonymity, credibility and accuracy by obtaining written approval from the Institutional Review Board. I will also follow procedures to ensure confidentiality of the data, store the data in a locked cabinet so that only researcher will have access, and provide anonymity of the information and ensure the research is used for its proposed purpose.

To gain approval to conduct the informal research, ensure credibility, and adhere to ethical practices of data collection, reporting, and distribution of reports, I will prepare a document to introduce me as the research and principal investigator, my qualifications, and contact information, the title of the project and the type of research I am conducting.

Furthermore, I will write a detailed description of the qualitative descriptive research study being conducted and its purpose. This document would include a summary of the literature, the research method, significance of the study, and specifics regarding the research site, duration of the study, and type of instrument to be used. I will also include in the document a description of the participants, my sampling procedures and individual background information. Moreover, I will include an analysis of risks and benefits along with an informed consent document.

I Need Your Help for a Doctoral Research Project Study!

Are you interested in being interviewed for a doctoral research project study? As a doctoral student in the Higher Education Leadership Program at the Walden University School of Education, I am working on a doctoral research project study as part of the Doctor of Education degree requirement. The study, titled Confidence in the Use of Technology on Low-Income First-Year College Students' Retention seeks to answer the question, "How do low-income first-year college students describe their confidence in the use of technology as a factor in their retention?"

If you are a first-year traditional aged student between the ages of 18-24, receives a Federal Pell Grant with an Expected Family Contribution of zero, I need your help. I am asking for your participation in the study because I believe you can provide valuable insight into this topic. If you choose to participate, I will conduct one or two interviews approximately 1-2 hours in length, with you. I anticipate that these interviews will take place at the end of fall semester term.

If you would like to find out more about being involved in this doctoral research project study, please contact ███████████ at ████████████ or by email at

████████████████████

Participant Recruitment Phone Call Script

Hello <potential participant's name>,

My name is ███████████ and I am a doctoral degree program in the Higher

Education Leadership Program of the Walden University's School of Education

Department. I was given your name by the Financial Aid Office because they thought

that you might be interested in participating in the research project study I am conducting

as a Doctor of Education degree requirement.

The study I am doing is titled Confidence in the Use of Technology on Low-

Income First-Year College Students' Retention. Through this study I seek to answer the

question "How do low-income first-year college students describe their confidence in the

use of technology as a factor in their retention?"

I am looking for first-year traditional aged students between the ages of 18-24,

receive a Federal Pell Grant with an Expected Family Contribution of zero, who can

provide insight on this topic.

If you choose to participate, your time commitment will be 1-2 hours for the first

interview with the potential for a second 1-2 hour, follow-up interview. At the end of the

interviews you will be given a $15.00 bookstore gift card as a way of thanking you for

participating in the study. In addition, there will some correspondence with me in order to

ensure that I accurately portray your thoughts in the final document. The interviews will

be completed at the end of the fall semester. Do you think you might be interested in

participating in this study?

Can I ask you some questions to make sure that you meet the criterion for the study?

- What year are you in school?

- Are you a first-year student currently enrolled at the college?

- Are you a traditional aged student between the ages of 18-24?

- Do you receive a Federal Pell Grant with an EFC between zero and 5,157?

- What is your gender?

- What is your ethnicity?

I will be sending you some additional information about the study. Please read it over and contact me if you have any questions. If you are still interested in participating please sign and return the informed consent form I send to you. Do you have any questions I might be able to answer for you right now?

You will receive the additional information shortly. Thank you so much for your time. Have a good day.

Interview Questions

I will begin the interview process to build rapport by introducing myself and thanking the interviewee for his/her participation in the study. Next, I will explain the purpose of the study and state the research question, then discuss how the data will be collected, what will be done with the data, and how I will ensure protection and confidentiality of the interviewee. Finally, I will inform the interviewee of how long the interview will take place.

Prompts in case the respondent does not answer the interview questions:

- sounds like you mean this?
- can you explain that a little further?
- tell more about that.
- give me an example?
- tell me what would that might look like?
- how did you do that?

My research questions is How do low-income first-year college students describe their confidence in the use of technology s as a factor in their persistence to pursue a degree?

1. Much research shows, using technology as a resource can have a positive impact on academic success. How do you use technology as a resource to support your academic achievement?

2. Data shows, college students who use technology effectively, can assist them to remain in college. In what ways have you applied your technology skills to effectively assist you to remain in college past your first-year?

3. Much literature show students face many challenges with using technology to finish their academic assignments. What are some challenges you have experienced with using technology to complete your academic projects?

4. Technology use can pose challenges for first-year students. How did you overcome challenges with the use of technology?

5. Research affirm, first year college students need to be confident with using technology to succeed in their first year of college. How confident were you with technology when you entered your first year of college?

6. Many students enter college who are not confident in their use of technology that might positively impact their success to remain in college past their first year. What challenges with confidence in your use of technology that might prevent you from remaining in college past their first year?

7. This research study is needed to provide higher education institutions with recommendations that might assist students to remain in college. In what ways can the college help you increase your confidence in the use of technology that might assist you to remain in college?

8. Studies have found that confidence in the use of technology is needed for students to succeed academically. How has your confidence in the use of technology helped you academically?

Wrap Up and Data Presentation Strategy

At the close of the interview, I will graciously thank the participants for their participation in the research study process, and explain the data presentation strategy. I will explain to the participants how I will represent the findings. I will tell them that I will represent the findings in a visual display, which might include figures, comparison tables, and demographic tables. In addition, as a qualitative researcher, I will report the findings in a narrative format including many forms such as chronological discussions, questions, or commentary about what experiences the participants described.

Finally, I will end the interview session with a question and answer period to give the participants an opportunity to ask their final questions.