# ACADEMIC AND SOCIAL INTEGRATION IN AMERICA'S PROMISE SCHOLARSHIP PROGRAMS: A MIXED METHODS STUDY

A Dissertation

Presented in Partial Fulfillment of the Requirements for the

Degree of Doctor of Philosophy

With a

Major in Educational Leadership in the

Department of Graduate Education

Northwest Nazarene University

by

Michael Rohlena

May, 2020

Major Professor: Eric Studebaker, Ph.D.

SŨ

#### AUTHORIZATION TO SUBMIT

## DISSERTATION

This dissertation of Michael Rohlena submitted for the degree of Doctor of Philosophy with a major in Educational Leadership and titled "Academic and Social Integration in America's Promise Scholarship Programs: A Mixed Methods Study," has been reviewed in final form. Permission, as indicated by the signatures and dates given below, is now granted to submit final copies.

Major Professor	Docusigned by: Eric Studebaker 9E0BB594EA2C4FADr. Eric Studebaker	Date <u>4/8/2020</u>   13:48:57 PDT
Committee Members	DocuSigned by: Iman Ja. Eller 3F26CEC3529C4EDr. Amanda Eller	Date 4/8/2020   16:43:46 PDT
-	DocuSigned by: Elizabeth. Cox. Brand. 1BE9ACD8F86F423Dr. Elizabeth Cox Brand	Date <u>4/8/2020</u>   14:38:39 PDT
Program Director	Hudi (wis 18C507285A124BDr. Heidi Curtis	Date <u>4/8/2020</u>   19:58:10 MDT
Discipline's College Dean	Lon Saudus 1F6287564ACC4Dr. LoriAnn Sanchez	Date <u>4/8/2020</u>   20:14:28 MDT

<sup>©</sup> Copyright by Michael Rohlena 2020

All Rights Reserved

#### ACKNOWLEDGMENTS

I would like to acknowledge everyone that helped me with my doctoral journey. I would like to thank Dr. Mike Poe for taking the time in 2017 to speak with a MFA trained scenic designer and encourage him to explore furthering his education at NNU. Additional NNU professors that gave me guidance and encouragement throughout this journey include Drs. Bethani and Eric Studebaker, Dr. Heidi Curtis, Dr. Lawanna Lancaster, Dr. Joseph Bankard, and Dr. Lynn Bohecker. I have to extend a great amount of thanks and gratitude to my dissertation committee; Dr. Elizabeth Cox Brand and Dr. Amanda Eller. Their insight, guidance, and flexibility have made all this possible. Finally, I would like to thank Dr. Eric Studebaker, as my dissertation chair and Major Professor. His support and knowledge guided me as I accomplished this step in my educational path.

#### DEDICATION

I am dedicating this dissertation to my family. My beautiful children, Harper Rae, Emmett Michael, and Hazel Catherine, who knew when it was time to let Daddy do his homework, but also knew when Daddy needed a break and should jump on the trampoline with them. Most importantly, I dedicate this to my better half, Andrea. Who was always there to encourage me to continue, even when it seemed like such a struggle. Who let me hole up in the basement for afternoons and evenings. But who also was there to tell me to step away and take a break.

#### ABSTRACT

In 2015, President Obama announced the America's College Promise (ACP) initiative, which proposed making two years of community college free for qualifying students. The ACP was inspired by the Tennessee Promise and was a response to the growing need for skilled workers in the workforce and because the primary barrier to higher education is cost. After announcement of the ACP, other states, communities, and colleges have proposed and/or implemented their own Promise scholarship programs. Because the ACP does not have specific guidelines for these programs, the various programs have their own student requirements for eligibility and to maintain the scholarship. Some of these requirements are activities that encourage academic or social integration of the student into the institution. Using Tinto's theory of persistence, this mixed methods study explored the relationship between the various Promise scholarship program requirements and the student's retention, as well as their perceived academic and social integration. This explanatory sequential research study used institutional data, an online survey, and individual student interviews. Results indicate an increase in Promise scholarship student retention rates in the second year of the Promise scholarship program, regardless of the institution, and only a slight difference in retention rates between institutions. The requirement of advising sessions and community service hours lead to higher academic integration and, therefore, higher retention. Interviewed students expressed gratitude for receiving the Promise scholarship and emphasized the relationships with and quality of the instructors. Students appreciated the ability to focus on their education instead of the stress of finances. Quality faculty and the focus on education also lead to higher academic integration.

# TABLE OF CONTENTS

ACKNOWLEDGMENTS	ii
DEDICATION	iii
ABSTRACT	iv
Chapter I Introduction	1
Statement of the Problem	6
Background	9
Research Questions	
Description of Terms	
Significance of the Study	
Theoretical Framework	
Overview of Research Methods	
Chapter II Review of Literature	
Introduction	
Theoretical Framework	
History and Purpose of Community Colleges	
Benefits of Community College	
Cost of College and Financial Aid	
Retention and Completion in Community College	
America's College Promise and Promise Scholarship Programs	
Conclusion	
Chapter III Design and Methodology	
Introduction	
Research Questions	
Research Design	
Participants	
A Community College	
B Community College	
C Community College	
Data Collection	
Online Survey	
Interviews	
Analytical Methods	
Reliability and Validity	

Limitations	65
Delimitations	68
Conclusion	68
Chapter IV Results	70
Introduction	70
Data Collection	73
Institutional data	73
Survey Instrument	73
Interview Protocol	73
Participants	74
Survey participants	74
Interview participants	75
Reliability and Validity	75
Survey reliability and validity	75
Interview reliability and validity	78
Results for Research Question 1: Promise Scholarship Program Affect on Retention	79
Results for Research Question 2: Promise Scholarship Program Affect on Student Perce	
of Academic and Social Integration	
Gender and peer group interactions	
Matriculation year and interactions with faculty	
Employment status and faculty concern for student development and teaching	
Academic services and Institutional Integration Scales	
Social activities and peer group interactions and social integration	89
Studying outside of class and Institutional Integration Scales	91
Working outside of class and institutional goals and commitments	92
Results for Research Question 3: Required Activities and Student Retention Rates	94
Results for Research Question 4: Required Activities and Student Perception of Academ Social Integration	
Institution and Institutional Integration Scales	98
Institution and question 23	100
Additional Qualitative Results	101
Faculty relationships	101
Quality instructors	102
Benefit of Promise scholarship program	103
Conclusion	104

Chapter V Discussion	107
Introduction	107
Summary of the Results	108
Research question 1: Promise scholarship program affect on retention	109
Research question 2: Promise scholarship program affect on student perception academic and social integration	
Research question 3: Required activities and student retention rates	113
Research question 4: Required activities and student perception of academic an integration	
Qualitative Data	
Conclusion	
Recommendations for Further Research	119
Implications for Professional Practice	122
Conclusion	122
References	
Appendix A National Institutes of Health (NIH) Certificate of Completion	141
Appendix B Email Recruitment Letter	
Appendix C Online Survey Questions	
Appendix D Survey Reminder Email	146
Appendix E Additional Information Request Letter - Interview	147
Appendix F Interview Informed Consent	
Appendix G Interview Instructions	
Appendix H Interview Protocol/Questions	
Appendix I Member Checking Email	
Appendix J Northwest Nazarene University IRB Approval	
Appendix K IRB Approval – A Community College	
Appendix L IRB Approval – B Community College	
Appendix M IRB Approval – C Community College	
Appendix N Data Request Emails	159
Appendix O Instititional Data Request Spreadsheet	160

# LIST OF TABLES

Table 1 Research Timeline	. 50
Table 2 Community College Population Overview 2018-2019	. 51
Table 3 Online Survey Statistics	
Table 4 Survey Response Demographics	. 54
Table 5 Demographics of Interview Participants	
Table 6 Institutional Integration Scales Factors	. 59
Table 7 Institutional Integration Scales Reliability Analysis (Pascarella & Terenzini, 1980)	. 76
Table 8 Institutional Integration Scales Reliability Analysis (Pilot Survey)	. 77
Table 9 Institutional Integration Scales Reliability Analysis (Final Survey)	. 78
Table 10 Combined Retention Statistics	
Table 11 Online Survey Descriptive Statistics by Factor	. 82
Table 12 Category/Factor Frequency Results for Online Survey	. 83
Table 13 Gender and Peer Group Interactions Results	
Table 14 Matriculation Year and Interactions with Faculty Results	. 86
Table 15 Employment Status and Faculty Concern for Student Development and Teaching	
Results	. 87
Table 16 Academic Servics and Institutional Integration Scales Categories and Factors	. 88
Table 17 Social Activities and Peer Group Interactions Results	. 90
Table 18 Social Activities and Social Integration Results	. 91
Table 19 Studying and Institutional Integration Scales Categories and Factors	. 92
Table 20 Working and Institutional Goals and Commitment Results	. 93
Table 21 Retention Statistics by Institution 2017-2018	. 94
Table 22 Retention Statistics by Institution 2018-2019	. 95
Table 23 Category/Factor Descriptive Statistics Based on Institution	. 96
Table 24 Category/Factor Frequency Results Based on Institution	. 97
Table 25 ANOVA Results by Institution	. 99
Table 26 Institution and Question 23 Results	101
Table 27 Codes for Theme of Faculty Relationships	102
Table 28 Codes for Theme of Quality Instructors	102
	103

# LIST OF FIGURES

Figure 1	Unemployment Rates and Earnings by Educational Attainment, 2018.	
Figure 2	Conceptual Framework of the Literature Review	
Figure 3	A Conceptual Schema for Dropout from College	
Figure 4	Expected Income by Education Level at Career Midpoint	
Figure 5	Relationship of Entities Involved in Financing Higher Education	
Figure 6	Explanatory Sequential Mixed Methods Research Design Process	
-	Typical Analytic Procedures for Qualitative Research	

#### **Chapter I**

#### Introduction

Community colleges have a great impact on students' lives, local businesses, and the economy. According to their 2014 report, Economic Modeling Specialists Intl. (EMSI) stated that community college graduates contributed \$806.4 billion in 2012 to the national economy. EMSI also collaborated with individual states to report the impact on the states' economies. For example, in Iowa during the 2014-2015 fiscal year, the community colleges and students contributed \$5.4 billion to the Iowa economy (Economic Modeling Specialists Intl., 2017). The percentage of the jobs in the national economy that will require the employee to have training beyond high school is projected to increase from 28% in 1973 to 65% in 2020. Nearly half of these positions will require at least an associate degree or some college education (Carnevale, Smith, & Strohl, 2013). In order to impact their local economy and provide a skilled workforce, community colleges are able to adjust and adapt their curriculum and programs to the needs of their local employment demands (Economic Modeling Specialists Intl., 2014; The White House, Office of the Press Secretary, 2015; U.S. Department of Education & Office of the Under Secretary, 2016). With affordable tuition rates, open admission policies, and convenient locations, community colleges offer opportunities for students that may not be available elsewhere (Campbell, Deil-Amen, & Rios-Aguilar, 2015; Everett, 2015; Levin, Viggiano, Damián, Vazquez, & Wolf, 2017; Palmadessa, 2017; The White House, Office of the Press Secretary, 2015). These characteristics make community colleges uniquely American types of institutions that were created to give more students access to post-secondary education (Jacobs & Worth, 2019; Swanger, 2016). Additionally, many of the students that attend community colleges are first-generation, come from low-income families, and come from ethnic minority

groups (American Association of Community Colleges, 2019; Bragg, Kim, & Barnett, 2006; Everett, 2015; Ginder, Kelly-Reid, & Mann, 2017).

Research shows that the higher the educational credential a person has earned, the higher their income potential and the lower the unemployment rate (Belfield & Bailey, 2011; Economic Modeling Specialists Intl., 2014; Stevens, Kurlaender, & Grosz, 2015; U.S. Department of Labor, Bureau of Labor Statistics, 2019). Figure 1 shows statistics from the United States Department of Labor that illustrate the relationship between educational level of a graduate, unemployment rates, and weekly earnings. The unemployment rate of someone with an associate degree (2.8%) is less than the average of all people (3.2%), and their median weekly earnings is greater than someone with no degree (U.S. Department of Labor, Bureau of Labor Statistics, 2019).

#### Figure 1

Unemployment Rates and Earnings by Educational Attainment, 2018



Unemployment rates and earnings by educational attainment, 2018

Retrieved from: <u>https://www.bls.gov/emp/chart-unemployment-earnings-education.htm</u> Source: U.S. Department of Labor, U.S. Bureau of Labor Statistics (2019). Students with an associate degree typically earn around \$42,000 per year, which is around \$6,600 more than students with only a high school diploma (American Association of Community Colleges, 2019; Economic Modeling Specialists Intl., 2014). During the 2014-2015 fiscal year, for every \$1 invested in their education, Iowa community college graduates received a return of \$6.50 in increased future earnings (Economic Modeling Specialists Intl., 2017).

With the exception of some specific programs, community colleges have open admission policies that allow access to all students (DeNicco, Harrington, & Fogg, 2015; Everett, 2015; Pratt, 2017; The White House, Office of the Press Secretary, 2015). This brings upon unique challenges to the community college compared to their four-year counterparts, including low retention, completion, and transfer rates (DeNicco et al., 2015; Everett, 2015; Roman, 2007). Persistence rates for students that started at a two-year college in 2016 was only 62%, which is less than their four-year counterparts' rate of 83% (*First-year persistence and retention: Snapshot report*, 2018). The graduation rate within three years at two-years (U.S. Department of Education & Office of the Under Secretary, 2018). However, the completion rate after six years, according to the National Student Clearinghouse Research Center, is closer to 55% (*First-year persistence and retention: Snapshot report*, 2018).

One of the main issues regarding retention and completion for community college students is cost, even though the cost of community college is significantly lower than public four-year institutions (American Association of Community Colleges, 2019; Campbell et al., 2015; Mertes & Jankoviak, 2016). Seventy-three percent of community college students apply for financial aid assistance, and 59% receive some form of student financial aid (American Association of Community Colleges, 2019). As the financial stress for students increase, they are less likely to complete and more likely to reduce their course load and/or stop for a semester (Mukherjee, McKinney, Hagedorn, Purnamasari, & Martinez, 2017; Pierce, 2015b). When financial stress is lessened, students can take more classes, which leads to faster completion and also allows the student to participate in more social activities. (Boatman & Long, 2016; McKinney, Mukherjee, Wade, Shefman, & Breed, 2015; Nora, Barlow, & Crisp, 2006; Pierce, 2015b). Because the employment sector needs more skilled workers (Carnevale et al., 2013; Economic Modeling Statistics Intl., 2014; The White House, Office of the Press Secretary, 2015), additional financial assistance for students is necessary to help students persist to graduation and enter the workforce.

To help students with financial barriers attend and complete college, President Obama announced the America's College Promise (ACP) program in 2015 in order to positively impact the economy. The purpose of the ACP was to "make two years of community college free for responsible students, letting students earn the first half of a bachelor's degree and earn skills needed in the workforce at no cost" (The White House, Office of the Press Secretary, 2015, para. 2). The announcement of the ACP started a national trend with states and colleges proposing and implementing Promise scholarship programs. The College Promise Campaign (2018) reports that in 2015 there were around 50 free college programs in the United States. As of April 2019, over 200 Promise scholarship programs in 43 states have been implemented or proposed, and at least 24 statewide initiatives have been developed (Statewide Promise Status Update, 2019; Hiestand, 2018).

In order for the Promise scholarship programs to be successful, the students, community colleges, and state governments will each have to do their part. (The White House, Office of the Press Secretary, 2015). The White House, Office of the Press Secretary (2015) made the

recommendation that students take more responsibility for their education, and that community colleges offer:

programs that either (1) are academic programs that fully transfer to local public fouryear colleges and universities, ... or (2) are occupational training programs with high graduation rates that lead to degrees and certificates that are in demand among employers. (p. 2-3)

Also, as Promise scholarship programs are created, states will have to invest more in higher education and form new partnerships with the federal government and the community colleges (The White House, Office of the Press Secretary, 2015). Beyond these partnerships, other aspects also contribute to the success of the Promise scholarship programs. The policies that drive the Promise scholarship programs must be clear and simple with limited restrictions. The students need accurate, understandable information (Mishory, 2018; Paterson, 2018). Another important factor is that the programs needs to be financially stable (Paterson, 2018; U.S. Department of Education & Office of the Under Secretary, 2016).

The ACP was inspired by similar programs in Tennessee and Chicago (U.S. Department of Education & Office of the Under Secretary, 2016), and many other states and institutions have since developed their own Promise scholarship programs (*College Promise Campaign*, 2018; Paterson, 2018; Pierce, 2015a, 2015b; Statewide Promise Status Update, 2019). Many Promise scholarship programs grant the student a last-dollar scholarship (Paterson, 2018; Pierce, 2015a, 2015b). A last-dollar scholarship is financial aid that is applied to students' educational costs after other forms of financial aid, scholarships, and grants are applied (College Promise Campaign, n.d.; Pierce, 2015b). While many Promise scholarship programs use the last-dollar scholarship model, not all programs have the same requirements for eligibility, application, and maintaining the scholarship. Some programs require the student to be full-time and participate in both community service and a mentoring program (Paterson, 2018; Pierce, 2015a; Smith & Bowyer, 2016; The White House, Office of the Press Secretary, 2015). Other Promise scholarship programs only allow students to attend community college, while some programs cover the first two years at either a community college or a four-year institution. Since the announcement of the ACP, more and more states are developing their own Promise scholarship programs with their own unique policies and requirements (Paterson, 2018; Pierce, 2015a, 2015b; U.S. Department of Education & Office of the Under Secretary, 2016). As a result, different Promise scholarship programs across the country have different requirements for eligibility to both receive the scholarship and to maintain it (Paterson, 2018; Pierce 2015a, 2015b). As more Promise scholarship programs are created, additional research is needed to determine the effectiveness of the individual programs.

#### **Statement of the Problem**

One of the primary issues regarding student retention and completion is cost (Campbell et al., 2015; Mertes & Jankoviak, 2016). Community colleges have open admission policies and convenient locations. Many community college students are first-generation students and come from low-income households (American Association of Community Colleges, 2019; Bragg et al., 2006; Everett, 2015; Ginder et al., 2017). While community colleges have significantly lower tuition rates than four-year institutions, nearly three-fourths of the community college students apply for financial aid, and 59% receive some type of aid (American Association of Community Colleges, 2019). Community college students are also more likely to be dependent on financial aid to continue their education (Bird & Castleman, 2016; Castleman & Page, 2016; McKinney et al., 2015). Of the students that first apply for financial aid, 75% refile their

FAFSA the following year. If a student does not refile, then the likelihood of completing their degree is less (Bird & Castleman, 2016).

In the next few years nearly one-third of the job openings will require some college or an associate degree (Carnevale et al., 2013). From 2010 to 2016, workers with an associate degree or some college gained 3.1 million new jobs, compared to only 80,000 for workers with a high school diploma or less (Carnevale, Jayasundera, & Gulish, 2016). Earning an associate degree not only gives students a better chance at finding employment, but they are more likely to earn a higher income as well, which in turn strengthens the economy (American Association of Community Colleges, 2019; Economic Modeling Specialists Intl., 2014; Stevens et al., 2015; U.S. Department of Labor, Bureau of Labor Statistics, 2019). One goal of the ACP initiative was to help supply the employment sector with skilled workers, by relieving the financial burden of community college from students. (The White House, Office of the Press Secretary, 2015).

Since the announcement of the ACP in 2015, the implementation of Promise scholarship programs has had an effect on high school graduation and college admissions (Bartik & Lachowska, 2014; Hlinka, Gericke, Akin, & Stephenson, 2018; Pluhta & Penny, 2013; Smith & Bowyer, 2016). After the Community Scholarship Program, a Promise scholarship program in Kentucky, was implemented, high school graduation rates increased by an average of 3.9% from 2012 to 2014. Also, the rate of high school students attending college increased by 10.6% from 2013 to 2014 (Hlinka et al., 2018). An example from Tennessee shows that almost 90% of the high school graduating seniors applied for the Tennessee Promise scholarships (Pierce, 2015a; The White House, Office of the Press Secretary, 2015), and the community colleges in Tennessee saw an increase in first-time freshman of nearly 25% in 2015 (Hiestand, 2018; Smith

& Bowyer, 2016). In their study, Pluhta and Penny (2013) compared three years before and three years after a Promise scholarship program was implemented at a public community college in the Pacific Northwest. While this study was the analysis of a single scholarship, Pluhta and Penny found that the number of high school graduates that applied to college greatly increased after the scholarship was announced (2013). Similarly, the number of high school graduates that matriculated to college greatly increased after the scholarship was announced (Pluhta & Penny, 2013).

As many areas of the United States are implementing Promise scholarship programs, many states and colleges in the Upper Midwest are following suit (College Promise Campaign, n.d.). The Upper Midwest region generally refers to Iowa, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin (Bakker, Koffel, & Theis-Mahon, 2017). In April 2018, Iowa passed House File 2458, known as the Future Ready Iowa Act. Future Ready Iowa has a section dedicated to strengthening workforce development through workforce scholarships and grant programs (Future Ready Iowa Act, 2018). Many technical colleges in Wisconsin have also implemented Promise scholarship programs, which include the Madison College Scholars of Promise, the Milwaukee Area Technical College Promise, and the Gateway College Promise (Promise Programs, n.d.). According to the College Promise website, individual Promise scholarship programs have also been implemented in North Dakota, South Dakota, Minnesota, and Michigan (College Promise Campaign, n.d.). As Promise scholarship programs are being implemented and additional students are attending community college, research regarding student retention and completion will aid in evaluating effectiveness of the Promise scholarship programs.

## Background

Community colleges have missions that often include educating workers with skills to fill the community's labor needs (Dunn & Kalleberg, 2017; Mission & Goals, n.d.). Community colleges help students that may not have opportunities to receive these skills elsewhere (Campbell et al., 2015; Everett, 2015; Levin et al., 2017; Palmadessa, 2017). Students who graduate with an Associate of Applied Science degree from a community college are likely to get a higher paying job than a student that did not complete a credential (American Association of Community Colleges, 2019; Economic Modeling Specialists Intl., 2014; Matheny, Chan, & Wang, 2015).

There are many different factors that affect student retention and persistence. While often used interchangeably, for the purpose of this study, retention is being defined as a student's continued enrollment from fall semester to the following fall semester at the same institution of higher education, while persistence refers to continuous enrollment of a student until degree completion (Hagedorn, 2006). Student demographic characteristics, such as gender, age, and race, can have an impact on retention and persistence (Demetriou & Schmitz-Sciborski, 2011; Mertes & Hoover, 2014; Windham, Rehfuss, Williams, Pugh, & Tincher-Ladner, 2014). The barriers that are most influential on student retention include the cost of attendance, lack of student motivation, student work schedules, family obligations, and college expectations (Hlinka, 2017; Mertes & Jankoviak, 2016; Wray, Aspland, & Barrett, 2014).

Studies have found that students are more likely to be retained if they become integrated both academically and socially into the educational institution (Demetriou & Schmitz-Sciborski, 2011; Mertes, 2015; Tinto, 1975, 1993, 1999). In 1975, Vincent Tinto first theorized the idea that the primary factors that impact student retention are their academic and social integration into the educational institution. Other external factors, such as age, gender, ethnicity, socioeconomic status, and pre-admission test scores also affect retention (Demetriou & Schmitz-Sciborski, 2011; Mertes & Hoover, 2014; Windham et al., 2014). However, these factors cannot be controlled by the institution. Factors that affect retention that can be controlled by the institution include quality contact with faculty, effective learning, and available academic, social, and personal support (Tinto, 1999). These factors help contribute to the academic and social integration of the student. Using Tinto's theory of persistence as a theoretical framework, this study will look at the academic and social integration activities that are required of the Promise scholarship program participants and how those requirements affect student retention.

While many of the Promise scholarship programs are new, some research has been done regarding the relationship between the Promise scholarship programs and student retention or persistence. In California, the rate of students that continued from the fall to spring semester that received the Ventura College Promise scholarship was more than 90%, and Ventura College Promise scholarship students were 50% more likely to continue into the second year of their program than their peers (Pierce, 2015b). Because of the lessened financial stress, the students "load up on classes and get into a groove" (Pierce, 2015b, p. 24). A 2018 study by Hlinka et al., found improvement in college retention and completion rates at West Kentucky Community and Technical College because of their Promise scholarship program, the Community Scholarship.

Many of the Promise scholarship programs are still very new. Therefore, there has not been extensive research on the success of these programs, especially relating to student retention and persistence. In order to provide data that will add to the literature regarding the effectiveness of Promise scholarship programs, this research will investigate the relationship between academic and social integration activities and college retention rates.

# **Research Questions**

The purpose of this study was to explore the relationship between participation in a Promise scholarship program, student retention rates, and a student's academic and social integration. In order to help the reader understand the central ideas of the study, the researcher narrowed the purpose statement to the following questions (Creswell, 2015):

- 1. How does participation in a Promise scholarship program affect retention of community college students in the Upper Midwest?
- 2. How does participation in a Promise scholarship program affect a student's perception of their academic and social integration?
- 3. Is there a relationship between the requirement of academic and social integration activities within the various Promise scholarship programs and student retention rates?
- 4. Is there a relationship between the requirement of academic and social integration activities within the various Promise scholarship programs and a student's perception of their academic and social integration?

#### **Description of Terms**

Amongst the research on community colleges, consistent terminology and definitions are used. Common terminology with clear, defined meanings is important to maintain clarity within the research study (Creswell, 2015). Therefore, the following terms will be defined as they relate to this study, the literature review, and referenced research. **America's college promise (ACP).** Initiative proposed by President Obama to make two years of higher education free for qualifying students (The White House, Office of the Press Secretary, 2015).

**Career and technical education (CTE).** Programs that provide students with the training, skills, and knowledge to prepare them for specific occupations in the workforce (Hirschy, Bremer, & Castellano, 2011).

**Community college.** An institute of higher education in which associate degrees are awarded. Degrees include transfer programs to four-year institutions and career focused or vocational programs designed for direct employment. Typical full-time completion would take two years. Often referred to as junior college or technical college (Grove, 2018).

**Completion.** When a student has earned a credential at an institute of higher education.

**First-dollar scholarship.** A scholarship where funding is applied to tuition and fees first, which enables additional financial aid to cover other educational expenses like textbooks and supplies (College Promise Campaign, n.d.).

**First-generation college student.** According to the United States Department of Education, the definition is:

(a) an individual both of whose parents did not complete a baccalaureate degree; or(b) in the case of any individual who regularly resided with and received supportfrom only one parent, an individual whose only such parent did not complete abaccalaureate degree. (Higher Education Act of 1965, p. 204)

Additionally, first-generation college student can refer to a student that is the first in their immediate family to attend college. A student whose parents did not attend a postsecondary institution, regardless of graduation or completion (Everett, 2015).

**Free application for federal student aid (FAFSA).** An application that determines student eligibility to receive need-based federal financial aid (Bird & Castleman, 2016).

The higher education act (HEA). A law designed to strengthen the federal resources given to higher education and higher education students. The HEA has been rewritten many times to adapt to the changing educational environment (Palmadessa, 2017).

**Last-dollar scholarship.** A scholarship where funding is applied to the remaining tuition and fees costs after other financial aid sources are applied (Pierce, 2015b).

**Nontraditional student.** A student that does not fit the traditional college student demographics. A nontraditional student is:

older than 24, or does not live in a campus residence (e.g., is a commuter), or is a parttime student, or some combination of these three factors; is not greatly influenced by the social environment of the institution and is chiefly concerned with the institution's academic offerings (especially courses, certification, and degrees). (Bean & Metzner, 1985, p. 489)

**Open admission.** Also referred to as open enrollment. An unselective admission process. Typically, the only requirement to be admitted into the institution is a high school diploma or equivalent (Nelson, 2013).

**Persistence.** Persistence is a student measurement. It is the continuous enrollment of a student until completion of desired degree (Hagedorn, 2006).

**Four-year institution.** An institute of higher education in which baccalaureate degrees are awarded. Typical full-time completion would take four years.

**Promise scholarship program.** A financial scholarship program that has a primary goal of increasing higher education attainment, focuses on the traditional college age student, and has a type of place requirement such as residency in a specific state, county, or city, or attendance at a particular school or district (Perna & Leigh, 2018).

**Retention.** Retention is an institutional measurement. It is the continued enrollment from fall semester to fall semester within the same higher education institution (Hagedorn, 2006).

Upper Midwest. A region of the United States that includes Iowa, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin (Bakker et al., 2017).

#### Significance of the Study

This study is intended to add to the current literature regarding retention in community colleges in the United States. It specifically looked at student recipients of Promise program scholarships and the varying academic and social requirements within the Promise scholarship programs. Some of the current Promise scholarship programs have specific academic requirements, such as maintaining full-time status and participation in service learning (Pierce, 2015a). Other Promise scholarship programs require social integration activities, such as attendance at an orientation weekend. Some programs include both academic and social integration activities. For example, at Ventura College, all participants must create an educational plan in order to qualify, and second-year students that received the scholarship in their first year must mentor current first-year recipients (Pierce, 2015b). The success of the Promise scholarship programs will depend on the retention and completion rates of the Promise

scholarship recipients. Being able to understand the impact of the varying requirements on retention will be beneficial as more Promise scholarship programs are started and existing programs are modified.

This study provided information for community colleges that are implementing or refining Promise scholarship programs. Specifically, it explored the relationship between receiving a Promise scholarship and a student's retention. It also explored the Promise scholarship student's perceptions of their own academic and social integration. Additionally, it explored the relationship between Promise scholarship program requirements and the student's retention.

#### **Theoretical Framework**

Vincent Tinto's (1975, 1993, 1999) theory of persistence suggests that a student is more likely to persist and graduate if they are academically and socially integrated into their institution. While external factors such as age, gender, ethnicity, socioeconomic status, educational goal, educational level of parents, and pre-admission test scores also affect retention and persistence (Demetriou & Schmitz-Sciborski, 2011; Mertes & Hoover, 2014; Windham et al., 2014), these student factors cannot be controlled by the institution. However, the institution can control internal conditions and help the student become integrated (Tinto, 1999). Tinto's theory was initially applied to four-year institutions of higher education (Tinto, 1975), but the idea of academic and social integration can be applied to community colleges students (Bean & Metzner, 1985; Bers & Smith, 1991; Mertes & Hoover, 2014; Sorey & Duggan, 2008).

As community colleges and states develop Promise scholarship programs, they create policies and requirements for the scholarship recipients (Pierce, 2015a, 2015b). Some of these requirements are academic activities, such as tutoring and the development of an academic plan.

Other requirements are related to social integration, such as attendance of a summer orientation (Pierce, 2015a, 2015b). This study will examine these academic and social integration activities and their relation to retention, and therefore, Tinto's theory of persistence is appropriate.

## **Overview of Research Methods**

The researcher used a mixed methods approach with an explanatory sequential design. The mixed methods approach uses both quantitative and qualitative data to form a better understanding of the data, and the explanatory sequential mixed methods design uses the qualitative data to better explain the quantitative data (Creswell, 2015; Ivankova, Creswell, & Stick, 2006; Tashakkori & Teddlie, 1998). For this study, the mixed methods approach was appropriate because the quantitative data gave a general understanding of the relationship between the Promise scholarship program, student retention, and student perceptions of their academic and social integration, and the qualitative information better informed the researcher as to why the Promise scholarship program had an impact.

For this mixed methods study, data from three community colleges in the Upper Midwest region of the United States were analyzed. Statistical data regarding the rates of retention was provided from each institution for both the institution generally and the Promise scholarship program recipients. Additionally, online surveys were sent to Promise scholarship program students, and interviews were conducted. Each of the three community college Promise scholarship programs had differing requirements for a student's continuous eligibility. Permission to conduct research was granted from each of the community colleges internal Institutional Research Boards (IRB). Initial demographic data was pulled from each community college, which included retention statistics for the institution as a whole and the Promise scholarship program students. For the quantitative portion of the study, the researcher collaborated with the Promise scholarship program director, or equivalent, at each research location to send an email recruitment letter (Appendix B). The email recruitment letter explained the research study, included informed consent, and provided the link to the online survey (Appendix C). The survey contained 10 demographic questions, and 31 Likert scale questions obtained from the Institutional Integration Scales designed by Pascarella and Terenzini (1980). The survey also contained nine short-answer questions designed by the researcher for qualitative data. At the end of the online survey, a question asked participants if they would be willing to participate in an interview at a future date. Initially, the email went out to the students at two of the research locations. Due to late IRB approval, the third research location sent the email approximately two weeks after the other two research locations. The survey was open for a total of five weeks, and a reminder email was sent to the potential participants approximately two weeks after the first email request was sent. (Appendix D).

For the qualitative portion of the study, interviews were conducted. The participants that indicated their interest at the end of the online survey were sent an interview request email (Appendix E). From the students that responded to the interview request, the researcher selected seven students to participate. The researcher conducted phone interviews and utilized the interview protocol (Appendix H). The protocol included both structured and unstructured questions to keep the conversation not only applicable to the research topic, but also casual and free-flowing. Potential probes were included to assist in facilitating the discussion.

#### **Chapter II**

## **Review of Literature**

# Introduction

Part of the mission of community colleges is to assist the community workforce with skilled workers (Dunn & Kalleberg, 2017; Mission & Goals, n.d.). However, student retention and completion at community colleges is low. One of the primary issues regarding student retention and completion is cost (Campbell et al., 2015; Mertes & Jankoviak, 2016). The America's College Promise initiative is designed to help students get the education that they may not be able to achieve without additional financial assistance, and therefore learn the skills needed to enter the workforce (U.S. Department of Education & Office of the Under Secretary, 2016). Students are more likely to find employment and earn more money if they have earned an associate degree over just a high school diploma (Economic Modeling Specialists Intl., 2014; Stevens et al, 2015; U.S. Department of Labor, Bureau of Labor Statistics, 2019). Many community colleges have implemented Promise scholarship programs, and these programs have been developed with varying student requirements (Paterson, 2018; Pierce 2015a, 2015b).

This literature review will discuss Vincent Tinto's theory of persistence as it relates to this study. It will then offer an overview of America's community colleges and their relationship with the workforce. The focus will be on community colleges with specific attention to the history and purpose of community college, the benefits of attaining an associate degree, the cost of college and financial aid, and retention and completion in community colleges. The America's College Promise (ACP) initiative and related programs will also be examined. Figure 2 depicts a visual representation of the literature review.

# Figure 2

Conceptual Framework of the Literature Review



# **Theoretical Framework**

In 1975, Vincent Tinto first theorized the idea of academic and social integration as an indicator of student retention in higher education. Tinto applied Durkheim's theory on suicide to the issue of student dropout rates in higher education. Tinto (1975) viewed college as the social system, and suggests that the conditions that affect a student to drop out of college parallel the

conditions that affect a person to drop out of society. The primary factors that have an impact on student retention include the academic and social integration of the student into the educational setting (Tinto, 1975, 1993, 1999). Students may leave their educational institution in two ways. They could exit out of college voluntarily or they could be forced to leave, which would primarily occur if the students had poor academic performance (Tinto, 1975). Tinto's (1975) theory relates to the student who voluntarily exits from education.

Tinto acknowledges that there are many factors that impact student dropout. Family background, individual student demographics, and pre-college schooling all have some impact (Tinto, 1975, 1993, 1999). The students' commitment to their educational goal and the institution's commitment to the students' attainment are also potential factors of impact (Tinto, 1975). However, the key, driving factors that have the greatest impact on a student's decision to drop out or be retained are the level of academic integration and level of social integration. Therefore, a student needs to be integrated both socially and academically to increase their chances for success. A student could be integrated socially, into clubs and other activities, but may still drop out if they have poor academics. On the other hand, a student with good grades may choose to withdraw if they have not become socially involved (Tinto, 1975). Figure 3 is a visual for Tinto's original framework from 1975. This conceptual schema for dropout from college shows that the process is a series of interactions between the student and the academic and social college systems. During these interactions, the student modifies their goals and commitments which leads to persistence or dropout (Tinto, 1975). Student demographics can have an impact on college performance and influence the educational expectations and commitments of the student. However, the student's integration influences the student's ultimate goal and commitment, and therefore influences their rate of persistence. (Tinto, 1975). "Given

individual characteristics, prior experiences, and goal commitment, it is the individual's integration into the college environment which most directly relates to continuance in college" (Tinto, 1975, p. 41). Academic integration can be measured by the student's academic performance and level of intellectual development, while social integration can be determined by the quality of peer-group interactions and student-faculty interactions (Tinto, 1975). Figure 3.

A Conceptual Schema for Dropout from College.



Reprinted from "Dropout from higher education: A theoretical synthesis of recent research," by V. Tinto, 1975, *Review of Educational Research*, 45(1) p. 95.

While external factors such as age, gender, ethnicity, socioeconomic status, educational goal, educational level of parents, and pre-admission test scores affect retention (Demetriou & Schmitz-Sciborski, 2011; Mertes & Hoover, 2014; Windham et al., 2014), these student factors cannot be controlled by the institution. However, the institution can control internal conditions and help the student become integrated (Tinto, 1999). These conditions include clear

information on academic programs, available academic, social, and personal support, quality contact with faculty and staff, and effective learning (Tinto, 1999). CTE programs are highly structured and therefore have clear information on program prescription and strong advising support (Van Noy, Trimble, Jenkins, Barnett, & Wachen, 2016). Student-institution fit and friendships positively affect college satisfaction (Bowman & Denson, 2014; Denson & Bowman, 2015). Many of the current Promise scholarship programs have required support systems, such as mentoring (Pierce, 2015a), to assist with the social integration of students.

Tinto's theory was initially applied to four-year institutions with traditional students. The Promise scholarship programs in this study are at community colleges, and the populations of community colleges are different than the population at four-year institutions. There are a higher number of nontraditional students that attend community college (American Association of Community Colleges, 2019; Miller, 2017). For the nontraditional student, external environmental factors have a larger impact on persistence than academic integration (Bean & Metzner, 1985). Additionally, at the community college, interactions with the college's institutional agents, such as faculty, staff, and other students, are key factors regarding the student's integration into the college. Interactions with faculty and interactions with other student peers impact the student's sense of comfort and integration (Deil-Amen, 2011). While community college students may not have time to participate in social activities, they do become attached to their institution (Karp, Hughes, & O'Gara, 2011). The academic relationships that are built in the classroom develop into social relationships, which contribute to a sense of social integration (Karp et al., 2011; Tinto, 1997). The classrooms act as a learning community and provide an environment in which both academic and social involvement occurs (Tinto, 1997).

In 1980, Pascarella and Terenzini developed an instrument to assess Tinto's theory of persistence related to student academic and social integration. Their research instrument, the Institutional Integration Scales (IIS), has five categories that help predict student persistence. The categories are peer-group interactions, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and institutional goals and commitments (Pascarella & Terenzini, 1980). These five scales support the predictive nature of Tinto's theory. The scales for peer-group interactions and interactions with faculty can measure a student's social integration, while the scales for faculty concern for student development and teaching and academic and intellectual development can measure a student's academic integration (Pascarella & Terenzini, 1980).

### History and Purpose of Community Colleges

There are over 1,000 community colleges in the United States (American Association of Community Colleges, 2019; Economic Modeling Specialists Intl., 2014; The White House, Office of the Press Secretary, 2015). Approximately 41% of college students are enrolled in community colleges across the United States (American Association of Community Colleges, 2019; The White House, Office of the Press Secretary, 2015). In the 2016-2017 academic year, community colleges conferred 839,855 associate degrees and 549,149 certificates (American Association of Community Colleges, 2019).

Initially, community colleges were referred to as junior colleges (Cohen & Brawer, 2008; Jurgens, 2010). In the mid-1800s, multiple proposals were prepared by university presidents and trustees to create junior colleges. These proposals were designed to lessen the burden on the universities to educate high school graduates and move the first two years from the university to a separate institution (Cohen & Brawer, 2008; Jacobs & Worth, 2019; Jurgens, 2010; Vaughan, 1985). Additionally, the passage of the Morrill Acts of 1862 and 1890 aimed to provide higher education opportunities for all students (Jurgens, 2010; Vaughan, 1985).

The first community college in the United States was established in 1901 in Joliet, Illinois. Joliet Junior College added an additional two years of courses to their high-school curriculum (Jurgens, 2010; Kasper, 2003; Vaughan, 1985). Additionally, in 1907, California passed a law that allowed high schools to offer college-level coursework (Jergens, 2010; Vaughan, 1985). These first junior colleges were focused on liberal arts coursework to then transfer to 4-year institutions (Jergens, 2010; Kasper, 2003).

In the 1930s, during the Great Depression, community colleges began to provide job training programs to help alleviate the widespread unemployment (Jergens, 2010; Kasper, 2003). These technical programs focused on curriculum that would prepare the students for jobs that required education beyond high school and would meet the needs of local employers (Jacobs & Worth, 2019; Jurgens, 2010). The focus on job training programs continued into the 1940s and 1950s (Jergens, 2010; Kasper, 2003).

The G.I. Bill of Rights, which provided educational funding for veterans, was passed in 1944 after World War II (Jacobs & Worth, 2019; Jurgens, 2010; Vaughan, 1985). This was followed by the Truman Commission Report, which called for the creation of a network of community colleges. The community colleges would combine the technical education programs with the liberal arts programs of junior colleges (Jurgens, 2010; Vaughan, 1985). They would also be more accessible to a greater number of citizens by charging little or no tuition while serving the needs of the community (Cohen & Brawer, 2008; Jurgens, 2010; Vaughan, 1985).

Throughout the 1960s and 1970s, the number of community colleges and enrollment greatly increased, due to baby boomers graduating high school, parents wishing their children

would attend postsecondary education, and students wishing to avoid the draft. By 1980, the student enrollment in community colleges increased to nearly 5 million students (Cohen & Brawer, 2008; Jurgens, 2010; Kasper, 2003). During the 1970s and 1980s, community colleges began to partner with businesses and industries to train using company specific technical skills (Jacobs & Worth, 2019; Jurgens, 2010). Additionally, community colleges strengthened their partnerships with high schools to help prepare students for technical programs (Cohen & Brawer, 2008; Jurgens, 2010).

The demographic identities of community college students are different than those of the traditional four-year college student. Student identities can be defined by age, race, gender, place of origin, socioeconomic status, immigration status, academic background, and enrollment status (Levin et al., 2017). Community college students tend to be non-traditional with an average age of 28 (American Association of Community Colleges, 2019; Huelsmann, 2015;), attend community college on a part-time basis (American Association of Community Colleges, 2019; Ginder et al., 2017; Huelsmann, 2015; The White House, Office of the Press Secretary, 2015), and maintain employment either on a full-time or part-time level (American Association of Community Colleges, 2019; Huelsmann, 2015; The White House, Office of the Press Secretary, 2015). Community colleges admit all students, often those who are first-generation, from ethnic minority groups, and tend to be underprepared for college (American Association of Community Colleges, 2019; Bragg et al., 2006; Everett, 2015; Ginder et al., 2017 Huelsmann, 2015).

Community colleges are able to create opportunities for students that may not be available elsewhere (Campbell et al., 2015; Everett, 2015; Huelsmann, 2015; Levin et al., 2017; Palmadessa, 2017). Community colleges offer affordable tuition rates, have open admission policies, and are conveniently located (Everett, 2015; Heller, 2011; Huelsmann, 2015; The White House, Office of the Press Secretary, 2015). Community colleges are significantly less expensive than public four-year institutions (American Association of Community Colleges, 2019; Everett, 2015; Ma, Baum, Pender, & Welch, 2016). The average cost of tuition and fees at a community college in 2017-2018 was \$3,660, compared to \$10,230 at a public four-year college (American Association of Community Colleges, 2019). Students who live closer to affordable colleges are more likely to attend (Doyle & Skinner, 2016). The vast majority of community college students travel a median of 10 miles to attend school (Cohen & Brawer, 2008; Everett, 2015), and for those that are unable to travel, community colleges offer distance education classes (Everett, 2015). Community colleges are able to assist students based on their academic preparedness by offering remedial coursework (Everett, 2015). Community colleges also offer both vocational and academic transfer programs which allow for many program opportunities for students (Everett, 2015; Jacobs & Worth, 2019; Jurgens, 2010; Vaughan, 1985).

Community colleges offer programs to help supply employers with a skilled workforce (Crookston & Hooks, 2012; D'Amico, Morgan, Katsinas, & Friedel, 2015; Economic Modeling Specialists Intl., 2014). Because they are designed for students to go directly into the workforce, Career and Technical Education (CTE) programs at community colleges tend to be more highly structured than their liberal arts counterparts (Scott-Clayton, 2011; Van Noy et al., 2016). CTE programs are directly aligned with the workforce demands and training needs (Hirschy et al., 2011; The White House, Office of the Press Secretary, 2015; Van Noy et al., 2016). CTE programs have defined course sequences with more required courses than electives, cohort courses, and course schedules that are accommodating to working students (Kolenovic,
Lindermann, & Karp, 2013; Scott-Clayton, 2011; Van Noy et al., 2016). Community college CTE programs provide thorough information regarding program offerings and course requirements, which help students navigate their academic careers (Scott-Clayton, 2011; Van Noy et al., 2016). Because CTE programs have strong program prescription, continuous active academic advising is less necessary, but close monitoring of student progress exists (Kolenovic et al., 2013; Van Noy et al., 2016). Programs that do not have industry standards or specific occupational requirements, such as accounting and business, tend to have less programmatic structure than the highly standardized allied health programs (Van Noy et al., 2016). However, CTE program alignment with labor markets and employers is strong (The White House, Office of the Press Secretary, 2015; Van Noy et al., 2016). Alignment occurs through advisory boards, accreditation agencies, or both (Van Noy et al., 2016).

## **Benefits of Community College**

In 2020, the number of jobs in the United States that will require at least some training beyond high school will increase from 28% in 1973 to nearly 65% (Carnevale et al., 2013). Nearly one-third of those jobs will require at least an associate degree (Carnevale et al., 2013). The number of jobs that required an associate degree increased by 3.1 million jobs from 2010 to 2016, compared to an increase of 80,000 jobs requiring a high school diploma or less (Carnevale et al., 2016). By the year 2030, nearly 3.5 million new jobs will be created, but only about a third of them will be filled due to a lack of skilled workers. Because of retirements, attrition, and economic growth, the shortage is expected to continue to grow beyond 2030 (Stockard, 2019).

Attainment of an associate degree has a positive impact on the earnings potential of the student (Belfield & Bailey, 2011; Economic Modeling Specialists Intl., 2014; Minaya & Scott-Clayton, 2017; Stevens et al., 2015; U.S. Department of Labor, Bureau of Labor Statistics,

2019). The average estimated earnings gains from attaining an associate degree is 22% for females and 13% for males (Belfield & Bailey, 2011). Students that have earned an associate degree are less likely to be unemployed and earn on average \$11,000 more annually at the midpoint in their career than a student with only a high school diploma (Economic Modeling Specialists Intl., 2014). Figure 4 is a bar chart that shows the potential income based on educational attainment.

#### Figure 4



Expected Income by Educational Level at Career Midpoint

Source: Economic Modeling Specialists Intl. (2014). *Where value meets values: The economic impact of community colleges*. Retrieved from https://www.empowererie.org/uploads/resources/796450 usa agg mainreport final 021114.pdf

Students that have obtained a vocational certificate can see positive earnings gains in the range of 7% to 24% (Belfield & Bailey, 2011). Students from career-focused community colleges have higher earnings than students from academically focused or comprehensive community colleges (Dunn & Kalleberg, 2017). Students that receive associate degrees and certificates are

more likely to find stable employment, and students with associate degrees are more likely to earn a living wage (Minaya & Scott-Clayton, 2017).

In addition to the financial benefit of attending college, there is a relationship between years of education and health behaviors and health status (Belfield & Bailey, 2011; Cutler & Lleras-Muney, 2010). For every additional year of education past high school, the probability of smoking is reduced by 3%, the probability of being obese is reduced by 1.4%, and the probability of being a heavy drinker is reduced by 1.8% (Belfield & Bailey, 2011; Cutler & Lleras-Muney, 2010). The mean rate of always wearing a seat belt raises 3.3% per additional year of education, from a base rate of 69% (Cutler & Lleras-Muney, 2010). Additionally, more educated people participate in more preventative health care, including mammograms, colorectal screenings and flu shots (Cutler & Lleras-Muney, 2010). Because of the reduction of risky behaviors and additional preventative measures, results indicate that the more education that is attained, the lower the mortality rate. (Cutler & Lleras-Muney, 2010).

Community colleges not only help students learn the technical skills to find employment, but they provide value to the community by offering programs to help supply employers with a skilled workforce (Crookston & Hooks, 2012; D'Amico et al., 2015; Economic Modeling Specialists Intl., 2014). While there is some research that indicates that community colleges have an impact on the community by creating jobs for staff and faculty, using local contractors for infrastructure improvement, and purchasing consumables and goods from local vendors, the true contribution to economic growth is the contribution of skilled workers to the workforce (Crookston & Hooks, 2012; D'Amico et al., 2015; Economic Modeling Specialists Intl., 2014; Matheny et al., 2015). Because of their structure, community colleges partner with local industry to develop specific training based on the local needs (The White House, Office of the Press Secretary, 2015; Van Noy et al., 2016). Community colleges are the primary provider of workforce training and need to continue to make strong partnerships with business leaders, especially in high cost/high demand programs (D'Amico et al., 2015; Jacobs & Worth, 2019; Jurgens, 2010; Sanburn, 2017).

Community colleges graduates also have an impact on the national economy. Graduates with higher skills and abilities strengthen the economy and lead to higher income (American Association of Community Colleges, 2019; Economic Modeling Specialists Intl., 2014). In 2012, the contribution of community college graduates to the national economy was \$806.4 billion (Economic Modeling Specialists Intl., 2014). Community colleges also generate a return on investments for the students, society, and taxpayers. Graduates will receive \$4.80 in increased future income for every \$1 spent on school. Society will receive \$1.1 trillion in added income, and benefit \$46.4 billion in social savings (Economic Modeling Specialists Intl., 2014). Social savings include a reduction in crime, welfare, and unemployment, as well as an increase in health and well-being. Society will also benefit \$25.90 per \$1 spent from federal, state, and local taxpayers (Economic Modeling Specialists Intl., 2014).

# **Cost of College and Financial Aid**

The affordability of college can be thought of as the price of college, financial aid, and ability to pay (Heller, 2011; Stuart, Rios-Aguilar, & Deil-Amen, 2014). The price of college includes tuition and fees, as well as housing, meals, and specific course fees. Financial aid includes scholarships, loans, and work-study, which can come from various sources including federal and state government, private sources, and the colleges and universities themselves (Heller, 2011; Ma et al., 2016). Many entities, including the student, the institution, and the

state, local and federal governments, contribute to the financing of higher education. Figure 5 shows the relationship between these entities.

# Figure 5

Relationship of Entities Involved in Financing Higher Education.



Retrieved from <u>http://www.higheredinfo.org/catcontent/cat8.php</u> Source: National Center for Higher Education Management Systems (2020).

Although the cost of community college is significantly lower than the public four-year institutions, it still is one of the main issues regarding retention and completion for community college students (Campbell et al., 2015; Johnstone, 2017; Mertes & Jankoviak, 2016). Of students that responded to the Community College Survey of Student Engagement (CSSC), almost half indicated that their lack of finances is a burden and could cause them to leave school (Johnstone, 2017). Many students live paycheck to paycheck, and around half of the students with debt believe they have too much debt (Johnstone, 2017).

In 1965, through the Higher Education Act (HEA), President Lyndon B. Johnson looked to increase college access to everyone by making the federal government the primary provider of financial aid (Dynarski & Scott-Clayton, 2013; Fuller, 2014; Hegji, 2017; Shaffer, Sohl, & Steele, 2016). The HEA continues to be amended every four to six years to allow for the changing world of higher education. Initially the HEA focused on traditional, low-income students that were enrolled full-time (Dynarski & Scott-Clayton, 2013; Fuller, 2014; Shaffer et al., 2016). Title IV of the HEA established grant assistance for students attending higher education institutions (Dynarski & Scott-Clayton, 2013; Hegji, 2017; Shaffer et al., 2016). The amendment in 1972 saw the creation of the Basic Educational Opportunity Grant (BEOG), which gives funds to students without the requirement to be repaid (Dynarski & Scott-Clayton, 2013; Fuller, 2014; Hegji, 2017). The Middle-Income Student Assistance Act was created in 1978 to allow all middle and low-income students to apply for subsidized loans (Dynarski & Scott-Clayton, 2013; Shaffer et al., 2016). In 1980, the BEOG was renamed the Pell Grant and was expanded to part-time students, and students attending community colleges (Dynarski & Scott-Clayton, 2013; Fuller, 2014). In 1980, the Parent Plus Loans were established to allow the parents of college students to take out loans for their children's education (Dynarski & Scott-Clayton, 2013; Shaffer et al., 2016). In 1992, the unsubsidized Stafford Loan program was added to allow families with no financial need to apply for loans (Dynarski & Scott-Clayton, 2013; Shaffer et al., 2016).

In 2016-2017, 59% of community college students received some sort of financial aid (American Association of Community Colleges, 2019). More than one-third of community college students receive the Pell grant (American Association of Community Colleges, 2019; Johnstone, 2017). The Pell Grant system is the nation's largest need-based financial aid program (Schudde & Scott-Clayton, 2016). Pell recipients are different from the non-Pell freshman in many ways. Minority students, females, and nontraditional aged students (25-29) are more likely to receive Pell Grants (Bird & Castleman, 2016; Johnstone, 2017). Pell recipients receive more need-based aid and loans, have lower scores on entry exams, lower GPAs, lower socio-economic status, are more often first-generation college students, and are less likely to live on campus (Bird & Castleman, 2016). Students that receive the Pell grant are more likely to have dependent children and more likely to work an off-campus job (Bird & Castleman, 2016; Johnstone, 2017). Pell recipients do have a higher rate of re-filing their FAFSA than their non-Pell recipients (Bird & Castleman, 2016). Because of their demographics, community college students are more likely to be dependent on their financial aid to continue their education (Castleman & Page, 2016; McKinney, et al., 2015).

Many of the current financial aid policies and procedures create challenges for students (Bird & Castleman, 2016; Campbell et al., 2015; Schudde & Scott-Clayton, 2016). These issues include disbursement delay (Campbell et al., 2015) and aid being disbursed in lump sum payments instead of periodic disbursements (Campbell et al., 2015; Weissman & O'Connell, 2016). Delays of disbursement can occur because of application errors and slow paperwork processing. (Campbell et al., 2015). These delays in disbursement can have a negative impact on student academics because it causes uncertainty and the students depend on this money for not only school costs, but rent, transportation, and other living expenses (Campbell et al., 2015; McKinney et al., 2015; Pierce, 2016). Financial aid regulations require aid to be proportional to course load (Campbell et al., 2015), students to maintain satisfactory academic progress (Campbell et al., 2016; Schudde & Scott-Clayton, 2016), and the necessity to refile the FAFSA (Bird & Castleman, 2016; Castleman & Page, 2016). If a student fails to refile their FAFSA, it is more likely that they will not continue their education and not complete a degree within six years (Bird & Castleman, 2016).

Receiving financial aid and loans can reduce financial stress on the student (Boatman & Long, 2016; McKinney et al., 2015; Nora et al., 2006). Around 63% of community college students work while taking classes and 68% are the primary money earners for their families (American Association of Community Colleges, 2019; Mukherjee et al., 2017). The student receiving financial aid can then spend more time focusing on academic activities, both inside and outside of the classroom (Boatman & Long, 2016; McKinney et al., 2015; Nora et al., 2006). Less financial stress also allows the student more opportunity to participate in social activities on campus and become socially integrated (Boatman & Long, 2016; McKinney et al., 2015; Nora et al., 2006). For example, students that received the Gates Millennium Scholarship, a last-dollar scholarship for low-income, high achieving students of color, were more able to be engaged with others and be involved in on-campus and off-campus activities because they had less college financial burden (Boatman & Long, 2016). Additionally, an increase in need-based financial aid encourages students to remain enrolled, take more credits, get better grades, and complete their degree on time, because outside work may not be necessary (Goldrick-Rab, Kelchen, Harris, & Benson, 2016; McKinney et al., 2015; Nora et al., 2006).

Students that do not receive enough financial aid to cover their academic costs may take out loans to supplement the financial burden of attending college. While many community college students receive Pell grants, they still need additional loan money for life circumstances (American Association of Community Colleges, 2019; McKinney et al., 2015). However, compared to those that did not borrow, students that took out federal loans in their first year of college are around 2.5 times more likely to dropout three years later and around two times more likely to drop out six years later (McKinney & Burridge, 2015). Through his research, Denning (2017) found that the lowering of tuition resulted in an increase in enrollment at community colleges in Texas. The additional students did not statistically change the number of students receiving a degree or certificate from a community college, but in looking at transfer rates after three to six years of graduating high school, more students had transferred to a four-year institution. The reduced tuition encouraged enrollment in the community college in order to transfer (Denning, 2017).

#### **Retention and Completion in Community College**

Much research has been done regarding student retention and completion in higher education and community colleges. Students are more likely to persist and graduate if they become integrated both academically and socially into college (Hirschy et al., 2011; Swail, Redd, & Perna, 2003; Tinto, 1975, 1993, 1999; Yu, 2015). Demographic indicators, such as age, gender, and ethnicity also affect retention and completion (Demetriou & Schmitz-Sciborski, 2011; Mertes & Hoover, 2014; Windham et al., 2014). Enrollment status and programmatic choice can also impact retention and completion (Attewell & Douglas, 2014; Crosta, 2014; Demetriou & Schmitz-Sciborski, 2011; Jones, 2015; Mertes & Hoover, 2014; Scott-Clayton, 2011; Stuart et al., 2014; Windham et al., 2014). Additionally, a student's family background can have an impact (Cataldi, Bennett, & Chen, 2018; Demetriou & Schmitz-Sciborski, 2011).

Primary demographic indicators for retention include age, gender, and ethnicity (Demetriou & Schmitz-Sciborski, 2011; Fike & Fike, 2008; Mertes & Hoover, 2014; Windham et al., 2014). Students that are female have higher retention rates than males (Mertes & Hoover, 2014; Windham et al., 2014). In their study, Windham et al. (2014) found gender to be the highest predictor of retention, with the chance of a female student being retained at 94% higher than a male student. Students under the age of 18 have higher retention rates while low retention rates are found coming from the age groups of 18-24 and 24-49 (Mertes & Hoover, 2014; Windham et al., 2014). Caucasian students have higher retention rates than other ethnicities, with Hispanic and African-American students having the lowest retention rates (Fike & Fike, 2008; Mertes & Hoover, 2014).

The student enrollment status also has an impact on retention and completion. This includes whether the student is taking full-time (12 credits or more) or part-time credit hours, and if the student continues in subsequent semesters without taking breaks (Attewell & Douglas, 2014; Crosta, 2014; Demetriou & Schmitz-Sciborski, 2011; Jones, 2015; Mertes & Hoover, 2014; Windham et al., 2014). Students who are enrolled with at least 12 credits have higher retention rates than students enrolled in 6 or less credits (Fike & Fike, 2008; Mertes & Hoover, 2014). Being enrolled on a part-time basis may negatively affect a student's desire to complete or transfer (Crosta, 2014; Demetriou & Schmitz-Sciborski, 2011; Fike & Fike, 2008). Additionally, when moving from 12 credits to 15 credits a semester, the graduation rates of community college students increases by nine percentage points (Attewell, & Monaghan, 2016). When looking at enrollment intensity and continuity, the combination of consistent, intense enrollment with limited breaks has the greatest likelihood of promoting student graduation (Attewell, & Monaghan, 2016; Crosta, 2014; Witteveen & Attewell 2017). Taking a break in one's enrollment, may negatively impact the students' completion of a credential (Crosta, 2014; Demetriou & Schmitz-Sciborski, 2011).

The design of Career and Technical Education (CTE) programs and their link to employment can impact the rate of retention and completion of students (Jones, 2015; Scott-Clayton, 2011; Stuart et al., 2014). Because the structures of CTE program courses at community colleges are typically prescribed and defined, they have a positive impact on retention (Jones, 2015; Scott-Clayton, 2011). Students are able to predict their schedules and course requirements, which aids in the success of the students (Jones, 2015). Having programmatic structure reduces the complexity of course offerings, which benefits the students that may not be able to navigate a less structured program (Scott-Clayton, 2011). Also, there is a positive relationship between student retention and completion if the job outlook of the student's program is strong (Stuart et al., 2014).

A student's socioeconomic status and the educational level of the student's parents also have an impact of the student's retention and completion (Cataldi et al., 2018; Demetriou & Schmitz-Sciborski, 2011; Fike & Fike, 2008). Students from low-income households are less likely to be retained and graduate because it is more likely that they attend under-resourced schools and have to work to help support their families (Demetriou & Schmitz-Sciborski, 2011). A student whose parents had not attended college were more likely to leave college without earning a credential than a student whose parents either attended some college or earned a bachelor's degree (Cataldi et al., 2018).

# America's College Promise and Promise Scholarship Programs

Announced in 2015, the America's College Promise (ACP) initiative was a proposal to make two years of community college free for qualifying students (Palmadessa, 2017; Pierce, 2015a; The White House, Office of the Press Secretary, 2015). The ACP proposed that students will have to be responsible for their education, community colleges will have to offer high-quality programs and focus on completion, and states will have to invest more in higher education and training (Palmadessa, 2017; White House, Office of the Press Secretary, 2015). The students receiving the Promise scholarships will have to prove academic progress, maintain a 2.5 grade point average, and attend college at least part-time (The White House, Office of the Press Secretary, 2015), and many of the programs require additional responsibilities of the students, such as mentoring, college counseling and community service participation (Pierce, 2015a; Smith & Bowyer, 2016; The White House, Office of the Press Secretary, 2015).

The ACP initiative also means that the community colleges and the states will have to participate. Community colleges will have to offer programs that fully transfer to four-year institutions and CTE programs with high graduation rates that are in high demand from local employers. Community colleges will also have to work to improve student outcomes (The White House, Office of the Press Secretary, 2015).

One of the early versions of a Promise scholarship program was the Tennessee Promise (Pierce, 2015a; Smith & Bowyer, 2016; The White House, Office of the Press Secretary, 2015) which enrolled its first group of students in the fall of 2015. Other programs that were initiated before the announcement of the ACP include the Kalamazoo Promise scholarship in Michigan (Bartik & Lachowska, 2014), the Oregon Promise grant in Oregon, and programs in at least eight other states (Pierce, 2015a). In 2015, there were around 50 free college programs, and as of September 2018, the number of Promise scholarship programs either implemented or proposed had increased to over 200 programs in 43 states (*College Promise Campaign*, 2018; Hiestand, 2018).

Implementation of Promise scholarship programs has had a positive impact on college enrollment, retention, and completion (Bartik, Hershbein, & Lachowska, 2017; Pierce, 2015a; Pluhta & Penny, 2013; Smith & Bowyer, 2016; Swanson, Watson, Ritter, & Nichols, 2017). In the districts with the programs in Tennessee, Michigan, and Oregon, the percentage of high school seniors applying to and attending community college has increased since implementation (Bartik et al., 2017; Pierce, 2015a; Pluhta & Penny, 2013; Smith & Bowyer, 2016). In fact, at the first application cycle, 90% of all high school seniors in Tennessee applied for the Tennessee Promise (Pierce, 2015a). Once in college, Promise scholarship recipients had a higher rate of retention than their comparative overall student population (Pierce, 2015a, Pluhta & Penny, 2013; Smith & Bowyer, 2016). Additionally, the percentage of credential attainment, after six-years, increased from around 36% to nearly 46% after the implementation of the Kalamazoo Promise (Bartik et al., 2017). Research has also shown that the Promise scholarship programs have encouraged students to attend college who may not have thought of themselves as college material and not pursued higher education (Pluhta & Penny, 2013).

The addition of Promise scholarship programs has had a positive impact on high school student achievements and behaviors as well (Bartik & Lachowska, 2014; Pluhta & Penny, 2013; Smith & Bowyer, 2016; Swanson et al., 2017). High school students were more likely to graduate, apply to college, and attend college after implementation of the Promise scholarship program (Pluhta & Penny, 2013; Smith & Bowyer, 2016). Additionally, Bartik and Lachowska (2014) found that the announcement of Promise scholarship programs impacted high school students' academic achievements. In their study, Bartik and Lachowska (2014) compared completed credit hours, GPA, and disciplinary actions for students in the Kalamazoo Public School District before and after the Kalamazoo Promise scholarship was announced. Results from this study showed that an effect didn't significantly occur until the third year after the Kalamazoo Promise was announced. After that third year, the likelihood that a student would earn any high school credit increased by 1.8 days for all students and 3.1 days for African American

students, and the GPAs of African American students increased by .7 on a 4.0 scale (Bartik & Lachowska, 2014).

The local communities have been impacted by Promise scholarship programs (Bartik & Sotherland, 2015; LeGower & Walsh, 2017; Sohn, Rubenstein, Murchie, & Bifulco, 2017; Swanson et al., 2017). On average, the announcement of a Promise scholarship program impacted public school enrollment with an increase of around 4% in the programs school district. The least restrictive Promise scholarship programs, with no specific achievement requirements, affected the greatest increase in enrollment of public school (LeGower & Walsh, 2017; Swanson et al., 2017). Promise scholarship programs have an effect on the number of families that move out of a Promise scholarship program district, with out-migration rates of families persistently declining, especially among families with children (Bartik & Sotherland, 2015; Swanson et al., 2017). Additionally, after three years of the announcement of the Promise scholarship program, home values increased around 7-12% when compared to the regions around the Promise scholarship program area (LeGower & Walsh, 2017).

In 2015, many states began to introduce legislation regarding their own Promise scholarship programs (Pierce, 2015a). The various state Promise scholarship programs often have similar last-dollar scholarship structures, but in some instances, do have slight variances regarding the funding and coverage of the scholarship. Arizona proposed to waive the first two years at Arizona community colleges if the federal government covers 75% of the cost (Pierce, 2015a). Indiana, Minnesota, Mississippi, and Missouri proposed state bills to create last dollar scholarships to cover tuition and fees for recent high school graduates (Pierce, 2015a). Differences also exist in the expectations of the student recipients. In order to maintain eligibility for the Promise scholarship, the majority of the programs require that the student maintain satisfactory academic progress, including a minimum GPA and a minimum number of completed credit hours (Millett, Saunders, & Fishstein, 2018). Additionally, some Promise scholarship programs that cover two-year degrees and certificate programs require students to meet with an academic advisor or mentor and/or participate in community service (Millett et al, 2018). For example, Indiana's proposal requires the scholarship recipients to participate in a mentoring program, while Mississippi and Missouri would require the recipients to participate in mentoring, community service, and attend school full-time (Pierce, 2015a).

# Conclusion

This literature review has included information pertinent to retention in community colleges and Promise scholarship programs. Tinto's theory of persistence was explained. Additionally, background on community colleges, the benefits of community college, the costs of college and financial aid, retention and completion in higher education, and the America's College Promise and Promise scholarship programs were discussed. Tinto (1975) theorized that the factors that have the largest impact on a student's retention are the academic and social integration of the student into their institution. External factors, such as age, gender, ethnicity, and socioeconomic status can affect retention, but cannot be controlled by the institution (Demetriou & Schmitz-Sciborski, 2011; Mertes & Hoover, 2014; Windham et al., 2014). The institution can help the student become more integrated, both academically and socially (Tinto, 1999).

Community colleges are positioned to help the local labor market fill its positions with skilled employees (Crookston & Hooks, 2012; D'Amico et al., 2015; Economic Modeling Specialists Intl., 2014; Matheny et al., 2015). Over 1,000 community colleges serve nearly 41% of the college students in the United States (American Association of Community Colleges, 2019; Economic Modeling Specialists Intl., 2014; The White House, Office of the Press Secretary, 2015). Students have access to opportunities at community colleges that they may not find at other educational institutions (Campbell et al., 2015; Everett, 2015; Huelsmann, 2015; Levin et al., 2017; Palmadessa, 2017). The demographic identities of students that attend community colleges differ from those that attend four-year institutions, with many students being non-traditional, working at least part-time, first-generation, and from minority ethnic groups (American Association of Community Colleges, 2019; Bragg et al., 2006; Everett, 2015; Ginder et al., 2017; Huelsmann, 2015).

Community colleges contribute to economic growth by supplying skilled workers to the workforce (Crookston & Hooks, 2012; D'Amico et al., 2015; Economic Modeling Specialists Intl., 2014; Matheny et al., 2015). The number of job openings that will require at least a degree from a community college will increase to 30% by the year 2020 (Carnevale et al., 2013). Students that graduate from college with higher skills earn more money and strengthen the economy (American Association of Community Colleges, 2019; Economic Modeling Specialists Intl., 2014).

While the cost of community college is less than the cost at public four-year institutions, it still is one of the main issues regarding retention and completion for community college students (Campbell et al., 2015; Johnston, 2017; Mertes & Jankoviak, 2016). The majority of community college students receive some sort of financial aid (American Association of Community Colleges, 2019). Receiving financial aid and loans can reduce financial stress on the student (Boatman & Long, 2016; McKinney et al., 2015; Nora et al., 2006).

Many factors contribute to a student's ability to persist and complete. Age, gender, and ethnicity are primary demographic indicators for retention (Demetriou & Schmitz-Sciborski,

2011; Mertes & Hoover, 2014; Windham et al., 2014). Program choice, enrollment status, and family economic status also impact retention and completion (Cataldi et al., 2018; Crosta, 2014; Demetriou & Schmitz-Sciborski, 2011; Mertes & Hoover, 2014).

America's College Promise and Promise scholarship programs aim to assist more students to attend community college, to learn the skills needed to enter the workforce. (The White House, Office of the Press Secretary, 2015). Research on Promise scholarship programs has shown an impact on high school student achievements and college enrollment, persistence, and completion (Bartik et al., 2017; Pierce, 2015a; Pluhta & Penny, 2013; Smith & Bowyer, 2016). The number of Promise scholarship programs increased from around 50 programs in 2015 to over 200 programs in 2018 (*College Promise Campaign*, 2018; Hiestand, 2018).

#### **Chapter III**

#### **Design and Methodology**

# Introduction

One important purpose of the community college is to enable students to get the skills needed to find employment and fill the community's employment needs (Dunn & Kalleberg, 2017; Mission & Goals, n.d.). By the year 2020, over 30% of the job openings will require at least an associate degree (Carnevale et al., 2013). By the year 2030, around one-third of the newly created jobs will be unfilled due to a lack of skilled workers (Stockard, 2019). Because community colleges have open admission policies, offer convenient locations, and have affordable tuition rates compared to their four-year counterparts, they make higher education more accessible to much of the population (Everett, 2015; The White House, Office of the Press Secretary, 2015). However, the cost of attending college is still a major factor for students (Campbell et al., 2015; Mertes & Jankoviak, 2016). In response to the growing need for skilled workers and knowing that a primary barrier to education is cost, the America's College Promise (ACP) initiative was announced in 2015, which proposed making two years of community college free for qualifying students (Palmadessa, 2017; Pierce, 2015a; The White House, Office of the Press Secretary, 2015). The announcement of the ACP prompted individual states and colleges to implement their own Promise scholarship programs (Paterson, 2018; Pierce 2015a, 2015b).

In addition to finding employment, students that attain an associate degree, or higher, earn more income than students who did not complete a degree (American Association of Community Colleges, 2019; Economic Modeling Specialists Intl., 2014; Stevens et al., 2015; U.S. Department of Labor, 2018). Graduates with an associate degree have median earnings of \$42,600 a year compared to high school graduates' earnings of \$36,000 (American Association of Community Colleges, 2019). Additionally, graduates with associate degrees and certificates are more likely to earn a living wage and find stable employment (Minaya & Scott-Clayton, 2017).

One of the inspirations for the ACP initiative was the Tennessee Promise (The White House, Office of the Press Secretary, 2015). The Tennessee Promise was implemented in 2014 and enrolled its first group of students in the fall of 2015 (Pierce, 2015a; Smith & Bowyer, 2016). This program provided a last-dollar scholarship to high school graduates, which means that the Tennessee Promise will pay for the remainder of the tuition for a student after all other financial aid sources, including Pell grants, are used (Pierce, 2015a). Other Promise scholarship programs have been created in various states and communities including Arizona, Indiana, Minnesota, and Missouri (Paterson, 2018; Pierce, 2015a). The purpose of the ACP is to provide students the opportunity to get an education and learn the skills needed to meet the economic needs of their communities (The White House, Office of the Press Secretary, 2015). The individual states and colleges are responsible for defining the qualifications and requirements of the students to be part of their Promise scholarship programs (Paterson, 2018; Pierce, 2015a, 2015b; U.S. Department of Education & Office of the Under Secretary, 2016). Often, these requirements include academic integration activities and social integration activities (Pierce, 2015a, 2015b). According to Tinto (1975), a student is more likely to persist and graduate if they become academically and socially integrated into their institution. Because many of the Promise scholarship programs are in their infancy, limited research has been completed regarding the success of these programs.

This chapter discusses the research design and methodology used to collect and analyze data regarding the relationship between Promise scholarship programs, Promise scholarship program requirements, student retention, and student perception of their academic and social integration. This information provides both a systematic plan to conduct the research and shows that the researcher is able to conduct the research (Marshall & Rossman, 2016). This chapter provides a description of the research methodology for this mixed methods study, including research design, research locations, participants, data collection, and data analytical methods. Reliability, validity, limitations, and delimitations are also addressed.

### **Research Questions**

This mixed methods study explored the impact of the Promise scholarship programs on retention through the following research questions:

1. How does participation in a Promise scholarship program affect retention of community college students in the Upper Midwest?

2. How does participation in a Promise scholarship program affect a student's perception of their academic and social integration?

2. Is there a relationship between the requirement of academic and social integration activities within the various Promise scholarship programs and student retention rates?

4. Is there a relationship between the requirement of academic and social integration activities within the various Promise scholarship programs and a student's perception of their academic and social integration?

# **Research Design**

This study explored the retention rates of students receiving Promise program scholarships, with an emphasis on the varying academic and social integration activities that were requirements of the individual Promise scholarship programs and the student's perceptions of their academic and social integration. The study used an explanatory sequential mixed methods research design. A mixed methods study uses both quantitative and qualitative data to provide a better understanding of the data that could not be done by one method on its own (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). The process of combining both quantitative and qualitative data builds on the strengths of the two types of data and provides a richer picture of the results (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). By using more than one method of data collection, the researcher increases the validity and accuracy of the findings through triangulation (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). The purpose of the explanatory sequential mixed methods design is to use qualitative research to more thoroughly explain the quantitative data (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). This research study followed Creswell's (2015) framework for conducting explanatory sequential mixed methods research. Figure 6 illustrates the process of an explanatory sequential mixed methods research design.

### Figure 6

#### Explanatory Sequential Mixed Methods Research Design Process



Adapted from Creswell, J. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. (5th ed.). Upper Saddle River, NJ: Pearson Education. P.544

In an explanatory sequential mixed methods research design, multiple variables are examined, with the change in one variable reflecting in a change in the other variable(s) (Creswell, 2015; Ivankova et al., 2006). In this study, the independent variables are the participation in the different required academic and social activities of an institution's Promise scholarship program and the dependent variables are retention rates and students' perception of academic and social integration. Following Creswell's (2015) process, the first step of the explanatory sequential mixed methods research is quantitative data collection. Through the use of secondary data sources and an online survey, the quantitative data was collected to explore the relationship between participation in a Promise scholarship program, student retention rate and students' academic and social integration. The online survey consisted of 10 demographic questions, 31 Likert scale questions obtained from the Institutional Integration Scales (IIS) designed by Pascarella and Terenzini (1980), and 12 short answer questions designed by the researcher (Appendix C). The IIS consisted of Likert scale questions, and explored the students' perceptions of their own academic and social integration into their institution. The quantitative data was analyzed using SPSS statistical software. The short answer questions were coded and categorized following qualitative analysis measures.

In the explanatory sequential mixed methods research design process, qualitative data is used to refine the information found from analyzing the quantitative data (Creswell, 2015; Ivankova et al., 2006). Following the data analysis, the researcher utilized both the quantitative results and the short answer results to determine the interview protocol and questions for the qualitative portion of the research. Qualitative semi-structured interviews can offer explanation to the numerical data found through the quantitative research (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). To gather the qualitative data, the researcher facilitated seven in-depth interviews. Each interview followed the interview protocol (Appendix H). Table 1 illustrates the researcher's timeline for the study, beginning with research location selection and IRB approval, ending with the dissertation defense.

# Table 1

# Research Timeline

Activity	Dates
Research Location Selection	June, 2019
IRB Final Approval	July, 2019
Secure Permissions from Research Locations	July – October, 2019
Quantitative Data Collection	September – October, 2019
Quantitative Data Analysis	October – November, 2019
Qualitative Data Collection (Interviews)	December, 2019
Validation and Transcription of Interview Data	December, 2019
Qualitative Data Analysis	December, 2019 – January, 2020
Finalize Analysis, Results and Discussion	February – March, 2020
Dissertation Defense	April 6, 2020

# **Participants**

The researcher used purposeful sampling methods to determine the research locations and participants for this study. The research locations were three different community colleges in the Upper Midwest region of the United States. The participants for this study were Promise scholarship recipients from the Promise scholarship programs from these three institutions. The Promise scholarship programs each had varying requirements and student expectations in order to receive and maintain their Promise scholarship.

Three individual community colleges were chosen because of their varying Promise scholarship program requirements. Tinto's (1975, 1993, 1999) theory of student persistence

states that if a student is academically and socially integrated into the institution they are more likely to persist and graduate. For this study, Promise scholarship programs were selected if students were required to participate in activities that could be categorized as academic integration, social integration, or both. Academic integration activities may include development of an academic plan of study, maintaining full-time enrollment status, receiving tutoring services, or meeting with an advisor. Examples of social integration activities include attending a summer orientation session or participation in extracurricular activities. The community colleges were given a pseudonym to protect the identity of the institutions. Table 2 summarizes the total student population from the three community colleges and the number of Promise scholarship recipients for the academic year 2018-2019.

Table 2

			Full-Time	Promise
	Approximate	Full-Time	Degree Seeking	Scholarship
	Student Population	Students	Students	Recipients
A Community				
College	12,000	2,157	269	151
B Community				
College	15,000	3,959	733	143
C Community				
College	4,500	755	252	30
Total	31,500	6,871	1,254	324

Community College Population Overview 2018-2019

*Note:* Data collected from each individual institution and National Center for Education Statistics (2018).

A Community College (ACC). A Community College has a service area that includes five full counties and parts of four additional counties. The district has a population of over 480,000 residents, with 28 K-12 districts. Each year ACC serves approximately 12,000 degree seeking students, of which approximately 80% attend on a part-time basis (National Center for Education Statistics, 2018). The Promise scholarship at ACC is a last dollar plus scholarship, meaning it can be applied to tuition, fees, books, and required materials after other financial aid has been applied. In order to be eligible for a Promise scholarship at ACC, a student must live in the district or have graduated from a high school in the ACC college district and be eligible for federal financial aid. In order to maintain their Promise scholarship, a student must be enrolled full-time (12 credits or more) in the fall and spring semesters, maintain established academic performance outcomes, meet with an advisor, and perform 8 hours of community service each semester.

**B** Community College (BCC). B Community College has a service area that includes portions of 12 counties. The district has a population of over 725,000 residents. Enrollment at BCC is approximately 15,000, of which around 75% attend on a part-time basis (National Center for Education Statistics, 2018). Additionally, BCC has multiple campus locations within its primary city, as well as four regional sites. The Promise scholarship at BCC is a last dollar scholarship and covers the student's tuition and fees after other financial aid has been applied. In order to be eligible for a Promise scholarship at BCC, a student must have graduated from a BCC college district high school, have a cumulative high school GPA of 2.25 or higher, and be Pell Grant eligible. In order to maintain their Promise scholarship, a student must attend a welcome orientation session, enroll in an academic success course, be enrolled full-time (12 credits or more) in the fall and spring semesters, achieve a GPA of 2.0 or higher each semester,

perform eight volunteer hours each semester, attend two workshops each semester, meet with an advisor one time each semester, and be a Promise mentor during their second year.

**C Community College (CCC).** C Community College has a service area that includes two full counties and parts of three additional counties. The district has a population of over 300,000 residents, with 26 K-12 districts. Each year CCC serves around 4,500 students, of which around 85% attend on a part-time basis (National Center for Education Statistics, 2018). Additionally, CCC has three main campuses and two regional centers. The Promise scholarship at CCC is also a last dollar scholarship and is applied to tuition and fees after other financial aid is applied. In order to eligible for a Promise scholarship at CCC, a student must reside within the CCC college district, be a current high school student at the time of application, graduate on-time from an accredited high school, earn a cumulative GPA of 2.25 or higher by the end of their junior year, earn a minimum of 15 on the ACT, and be Pell Grant eligible. In order to maintain their Promise scholarship, a student must be enrolled full-time (12 credits or more) in the fall and spring semesters, maintain minimum academic standards, perform eight hours of community service each semester, and use the advising support services of the college.

Emails to Promise scholarship participants were sent on behalf of the researcher by each institution. Students were invited to participate in an online survey about their experiences within the Promise scholarship program. The total number of students that received the survey request was 707. The number of students that attempted the survey was 113. Upon review of the survey data, the researcher removed 26 cases because the responses stopped after completing the demographic questions and did not continue to the IIS Likert scale questions and the qualitative questions. The final 87 cases represented a 12.3% response rate, which is within the anticipated range of external survey response rates (Biersdorff, 2009; Ramshaw, 2019).

Table 3 shows the online survey statistics, including the individual research locations and the total.

### Table 3

**Online Survey Statistics** 

	Received Survey Request	Attempted Survey	Completed Survey	Response Rate
ACC	341	70	58	17.0%
BCC	323	31	20	6.2%
CCC	43	12	9	14.0%
Total	707	113	87	12.3%

The first questions on the survey asked for specific demographic information from the participants. Table 4 summarizes the demographic information obtained from these questions on the survey: gender, age, matriculation year, enrollment status, race/ethnicity, employment, approximate GPA, whether they are a first-generation college student, and whether they are receiving need-based financial aid.

# Table 4

	ACC	BCC	CCC
Total Respondents	58	20	9
Gender			
Male	13	5	3
Female	45	15	6
Age			
18-24	58	20	6
25-34	-	-	2
35-44	-	-	-
45-54	-	-	1
Over 55	-	-	-

# Table 4 continued

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Matriculation Year			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			-	-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			-	-
Missing         1         -         -           Enrollment Status         Currently enrolled         56         20         9           Completed degree         1         -         -         -           Completed diploma         -         -         -         -           Not enrolled         1         -         -         -           Race/ethnicity         -         -         -         -           Race/ethnicity         -         1         -         -           African-American         1         1         -         -           Caucasian         32         4         7         Native American         1         1         -           Spanish/Hispanic         6         10         1         1         -         -           Coucasian         32         4         7         1         1         -         -           Mistive American         1         1         1         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -				
Enrollment Status       Currently enrolled       56       20       9         Completed degree       1       -       -         Completed digloma       -       -       -         Not enrolled       1       -       -         Race/ethnicity       -       -       -         African-American       -       1       -         Asian/Pacific Islander       15       2       -         Caucasian       32       4       7         Native American       1       1       -         Spanish/Hispanic       6       10       1         Other       3       1       1         Prefer not to Answer       1       1       -         Full-Time       9       2       2         Part-Time       41       14       4         Not Employed       6       4       2         Employed on Campus       1       -       1         Missing       -       -       -         Approximate GPA       -       -       -         K- 4.0       12       2       1         B- 3.0       26       8       2       -			16	7
Currently enrolled         56         20         9           Completed degree         1         -         -           Completed diploma         -         -         -           Not enrolled         1         -         -           Race/ethnicity         -         -         -           African-American         -         1         -           Asian/Pacific Islander         15         2         -           Caucasian         32         4         7           Native American         1         1         -           Spanish/Hispanic         6         10         1           Other         3         1         1           Prefer not to Answer         1         1         -           Employment         -         -         1           Missing         -         -         1           Missing         -         -         1           Missing         -         -         -           Approximate GPA         -         -         -           F- Below 1.0         -         -         -           F- Below 1.0         -         -         -	-	1	-	-
$\begin{array}{c cccc} Completed degree & 1 & - & - & - & - & - & - & - & - & -$				
Completed diploma       -       -       -         Not enrolled       1       -       -         Race/ethnicity       -       1       -         African-American       -       1       -         Asian/Pacific Islander       15       2       -         Caucasian       32       4       7         Native American       1       1       -         Spanish/Hispanic       6       10       1         Other       3       1       1         Prefer not to Answer       1       1       -         Employment       9       2       2         Part-Time       9       2       2         Part-Time       41       14       4         Not Employed       6       4       2         Employed on Campus       1       -       -         Missing       -       -       -         Missing       -       -       -         Missing       -       -       -         D- 1.0       -       -       -         F. Below 1.0       -       -       -         T. D- 1.0       -       - <td>Currently enrolled</td> <td>56</td> <td>20</td> <td>9</td>	Currently enrolled	56	20	9
Not enrolled         1         -         -           Race/ethnicity         African-American         -         1         -           Asian/Pacific Islander         15         2         -           Caucasian         32         4         7           Native American         1         1         -           Spanish/Hispanic         6         10         1           Other         3         1         1           Prefer not to Answer         1         1         -           Employment         -         -         2         2           Part-Time         9         2         2         2           Part-Time         41         14         4           Not Employed         6         4         2           Employed on Campus         1         -         1           Missing         -         -         -           As 4.0         12         2         1           Bs 3.0         26         8         2           C - 2.0         3         -         -           D- 1.0         -         -         -           F- Below 1.0         - <td< td=""><td>Completed degree</td><td>1</td><td>-</td><td>-</td></td<>	Completed degree	1	-	-
Race/ethnicity       I       I         African-American       -       1       -         Asian/Pacific Islander       15       2       -         Caucasian       32       4       7         Native American       1       1       -         Spanish/Hispanic       6       10       1         Other       3       1       1         Prefer not to Answer       1       1       -         Employment       -       -       2       2         Part-Time       9       2       2       2         Part-Time       41       14       4         Not Employed       6       4       2       2         Employed on Campus       1       -       -       -         Missing       -       -       -       -         As 4.0       12       2       1       B       -       -         Missing       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       <	Completed diploma	-	-	-
African-American       -       1       -         Asian/Pacific Islander       15       2       -         Caucasian       32       4       7         Native American       1       1       -         Spanish/Hispanic       6       10       1         Other       3       1       1         Prefer not to Answer       1       1       -         Employment       9       2       2         Part-Time       41       14       4         Not Employed       6       4       2         Employed on Campus       1       -       -         Missing       -       -       -         D- 1.0       -       -       -         F- Below 1.0       -       -       -         Frist-generation college       36       16       6         No       12       2 <t< td=""><td>Not enrolled</td><td>1</td><td>-</td><td>-</td></t<>	Not enrolled	1	-	-
Asian/Pacific Islander       15       2       -         Caucasian       32       4       7         Native American       1       1       -         Spanish/Hispanic       6       10       1         Other       3       1       1         Prefer not to Answer       1       1       -         Employment       9       2       2         Part-Time       41       14       44         Not Employed       6       4       2         Employed on Campus       1       -       -         Missing       -       -       -         D- 1.0       -       -       -         F- Below 1.0       -       -       -         Frist-generation college       36       16       6         No       22       4       3         Need-Based Aid       -       - <td< td=""><td>Race/ethnicity</td><td></td><td></td><td></td></td<>	Race/ethnicity			
$\begin{array}{c ccccc} Caucasian & 32 & 4 & 7 \\ Native American & 1 & 1 & - \\ Spanish/Hispanic & 6 & 10 & 1 \\ Other & 3 & 1 & 1 \\ Prefer not to Answer & 1 & 1 & - \\ Employment & & & & \\ Full-Time & 9 & 2 & 2 \\ Part-Time & 41 & 14 & 4 \\ Not Employed & 6 & 4 & 2 \\ Employed on Campus & 1 & - & 1 \\ Missing & - & - & & \\ Approximate GPA & & & & \\ A- 4.0 & 12 & 2 & 1 \\ B- 3.0 & 26 & 8 & 2 \\ C- 2.0 & 3 & - & & \\ B- 3.0 & 26 & 8 & 2 \\ C- 2.0 & 3 & - & & \\ D- 1.0 & - & - & & \\ F- Below 1.0 & - & - & \\ D- 1.0 & - & - & \\ F- Below 1.0 & - & - & \\ Interpret & & & & \\ First-generation college \\ student & & & \\ Yes & 36 & 16 & 6 \\ No & 22 & 4 & 3 \\ Need-Based Aid & & \\ Yes & 47 & 15 & 9 \\ No & 1 & 1 & - \\ \end{array}$	African-American	-	1	-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Asian/Pacific Islander	15	2	-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Caucasian	32	4	7
Other         3         1         1           Prefer not to Answer         1         1         -           Employment         9         2         2           Part-Time         41         14         4           Not Employed         6         4         2           Employed on Campus         1         -         1           Missing         -         -         -           Approximate GPA         12         2         1           B- 3.0         26         8         2           C- 2.0         3         -         -           D- 1.0         -         -         -           F- Below 1.0         -         -         -           First-generation college         36         16         6           Student         -         -         -           Yes         36         16         6           No         22         4         3           Pres         36         16         6           No         22         4         3	Native American	1	1	-
Other         3         1         1           Prefer not to Answer         1         1         -           Employment         9         2         2           Part-Time         41         14         4           Not Employed         6         4         2           Employed on Campus         1         -         1           Missing         -         -         -           Approximate GPA         12         2         1           B- 3.0         26         8         2           C- 2.0         3         -         -           D- 1.0         -         -         -           F- Below 1.0         -         -         -           First-generation college         36         16         6           Student         -         -         -           Yes         36         16         6           No         22         4         3           Pres         36         16         6           No         22         4         3	Spanish/Hispanic	6	10	1
Employment       9       2       2         Part-Time       41       14       4         Not Employed       6       4       2         Employed on Campus       1       -       1         Missing       -       -       1         Missing       -       -       -         Approximate GPA       12       2       1         B- 3.0       26       8       2         C- 2.0       3       -       -         D- 1.0       -       -       -         F- Below 1.0       -       -       -         Unknown       17       10       6         First-generation college       -       -       -         student       Yes       36       16       6         No       22       4       3       -         Need-Based Aid       -       -       -       -         Yes       47       15       9       -         No       1       1       -       -       -		3	1	1
Full-Time922Part-Time41144Not Employed642Employed on Campus1-1MissingApproximate GPA1221B- 3.02682C- 2.03D- 1.0F- Below 1.0Frast-generation collegestudentStudentYes36166No2243Need-Based AidYes47159No11-	Prefer not to Answer	1	1	-
Full-Time922Part-Time41144Not Employed642Employed on Campus1-1MissingApproximate GPA1221B- 3.02682C- 2.03D- 1.0F- Below 1.0Frast-generation collegestudentStudentYes36166No2243Need-Based AidYes47159No11-	Employment			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		9	2	2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		41	14	
Employed on Campus       1       -       1         Missing       -       -       -         Approximate GPA       12       2       1         B- 3.0       26       8       2         C- 2.0       3       -       -         D- 1.0       -       -       -         F- Below 1.0       -       -       -         Unknown       17       10       6         First-generation college       -       -       -         student       Yes       36       16       6         No       22       4       3       3         Need-Based Aid       -       -       -       -         Yes       47       15       9       9         No       1       1       -       -				
Missing       -       -       -         Approximate GPA       12       2       1         B- 3.0       26       8       2         C- 2.0       3       -       -         D- 1.0       -       -       -         F- Below 1.0       -       -       -         Unknown       17       10       6         First-generation college       -       -       -         student       Yes       36       16       6         No       22       4       3       3         Need-Based Aid       -       -       -       -         Yes       47       15       9       9         No       1       1       -       -			-	
Approximate GPA       12       2       1         B- 3.0       26       8       2         C- 2.0       3       -       -         D- 1.0       -       -       -         F- Below 1.0       -       -       -         Unknown       17       10       6         First-generation college       -       -       -         student       -       -       -       -         Yes       36       16       6       6         No       22       4       3       -         Need-Based Aid       -       -       -       -         Yes       47       15       9       9         No       1       1       -       -		-	-	-
$\begin{array}{c cccc} A-4.0 & 12 & 2 & 1 \\ B-3.0 & 26 & 8 & 2 \\ C-2.0 & 3 & - & - \\ D-1.0 & - & - & - \\ F- & Below 1.0 & - & - & - \\ Unknown & 17 & 10 & 6 \\ \hline First-generation college \\ student \\ \hline Yes & 36 & 16 & 6 \\ No & 22 & 4 & 3 \\ \hline Need-Based Aid \\ \hline Yes & 47 & 15 & 9 \\ No & 1 & 1 & - \\ \end{array}$	-			
B- 3.0         26         8         2           C- 2.0         3         -         -           D- 1.0         -         -         -           F- Below 1.0         -         -         -           Unknown         17         10         6           First-generation college         -         -         -           student         -         -         -         -           Ves         36         16         6           No         22         4         3           Need-Based Aid         -         -         -           Yes         47         15         9           No         1         1         -		12	2	1
C- 2.0       3       -       -         D- 1.0       -       -       -         F- Below 1.0       -       -       -         Unknown       17       10       6         First-generation college       -       -       -         student       -       -       -       -         Yes       36       16       6       6         No       22       4       3       3         Need-Based Aid       -       -       -       -         Yes       47       15       9       9         No       1       1       -       -				_
D- 1.0         -         -         -           F- Below 1.0         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -			-	-
F- Below 1.0 Unknown         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -		-	_	_
Unknown17106First-generation college student556Yes36166No2243Need-Based Aid599No11-		_	_	_
First-generation college studentYes36166No2243Need-Based Aid7159No11-		17	10	6
student       Yes       36       16       6         No       22       4       3         Need-Based Aid       Yes       47       15       9         No       1       1       -		17	10	0
No         22         4         3           Need-Based Aid         Yes         47         15         9           No         1         1         -	student			
Yes         47         15         9           No         1         1         -	Yes	36	16	6
Yes47159No11-		22	4	3
No 1 1 -	Need-Based Aid			
	Yes	47	15	9
	No	1	1	-
Unknown 9 4 -	Unknown	9	4	-

Following the process for explanatory sequential mixed methods research design, quantitative data was collected in the first phase of this study (Creswell, 2015; Ivankova et al., 2006). By conducting quantitative research first, it puts emphasis on the quantitative data and uses the qualitative results to help explain and justify the quantitative results (Creswell, 2015; Ivankova et al., 2006). The online survey contained both quantitative data and open-ended qualitative questions. The survey results were completed and analyzed before the qualitative interviews were conducted to allow the researcher to modify and adjust the interview protocol if necessary.

To gather qualitative data, the researcher intended to conduct interviews with participants at each of the community colleges. Upon completion of the online survey, students indicated if they would be interested in participating in an interview to discuss their experiences. Fifteen participants from ACC, two participants from BCC, and two participants from CCC indicated an interest in participating in the interviews and supplied their email address. The researcher contacted the 19 students and only received communication back from students at ACC.

Multiple sampling methods were used to determine the interview participants. First, criterion sampling was used. Criterion sampling was chosen to ensure that all participants meet specific criteria (Marshall & Rossman, 2016). In this study, the researcher focused on second-year students for the interviews. This criterion was selected because the second-year students would have a better understanding of the impact of the various activities on their success. Second, convenience sampling was used because of the limited number of responses received. By using convenience sampling, the researcher interviewed students that were available and

willing to be interviewed (Creswell, 2015). Table 5 summarizes the demographics of the interview participants at ACC. All interview participants were at least 18 years of age.

# Table 5

	Gender	Ethnicity	Employed	First-Gen	Program
Student 1	Male	Caucasian	PT	Yes	Auto Body
Student 2	Female	Caucasian	No	Yes	ECE
Student 3	Female	Asian/Pacific	PT	No	Counseling
Student 4	Female	Caucasian	PT	Yes	Nursing
Student 5	Male	Asian/Pacific	PT	Yes	Nursing
Student 6	Female	Caucasian	FT	Yes	Paramedic/Firefighter
Student 7	Female	Caucasian	РТ	No	ECE

# Demographics of Interview Participants

*Note:* All students from ACC. All students in age range of 18-24. PT indicates student works part-time (less than 40 hours a week) outside of class. ECE indicates Early Childhood Education program.

# **Data Collection**

When conducting research with human participants, focus should be placed on treating the participant with respect, beneficence, and justice. The researcher must not use the participants simply as a means to an end, must ensure the participants are not harmed, and must consider who benefits and who does not (Marshall & Rossman, 2016). In order to practice proper research ethics, the researcher completed training and certification with the National Institute of Health (see Appendix A). The researcher obtained permission to conduct the research from the Institutional Review Board (IRB) at Northwest Nazarene University in April, 2019 (Appendix J). As required, all data was saved and stored per the IRB requirements. Additionally, permission to conduct research was obtained from the IRB at each of the three research locations (Appendix K-M).

Initial quantitative data was collected from each individual location and national data collection agencies. Student demographic and retention data was pulled from the National Center for Education Statistics (NCES). Additionally, each individual institution provided specific retention data for the Promise scholarship recipients as well as overall retention data from their institution.

**Online Survey.** When using surveys in research, the researcher seeks to identify trends within the given population (Creswell, 2015). For this study, the researcher created an online survey using Qualtrics<sup>TM</sup> that consisted of 10 demographic questions, the Institutional Integration Scales developed by Pascarella and Terenzini (1980), and 12 short answer questions (Appendix C). The demographic questions included questions such as the student's gender, ethnicity/race, and the year they started classes at the institution. The Institutional Integration Scales consisted of 31 Likert scale questions with answers that included 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, 1-Strongly Disagree. The original scales had 34 questions, which Pascarella and Terenzini decreased to 30 because four items had low validity scores (Pascarella & Terenzini, 1980). The researcher added one of the four items to the survey to make the total 31. Each question was categorized under five factors: peer-group interactions, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and institutional goals and commitments (Pascarella & Terenzini, 1980). Table 6 shows the five factors and which IIS question connects to each factor.

# Table 6

Institutional In	ntegration	Scales	Factors
------------------	------------	--------	---------

Factor	Institutional Integration Scales Questions
Peer-Group Interactions	1. I have developed close personal relationships with other students.
reer-oroup interactions	<ol> <li>6. The student friendships I have developed have been personally satisfying.</li> <li>11. My interpersonal relationships with other students have had a positive</li> </ol>
	influence on my personal growth, attitudes, and values.
	16. My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas.
	<ul><li>21. It has been easy for me to meet and make friends with other students.</li><li>26. Many of the students I know would be willing to listen to me and help me if I had a personal problem.</li></ul>
	29. Most students at this university have values and attitudes similar to my own.
	30. I am satisfied with the opportunities to participate in organized extracurricular activities at this community college.
Interactions with Faculty	2. My non-classroom interactions with faculty have had a positive influence on my personal growth, values, and attitudes.
	7. My non-classroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas.
	12. My non-classroom interactions with faculty have had a positive influence on my career goals and aspirations.
	17. I have developed a close, personal relationship with at least one faculty member.
	22. I am satisfied with the opportunities to meet and interact informally with faculty members.
Faculty Concern for Student Development and	3. Many of the faculty members I have had contact with are generally interested in students.
Teaching	8. Many of the faculty members I have had contact with are generally outstanding or superior teachers.
	13. Many of the faculty members are willing to spend time outside of class to discuss issues of interest and importance to students.
	18. Most of the faculty members are interested in helping students grow in more than just academic areas.
	23. Most faculty members are genuinely interested in teaching.
Academic and Intellectual Development	4. I am satisfied with the extent of my intellectual development since enrolling in this community college.
	9. My academic experience has had a positive influence on my intellectual growth.
	14. I am satisfied with my academic experience.
	<ul><li>19. Many of my courses have been intellectually stimulating</li><li>24. My interest in ideas and intellectual matters has increased since</li></ul>
	coming to this community college.
	27. I am more likely to attend a cultural event (i.e., concert, lecture, art
	show) now than I was before coming to this community college.
	31. I have performed academically as well as I anticipated I would.

#### Table 6 continued

Institutional Goals and	5. I am confident that I made the right decision in choosing to attend this
Commitments	community college.
	10. It is likely that I will register for classes at this college next fall.
	15. It is important that I graduate from college.
	20. I have an idea of what I want to major in.
	25. Getting good grades is important to me.
	28. It is important for me to graduate from this community college.

These five factors follow Tinto's components of academic and social integration. Academic integration can be measured by the student's academic performance and level of intellectual development, while social integration can be determined by the quality of peergroup interactions and student-faculty interactions (Tinto, 1975). The 12 short-answer questions were qualitative in nature, and were developed by the researcher to gather more specific information on the students and their experiences in college. The final question on the survey asked if the student would be willing to participate in an interview at a later date. If the participant was willing, they were asked to provide their email address.

To collect the data from the online survey, the researcher communicated with the Promise scholarship program director at each institution to determine the most effective way to administer the survey. Each institution sent an email on behalf of the researcher to the qualifying participants. First, a recruitment email was sent to potential participants (Appendix B). The recruitment email explained the purpose of this research and included a link to the survey (Appendix C). Participants gave informed consent electronically by clicking on the survey link. Two research locations sent out the recruitment email during the last week of September. The third research location sent out the recruitment email during the second week of October. The survey was open for a total of five weeks and a reminder email was sent to the potential participants approximately two weeks after the first email was sent. (Appendix D). The surveys were able to be completed by the students on their own time, at their own pace, and on their own device.

**Interviews.** The qualitative data was gathered from telephone interviews as well as participants' written responses. From the students that expressed interest in the interviews, a sample was chosen to participate. Telephone interviews allowed the research to gather qualitative data from participants that were geographically located at a distance from the researcher (Creswell, 2015). The one-on-one interviews allowed the researcher to ask questions and the interviewe to provide answers that went beyond the initial questions (Creswell, 2015). The interviews were semi-structured which allowed for additional qualitative data to be collected. The qualitative semi-structured interviews helped further explain and understand the data gathered from the online surveys (Creswell, 2015; Marshall & Rossman, 2016).

The interviews were conducted in December 2019. The interview discussions took place at convenient times for the researcher and the participants. The discussions lasted for approximately 20 minutes. An interview protocol (Appendix H) was developed to ensure consistency between the individual interviews (Creswell, 2015; Marshall & Rossman, 2016). The protocol included both structured and unstructured questions to keep the discussion applicable to the topic, but also casual and free-flowing, as well as potential probes to assist in facilitating the discussion. The researcher was the facilitator of the interview discussions and used a recording device to record all interview sessions. Prior to the discussion, the participants gave consent to participate in the interviews, to be audio recorded, and to be quoted directly if deemed appropriate by the researcher (Appendix F). At the end of the interview session, the researcher took time to gather personal reflections and observations about the individual interview session. Upon completion of each interview session, the researcher saved all recordings and documents to a password protected drive.

# **Analytical Methods**

The researcher followed the analytical steps outlined by Creswell (2015), to analyze the quantitative data. First, the researcher organized and prepared the data for analysis by assigning scores to the data, selecting a statistical program, inputting the data, and cleaning up the database. Next, the data was analyzed through both a descriptive analysis and a statistical analysis. Finally, the results were reported using descriptions and tables (Creswell, 2015).

Online surveys were created and completed through Qualtrics<sup>TM</sup>, an online survey tool. The data from Qualtrics<sup>TM</sup> was transferred to the SPSS statistical software for analysis. The results were presented using descriptions and tables. Each individual question was coded and categorized. T-tests and analysis of variance (ANOVA) tests were run to determine if there was any statistical significance between the relationship of the demographic characteristics and the IIS factors. If a statistical significance was determined, a correlation was run to further explore the relationship.

The qualitative data from the open-ended questions were coded by the researcher and themes were identified. Three questions were coded and entered into SPSS statistical software for analysis. Question five was dichotomously coded by the student's indication that they had participated in academic services or not, question six was dichotomously coded if they had attended college sponsored social activities or not, and question eight was coded twice, once if students indicated they spent time working outside of class, and then if they indicated they spent time studying outside of class. T-tests, and applicable correlations, were run with each of these
new variables to explore their relationship with the IIS factors. Furthermore, all of the qualitative themes were used as the basis of the questions in the interviews.

To gather the additional qualitative data that supported the explanatory sequential mixed methods research design, interviews were conducted with students at one of the community colleges after the data from the online survey was analyzed. The process to conduct the interviews followed Marshall and Rossman's (2016) phases of qualitative analytic procedures. See Figure 7.

# Figure 7

# Typical Analytic Procedures for Qualitative Research



Adapted from Marshall, C. & Rossman, G. (2016). *Designing qualitative research*. (6<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publications. p. 217.

After each interview sessions, observations, notes, and other thoughts were recorded by the researcher. The interview recordings were transcribed. After the interview information was transcribed, the transcripts were reviewed and organized by the researcher. Through multiple readings and listening of the texts, the researcher became familiar with the data which led to the development of codes and themes (Creswell, 2015; Marshall & Rossman, 2016). Using the printed transcripts, with additional assistance from the audio recordings, the researcher identified themes and codes from the research, as well as common vocabulary and verbiage.

# **Reliability and Validity**

For this mixed methods research study, multiple measures were taken to ensure the reliability and validity of the data. Reliability means the data from an instrument would be similar when repeated in similar circumstances with minimal error, and validity refers to the idea that the instrument interpretation matches the desired purpose (Creswell, 2015). Triangulation, ensuring validity of survey instrument, and using an interview protocol were techniques used by the researcher to reinforce the credibility of the data (Creswell, 2015; Marshall & Rossman, 2016).

Triangulation is the usage of multiple methods of research, data sources, or theories to corroborate the researcher's findings (Creswell, 2015; Marshall & Rossman, 2016; Maxwell, 2013). By using triangulation, the researcher not only shows credibility, but the data can be considered more robust, accurate, and objective with less bias (Marshall & Rossman, 2016). This explanatory sequential mixed methods research study used an online survey, consisting of quantitative Likert scale questions and qualitative open-ended questions, and qualitative interviews to explore the relationship between Promise scholarship program requirements, student retention rates, and academic and social integration.

Reliability and validity are concerns when using a survey. Developed in 1980 by Pascarella and Terenzini, the Institutional Integration Scales (IIS) measure a student's academic and social integration and their institutional goals and commitments. One way to determine whether an instrument has consistent reliability is to conduct a reliability analysis and calculate Cronbach's alpha (Field, 2013; Laerd Statistics, 2015). The reliability analysis run initially by Pascarella and Terenzini reported Cronbach's alphas ranging from .71 to .84 for each of the five factors (1980). These values are larger than the acceptable Cronbach's alpha limit of .7 (DeVellis, 2003; Field, 2013; Kline, 2005). After conducting the pilot survey, the researcher conducted a reliability analysis. The Cronbach's alpha for the entire IIS from the pilot data was .93. After analyzing the alpha for the individual factors, the researcher chose to remove question 10, because it was not relevant to second year students at a community college. After removing question 10, the overall Cronbach's alpha was .94, and the individual factors ranged from .51 to .85. Finally, a reliability analysis was run after the final survey was conducted. The overall Cronbach's alpha for the final data was .94, with the individual factors ranging from .74 to .87. Again, each of these alphas are above the acceptable value of .7 (DeVellis, 2003; Field, 2013; Kline, 2005).

By developing an interview protocol, the researcher ensures validity and reliability of the instrument (Creswell, 2015; Marshall & Rossman, 2016). A protocol is a form that describes the process of the interview or focus group, the questions to ask, and has an area for notes (Creswell, 2015). The researcher recruited an expert panel of two colleagues to review the interview protocol. Additionally, pilot interviews were conducted by the researcher. The pilot interviews were completed to test the questions for clarity and understanding, to ensure validity of the questions, and to test the recording equipment (Creswell, 2015; Marshall & Rossman, 2016). Based on the information gathered by the pilot study, the interview protocol was edited (Appendix H).

# Limitations

Limitations are potential concerns regarding the data collection that cannot be controlled by the researcher (Creswell, 2015). The acknowledgement of limitations indicates the "potential weaknesses or problems with the study identified by the researcher" (Creswell, 2015, p. 197). The limitations of this study include the response rate of the participants, student survey fatigue, and the idea that the results may not be generalizable. The length of time needed to conduct the surveys and the interviews themselves are also limitations. Additionally, the varying techniques for reporting retention statistics between the institutions can be considered a limitation.

The online survey was sent to all qualifying Promise scholarship recipients at the three community colleges. The students were provided with an informed consent statement and gave informed consent by clicking into the survey. The survey was not mandatory, therefore the students that did complete the survey did so voluntarily. The researcher worked with the Promise scholarship program director to determine the most effective way to gather participants for the survey to try and maximize the number of responses. However, by not receiving responses from every qualifying participant, the data may not be a truly accurate representation of the total population.

Students tend to be given many types of surveys. In order to attempt to reduce survey fatigue, full explanation of the purpose of the survey was provided to the participants. Also, all questions on the survey were created to be beneficial and maximize the information gathered. The expected time to complete the survey was made available to the participants. The survey was also created to be easy to complete. Because the survey was created using Qualtrics<sup>TM</sup>, an online survey tool, the participants could access the survey from multiple platforms, including a laptop or phone. Additionally, participants were able to take the survey at their own convenience and at their own pace.

Another limitation exists with the generalizability of the findings of this study. The research locations were located in similar geographic and political environments. Additionally, the participants were primarily Caucasian and Asian/Pacific, and not very ethnical diversity. The lack of diversity, both location and ethnically, creates a limitation when generalizing the findings to a broader audience.

With the interviews, the qualitative limitations also include generalizability and that the data could be interpreted in multiple ways. Qualitative studies are not generalizable, but their results may be transferable (Marshall & Rossman, 2016). The use of triangulation can assist in minimizing the limitation of multiple interpretations. For the interviews, the researcher used convenience sampling to determine the interviewees. While convenience sampling saves time, it can be at the detriment to credibility (Marshall & Rossman, 2016). Due to the convenience sampling, all interview participants came from one institution. This is also a limitation because interview data was not gathered from all three research locations.

Researcher bias is also a limitation. Because the researcher is the tool for qualitative studies, and there is an element of subjectivity in determining the validity of the conclusions, there could be researcher bias (Maxwell, 2013). Personal reflections are expected in qualitative research, and because the researcher was doing the interviews, the researcher can reflect on the larger meaning of the data (Creswell, 2015).

Another limitation deals with the notion that institutions report statistics in varying ways. While all efforts were made by the researcher to gather retention statistics in comparative measures from each of the institutions, the data was provided by an external person, and the data may not be completely comparable. Because of this, some data from CCC did not appear to be reported in the same way as ACC and BCC. Therefore, in answer to some of the research questions, data from CCC was excluded.

# Delimitations

Three institutions in the Upper Midwest region of the United States were chosen for this study. Other institutions in this region have potential participants, but in order to keep the survey size manageable, participants at other institutions were not included. Also, some institutions declined to be part of this study. By controlling the number of research locations, this creates a delimitation. Additionally, the interview participants were only from ACC, because of the limited number of responses to the interview request. Only interviewing participants from one institution is a delimitation because the results may not be indicative of the other two research locations.

Additionally, second year students were selected as participants in the interviews. First year student data could be beneficial. However, this criterion was chosen because the second-year students would have a better understanding of the impact of the various activities on their success based on their experiences in the previous year.

## Conclusion

This chapter outlined the research design and methodology used to conduct this mixed methods study. An explanatory sequential mixed methods research design was chosen to use the qualitative data to help further explain the quantitative data. Participants included Promise program scholarship recipients from three individual community colleges in the Upper Midwest region of the United States.

The quantitative data were gathered from the National Center for Education Statistics, the community college's institutional research departments, and online surveys. The researcher requested retention data from each institution regarding their student population and their Promise scholarship recipients. Promise scholarship recipients were sent an email survey request with the assistance of the institution. The online survey consisted of 10 demographic questions, 31 Likert scale questions from the Institutional Integration Scales (Pascarella and Terenzini, 1980), and 12 short answer questions (Appendix C). Reliability and validity were determined by a reliability analysis and analyzation of Cronbach's alpha. Data were analyzed exploring frequencies, using t-tests, ANOVAs, and correlation tests with SPSS statistical software.

The qualitative data were gathered from open-ended questions on the surveys and interview responses. Respondents to the online survey indicated their willingness to participate in an interview. Because of the low response rate from potential interview participants, convenience sampling was used, and only students from ACC were interviewed. The interviews were recorded and transcribed by the researcher. The researcher also completed observations after the interview discussions. Qualitative data were analyzed and coded to identify recurring themes and verbiage. An interview protocol was created and reviewed by three professionals to ensure validity of the interview questions.

#### **Chapter IV**

#### Results

# Introduction

Community colleges are designed to help students learn the skills needed to find a job as well as fill the employment needs of the local community (Crookston & Hooks, 2012; D'Amico et al., 2015; Dunn & Kalleberg, 2017; Mission & Goals, n.d.). Over one-third of the job openings in 2020 will require the employee to have at least an associate degree (Carnevale et al., 2013), and by 2030 around one-third of the newly created jobs will be unfilled due to a lack of skilled workers (Stockard, 2019). Community colleges have open admission policies, affordable tuition rates, and convenient locations, which makes higher education more accessible to the general population (Everett, 2015; The White House, Office of the Press Secretary, 2015). Even with lower tuition rates, the cost of college is still a major concern for community colleges participate in Promise scholarship programs to financially assist students and increase skilled workers (Palmadessa, 2017; Pierce, 2015a; The White House, Office of the Press Secretary, 2015).

The literature review showed that there are many benefits to postsecondary education, to both the community and the student. Nearly 41% of all college students are enrolled in community colleges, partly because community colleges are more affordable, have open admission policies, and are conveniently located (American Association of Community Colleges, 2019; Everett, 2015; Heller, 2011; Huelsmann, 2015; The White House, Office of the Press Secretary, 2015). Students that complete an associate degree, on average, earn more than a student that does not complete a degree (American Association of Community Colleges, 2019; Economic Modeling Specialists Intl., 2014; Stevens et al., 2015; U.S. Department of Labor, Bureau of Labor Statistics, 2019).

As of 2018, there were over 200 Promise scholarship programs in the United States (*College Promise Campaign*, 2018; Hiestand, 2018). In April 2019, it was reported that over 60% of the states are creating legislation to implement, or currently have implemented statewide Promise scholarship programs (Statewide Promise Status Update, 2019). Promise scholarship programs are designed to assist students with the financial need to attend community college and learn needed skills to find employment (Palmadessa, 2017; Pierce, 2015a; The White House, Office of the Press Secretary, 2015). Promise scholarship programs have had positive impacts on college enrollment, retention, and completion (Bartik et al., 2017; Pierce, 2015a; Pluhta & Penny, 2013; Smith & Bowyer, 2016). This study takes a closer look at the relationship between Promise scholarship programs and student retention.

In order to explore the impacts of the Promise scholarship programs on community college retention, the researcher used Vincent Tinto's (1975) theory of persistence as the theoretical framework for this study. Tinto theorized that a student was more likely to drop out of college if they were not integrated into their academic institution, both academically and socially (1975). Tinto found that students with higher levels of academic and social integration had a higher chance of successful completion (Tinto, 1975). In order to help predict student persistence, Pascaerlla and Terenzini (1980) developed the Institutional Integration Scales (IIS). This survey instrument explores a student's perception of their academic and social integration, as well as their institutional goals and commitments (Pascarella & Terenzini, 1980).

This mixed method study used institutional data on student retention, the IIS survey, open-ended survey questions, and interviews to explore the relationship between Promise scholarship programs, retention, and the students' perception of their academic and social integration at their institution. This mixed methods design used qualitative data to better understand the quantitative results (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). By using an explanatory sequential mixed methods design, both quantitative and qualitative data was analyzed. The quantitative data was analyzed first, and the qualitative data was used to further explain the quantitative results (Creswell, 2015; Ivankova et al., 2006). Quantitative data was gathered through a request to each individual institution and the IIS survey. The qualitative data was gathered through open-ended questions on the survey and through participant interviews. Following the structure for explanatory sequential mixed methods research, the quantitative data was collected and analyzed before the interview portion of the qualitative data was collected (Creswell, 2015; Ivankova et al., 2006). The qualitative data provided a more thorough explanation of the initial analysis of the quantitative data (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). The research questions that guided this dissertation were:

1. How does participation in a Promise scholarship program affect retention of community college students in the Upper Midwest?

2. How does participation in a Promise scholarship program affect a student's perception of their academic and social integration?

3. Is there a relationship between the requirement of academic and social integration activities within the various Promise scholarship programs and student retention rates?4. Is there a relationship between the requirement of academic and social integration activities within the various Promise scholarship programs and a student's perception of their academic and social integration?

The results of each individual research question will be addressed in the order presented above. Both the quantitative and qualitative data, where applicable, will be presented.

# **Data Collection**

Institutional data. The researcher requested specific enrollment and retention data from each of the community colleges, pertaining to the institution as a whole, and isolated to the Promise scholarship population. Each institution was given a spreadsheet to complete (Appendix O), and the researcher communicated with each institution to clarify the data requested and to answer any questions (Appendix N). The researcher made efforts to ensure the data gathered from each institution was comparable in nature. Additionally, the researcher examined institutional data available on the National Center for Education Statistics website at www.nces.ed.gov.

Survey instrument. An online survey (Appendix C) was developed to gather additional quantitative data and initial qualitative data. The survey consisted of 10 demographic questions, 31 Likert scale questions obtained from the Institutional Integration Scales (IIS) designed by Pascarella and Terenzini (1980), and 12 short answer questions designed by the researcher. The IIS explored the student's perceptions of their academic integration, social integration, and institutional goals and commitments (Pascarella and Terenzini, 1980). The survey was created using Qualtrics<sup>TM</sup> software and a survey link was created. The researcher worked with staff and administration at each of the three institutions to administer the survey to research participants. At each institution, the administration chose to send the email request to the potential participants on the behalf of the researcher.

**Interview protocol.** Following the process of explanatory sequential mixed methods research, the researcher developed an interview protocol after analyzing data collected from the

online survey (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). The interview protocol was developed to maintain consistency between the interviews and ensure validity and reliability (Creswell, 2015; Marshall & Rossman, 2016). The design of the interview protocol was informed by the coding of the open-ended qualitative questions. The researcher consulted with two experts, one in retention and one in institutional research, to establish the protocol. Additionally, pilot interviews were conducted to test the protocol for clarity, ensure validity of the instrument, and test recording equipment (Creswell, 2015; Marshall & Rossman, 2016). The researcher used the final interview protocol (Appendix H) to conduct seven interviews with Promise scholarship program students. By using the interview protocol, the researcher ensured consistency of the collected data (Creswell, 2015; Marshall & Rossman, 2016)

## **Participants**

The participants for this study were Promise scholarship recipients from three community colleges in the Upper Midwest. Each community college was given a pseudonym to protect the institution's identity: A Community College (ACC), B Community College (BCC), and C Community College (CCC). The researcher worked with the Promise scholarship program director and administration at the three community colleges to recruit the participants.

**Survey participants.** The online survey was distributed to 707 students. The Promise scholarship program director administered the survey request to the Promise scholarship students at their institution (Appendix B). ACC had 341 Promise scholarship recipients; BCC had 323; and CCC had 43. Initially, 113 students began the survey. The researcher removed 26 cases from the original 113 because those participants only completed the demographic questions and did not continue. The 87 responses accounted for a 12.3% response rate. This

response rate is within the anticipated range for external surveys (Biersdorff, 2009; Ramshaw, 2019). Additionally, research has shown that surveys with low response rates can have as accurate data as surveys with high response rates (Holbrook, Krosnick, & Pfent, 2008; Keeter, Kennedy, Dimock, Best, & Craighill, 2006). Refer to Table 4 in Chapter 3 for a detailed breakdown of the survey respondents.

Interview participants. The researcher included in the online survey a question asking whether participants would be willing to participate in a follow up interview. A total of 19 students responded positively to the question. The researcher contacted each of the 19 students, and of those, eight responded. From those eight students, seven participated in individual interviews. Due to the convenience sampling, each interviewee attended ACC. Convenience sampling can be a limitation, and hinder the credibility of the study (Marshall & Rossman, 2016). The findings may not be generalizable to other institutions. Refer to Table 5 in Chapter 3 for the demographics of the interview participants.

#### **Reliability and Validity**

The researcher used multiple measures to ensure reliability and validity of the data. Reliability refers to the idea that the research instrument would produce similar results when repeated. Validity occurs when the research instrument measurements generate the desired outcomes of the study (Creswell, 2015). By using mixed research methods, triangulation is used to reinforce the credibility of the data (Creswell, 2015; Marshall & Rossman, 2016).

## Survey reliability and validity.

The Institutional Integration Scales (IIS) was developed by Pascarella and Terenzini (1980) to measure the academic and social integration of students into their institution, as well as their institutional goals and commitments. The IIS has 31 Likert scale questions with 5

answers ranging from strongly disagree to strongly agree. A common way to measure internal consistency is Cronbach's alpha (Field, 2013; Laerd Statistics, 2015). Cronbach's alpha is used when a survey instrument has multiple Likert questions that form a scale or factor, and the researcher wishes to test the reliability of the factor (Field, 2013; Laerd Statistics, 2015). In their study, Pascarella and Terenzini conducted a reliability analysis on the IIS and found Cronbach's coefficient alphas ranging from .71 to .84 (1980). These values are all above the acceptable limit of .7 (DeVellis, 2003; Field, 2013; Kline, 2005). Table 7 summarizes the Cronbach's alpha for each sub scale.

Table 7

		Cronbach's	Number
Scales	Subscales	Alpha	of Items
Social Integration	Peer Group Interactions	.84	7
	Interactions with Faculty	.83	5
Academic Integration	Faculty Concern for Student	.82	5
	Development and Teaching		
	Academic and Intellectual Development	.74	7
Institutional Goals			
and Commitments		.71	6

Source: Pascarella, E. T., and Terenzini, P. T. (1980) Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *Journal of Higher Education*, 51(1), 60-75.

Additionally, other researchers have justified the use of the IIS to measure student integration, including Bers and Smith (1991), French and Oaks (2004), and Mannan (2001).

The researcher conducted a pilot of the online survey to validate the IIS, as well as the open-ended qualitative questions on the survey. The initial Cronbach's alpha for the entire IIS

from the pilot data was .93. However, after analyzing the reliability of each individual subscale, the researcher decided to eliminate question 10. Question 10 stated "It is likely that I will register for classes at this college next fall." Because the research locations are two-year community colleges, this question is not relevant to second year students that are planning on graduating. After removing question 10, the Cronbach's alpha for the entire IIS from the pilot data was .94. Table 8 summarizes the reliability of each individual subscale from the pilot data after removing question 10. All alpha values are above the acceptable limit of .7 (DeVellis, 2003; Kline, 2005), with the exception of institutional goals and commitments. The alpha value for the factor of institutional goals and commitments was .51. While this value is not above .7, it is above Field's acceptable level of .5 (2013). Because this value was for the pilot survey, the researcher chose to continue and analyze the factor of institutional goals and commitments with the final survey data.

# Table 8

Institutional I	ntegration	Scales	<i>Reliability</i>	Analysis	(Pilot Su	rvey)

		Cronbach's	Number
Scales	Subscales	Alpha	of Items
All Scales		.94	30
Social Integration	Peer Group Interactions	.85	8
	Interactions with Faculty	.83	5
Academic Integration	Faculty Concern for Student Development and Teaching	.84	5
	Academic and Intellectual Development	.86	7
Institutional Goals			
and Commitments		.51	5

Once the final survey data was collected, the researcher used the SPSS statistical software to run a reliability analysis using the final survey data (Field, 2013; Laerd Statistics, 2015). Again, the researcher removed question 10 to increase the reliability of the overall scales and the institutional goals and commitments scale. The overall Cronbach's alpha is .94, and the range for the five scales is from .74 to .88. The results are shown in Table 9. All values are above the acceptable value of .7 (DeVellis, 2003; Field, 2013; Kline, 2005).

# Table 9

		Cronbach's	Number
Scales	Subscales	Alpha	of Items
All Scales		.94	30
Social Integration	Peer Group Interactions	.87	8
	Interactions with Faculty	.85	5
Academic Integration	Faculty Concern for Student		
	Development and Teaching	.88	5
	Academic and Intellectual		
	Development	.86	7
Institutional Goals			
and Commitments		.74	5

## Institutional Integration Scales Reliability Analysis (Final Survey)

# Interview reliability and validity.

The researcher developed an interview protocol to maintain consistency between interview discussions and ensure validity and reliability (Creswell, 2015; Marshall & Rossman, 2016). The protocol was developed after the online survey was completed. The researcher collaborated with two professional colleagues to review and edit the interview protocol. One colleague is a professional working in the field of community college retention and recruitment. The other colleague works in the college's Institutional Research department and works on data collection, surveys, and interviews. After multiple discussions with these colleagues, the researcher removed unnecessary questions, clarified wording, and added additional prompts. The final protocol (Appendix H) was piloted before being included in this study's interview discussions to test the questions for understanding and to test the recording equipment (Creswell, 2015; Marshall & Rossman, 2016).

### **Results for Research Question 1: Promise Scholarship Program Affect on Retention**

The first question in this research study was "How does participation in a Promise scholarship program affect retention of community college students in the Upper Midwest?" To assess this question, the researcher examined data from the National Center for Education Statistics website and specific retention data that was supplied from each of three study locations. The researcher requested data from each institution that reported the fall to fall retention rates for the Promise scholarship program students and from the other institutional students excluding the Promise scholarship students. The information provided from CCC did not appear to be comparable to the data provided from ACC and BCC. The data from ACC and BCC was divided into Promise scholarship students, and non-Promise scholarship, full-time, degree seeking students. The data from CCC included Promise scholarship student data and full institutional data, but not non-Promise, full-time, degree seeking students. Therefore, data from CCC was excluded. From the data provided by ACC and BCC, the researcher added the total number of Promise scholarship students and non-Promise scholarship students together and calculated the retention rates. Table 10 provides the information for the academic years of 2017-2018 and 2018-2019.

## Table 10

# **Combined Retention Statistics**

		2017-2018		2018-2019			
		Retention			Retention		
	Fall	(fall to	Retention	Fall	(fall to	Retention	
	enrollment	fall)	Percentage	enrollment	fall)	Percentage	
Promise Students	235	116	49.4%	291	191	65.6%	
Institution excluding							
Promise Students	5408	2574	47.6%	5209	2473	47.5%	
Total	5643	2690	48.7%	5500	2664	48.4%	

Note: Retention data included students continuing from fall to fall semester, may not be accounting for 1-year diploma graduates. Comparative data was not supplied by CCC.

For the 2017-2018 academic year, the retention rate for Promise scholarship students was slightly higher but comparable to the rate for non-Promise scholarship students. During the second year of the Promise scholarship program, the retention rate for Promise scholarship students increased from 49.4% in 2017 to 65.6% in 2018. The retention rate for the non-Promise students and the institution total stayed relatively the same, around 47.5% and 48.5% respectively.

Results from the open-ended questions on the survey showed that around one-third (31%) of the survey respondents indicated that a primary reason for choosing to attend their community college was for monetary reasons, and nearly 10% specifically mentioned financial aid and/or the Promise scholarship itself. One student stated, "I chose [ACC] because of their track record, it being my mother's alma mater, and the great opportunity the Promise scholarship afforded me." From the interview participants, over 70% (five of the seven) mentioned the cost of college as a reason for choosing their institution. Moreover, throughout all seven interviews, the notion of money and the cost of college was mentioned 19 times. One

student said "It [the Promise scholarship] is helping you.... Everything is being paid for if your financial aid isn't covering it." Another student reiterated the same idea: "Being in the Promise program has helped me save money for university, future rent, helping my family out, and extra cash for when I start a new chapter in my life."

The final question on the online survey asked if the participant had additional information that they wished to share. One student specifically mentioned the Promise scholarship, and the opportunity that the program gives students:

The promise scholarship has helped me in many ways that I never thought I could do. My family was having difficult times paying bills each month and the extra money coming in was a life saver. I can never thank them enough for this opportunity.

Additionally, in the interviews, a similar question was asked. Six participants spoke about how the Promise scholarship program is a gift, an opportunity to not be wasted, and is life changing. Student 7 stated, "I literally wouldn't be able to do any of this without the Promise scholarship. My family and I are so thankful that I got this scholarship. It has truly changed my life." Both Student 3 and Student 6 said that being in the Promise scholarship program has "taken a weight off my shoulders," by not having to worry about the money needed to pay for their education.

# Results for Research Question 2: Promise Scholarship Program Affect on Student Perception of Academic and Social Integration

The second question in this study explored the student's perception of their institutional integration and asked "How does participation in a Promise scholarship program affect a student's perception of their academic and social integration?" To answer this question, the researcher utilized the online survey and the interview discussions. The online survey consisted

of 30 Likert scale questions provided by the Institutional Integration Scales (IIS) by Pascarella and Terenzini (1980). The 30 questions from the IIS were grouped into five factors: peer-group interactions, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and institutional goals and commitments. See Table 6 in Chapter 3 for the grouping of the IIS questions. Mean scores for each participant were calculated for each subgroup. Additionally, scores from peer-group interactions and interactions with faculty were combined and averaged to create a category for social integration, while the academic integration category combined faculty concern for student development and teaching scores with academic and intellectual development scores. Table 11 shows descriptive statistics from the entire survey population for each of the factors.

Table 11

		Standard		
Factor/Category	Mean	Deviation	Maximum	Minimum
Academic Integration	4.12	.54	5.00	2.41
Social Integration	3.71	.63	5.00	2.29
6				
Peer Group Interactions	3.66	.71	5.00	2.13
	2100	., 1	2100	2.10
Interactions with Faculty	3.75	.69	5.00	2.20
Faculty Concern for Student				
Development and Teaching	4.18	.59	5.00	2.40
Academic and Intellectual				
Development	4.01	.57	5.00	2.43
Institutional Goals and	-			-
Commitments	4.51	.51	5.00	2.60

*Online Survey Descriptive Statistics by Factor* (n = 87)

Average frequencies were also calculated. For the purpose of this study, if a category or factor had an average score above 3, the researcher reported it as a positive frequency indicating

the participant had a positive perception of the category or factor. Table 12 shows the

frequency results for the two categories and five factors, including the reported frequency.

# Table 12

Category/Factor	Reported Frequency (M > 3)	$5 \ge M \ge 4$	4 > M > 3	$3 \ge M \ge 2$	$2 > M \ge 1$
Academic Integration	97.7%	58.6%	39.1%	2.3%	0
Social Integration	81.6%	39.1%	42.5%	18.4%	0
Peer Group Interactions	74.7%	44.8%	30.1%	25.3%	0
Interactions with Faculty	77.0%	41.4%	35.6%	23.0%	0
Faculty Concern for Student					
Development and Teaching	94.3%	70.1%	24.2%	5.7%	0
Academic and Intellectual					
Development	95.4%	58.6%	36.8%	4.6%	0
Institutional Goals and					
Commitments	97.7%	89.7%	8.0%	2.3%	0

Category/Factor Frequency Results for Online Survey (n = 87)

Note: Bold indicates reported frequency.

The highest mean scores and largest percentage of reported frequencies were for the factors of faculty concern for student development and teaching, academic and intellectual development, and institutional goals and commitments, with the mean score being above 4.0 and the reported frequency above 94% for each factor. Additionally, the category of academic integration had a mean score of 4.12 and reported frequency of 97.7%. The students reported higher integration in factors associated with academic integration than social integration.

When asked on the survey about their institution, 18% of the respondents indicated they liked their instructors and an additional 18% specifically mentioned the welcoming and helpful atmosphere. In the interviews, 100% of the participants spoke to their relationships with faculty and there were a total of 35 different times when it was mentioned. Student 7 stated:

Words can't begin to describe how amazing my instructors are. They instill a passion for Early Childhood into their students through their own love for this pathway. Their expertise and guidance have brought me to where I am today and I am so thankful for them.

Students 1, 2, and 3 spoke about how their instructors are helpful and caring. Student 3 continued to say "I have an instructor who actively reaches out to students who aren't performing well.... I have never met a teacher as caring as him." Five of the seven participant spoke about how the faculty and staff are all understanding of the students concerns, with Student 2 adding that "I have never met teachers or instructors like that [so understanding]."

To further explore the impact of the Promise scholarship program of select sets of students, the researcher ran t-tests and analysis of variance (ANOVA) tests with each of the demographic questions and the categories and factors. An independent t-test is run to compare the differences between two groups (Field, 2013; Laerd Statistics, 2015). An ANOVA is run to determine if there are significant differences between two or more groups (Field, 2013; Laerd Statistics, 2015). Statistical significance was found between gender and peer group interactions scores (p = .03), matriculation year and interactions with faculty scores (p = .02), and amount of time spent working outside of class and faculty concern for student development and teaching scores (p = .02).

### Gender and peer group interactions.

In order to explore the difference between gender and the participants peer group interactions score, an independent-samples t-test was run. There were no outliers in the data, as assessed by a boxplot. The scores were normally distributed, as observed from Normal Q to Q plots, and there was homogeneity of variances as assessed by Levene's test for equality of variances (p = .41). The peer group interactions score for female participants (n = 66, M = 3.75, SD = .72) was higher than the peer group interactions score for males (n = 21, M = 3.37, SD = .61). This difference was statistically significant, M = .39, t(85) = 2.22, p = .03.

In order to determine the effect size of the difference between the two groups, Cohen's d was calculated (Field, 2013; Laerd Statistics, 2015). If the effect size is larger, there is a greater difference between the two groups. According to Field, a Cohen's d between 0 and .3 is a small effect, Cohen's d between .3 and .5 is a medium effect, and Cohen's d above .5 is a large effect (2013). Cohen's d was calculated to understand the difference between peer group interactions scores related to gender. A large effect was found, Cohen's d = .56. Table 13 illustrates the results from the independent samples t-test.

Table 13

Gender and Peer	Group	Interactions	Results
-----------------	-------	--------------	---------

Group	N	Mean	SD	t	р	d
Female	66	3.75	.72	2.22	.03	.56
Male	21	3.37	.61			

Note: N = sample size, SD = standard deviation, t = t-value, p = significance, d = effect size.

Additionally, a point-biserial correlation was run between gender and peer group interactions score. A point-biserial correlation explores the strength of the relationship between a dichotomous variable (gender) and a continuous variable (peer group interactions score) (Field, 2013; Laerd Statistics, 2015). There was a significant correlation between gender and peer group interactions score  $r_{pb}(87) = .23$ , p = .03. This indicates a small correlation, with gender accounting for 5.5% of the variability of the peer group interactions scores.

#### Matriculation year and interactions with faculty.

The researcher compared the student's matriculation year with their score for interactions with faculty. A one-way ANOVA was conducted to determine if the interactions with faculty score was different for groups that started in different years. Two cases were removed before running the analysis. One case did not answer the question, and one case indicated their matriculation year to be 2016. There was one outlier in the year 2017. The researcher ran the ANOVA without the outlier, and found similar results. Therefore, the outlier was included in the final analysis. The data appeared to be normally distributed as observed on the Normal Q-Q plot, and there was homogeneity of variances, as assessed by Levene's test for equality of variances (p = .73). The interactions with faculty score decreased from 2017 (n = 7, M = 4.37, SD = .77) to 2018 (n = 33, M = 3.83, SD = .67) to 2019 (n = 45, M = 3.61, SD = .64). The interactions with faculty score was statistically significantly different for the different matriculation years F(2, 82) = 4.18, p = .02. Tukey post hoc analysis revealed that the mean decrease from 2017 to 2019 of .75 was statistically significant (p = .02). In order to determine the effect size when running an ANOVA, partial eta-squared  $(n_p^2)$  is calculated (Laerd Statistics, 2015). The  $n_p^2$  of .09 indicates a small effect size. Table 14 shows the results from the ANOVA. Table 14

Group	N	Mean	SD	F	р	$n_{\rm p}^{2}$
2017	7	4.37	.77	4.18	.02	.09
2018	33	3.83	.67			
2019	45	3.61	.64			

Matriculation Year and Interactions with Faculty Results

Note: N = sample size, SD = standard deviation, F = F-value, p = significance,  $n_p^2 =$  effect size.

#### Employment status and faculty concern for student development and teaching.

Additionally, a one-way ANOVA was conducted to determine if the score for faculty concern for student development and teaching was different for groups that had different employment statuses. There were two outliers for the group that worked part-time. The researcher ran the ANOVA without the outliers, and found similar results. Therefore, the outliers were included in the final analysis. The data appeared to be normally distributed as observed on the Normal Q-Q plot, and there was homogeneity of variances, as assessed by Levene's test for equality of variances (p = .82). The faculty concern for student development and teaching score was highest for the students employed full-time (n = 13, M = 4.57, SD = .47), followed by students employed at the college (n = 2, M = 4.5, SD = .71) and students not working (n = 12, M = 4.28, SD = .43), with students employed part time having the lowest scores (n = 59, M = 4.06, SD = .60). The faculty concern for student development and teaching score was statistically different for the groups F(3, 82) = 3.36, p = .02. Tukey post hoc analysis revealed that the mean decrease from students employed full-time to student employed part-time of .51 was statistically significant (p = .02). Effect size calculations reveal a small effect,  $n_p^2 =$ .11. Table 15 illustrates the results from the ANOVA.

#### Table 15

Group	N	Mean	SD	F	р	$n_{\rm p}^{2}$
Employed Full-Time	13	4.57	.47	3.36	.02	.11
Employed Part-Time	59	4.06	.60			
Employed at College	2	4.50	.71			
Not Employed	12	4.28	.43		2	

Employment Status and Faculty Concern for Student Development and Teaching Results

Note: N = sample size, SD = standard deviation, F = F-value, p = significance,  $n_p^2 =$  effect size.

## Academic services and Institutional Integration Scales.

Question five from the open-ended section of the survey asked "What additional services (tutoring, advising, workshops) have you used?" The students either typed in the different services or said they had not attended any. The researcher initially coded these answers by type of activity and then coded these answers dichotomously, as yes or no. Fifty-six students indicated they use academic services and 22 indicated they do not use academic services. To further explore the survey data, the researcher ran t-tests to determine if there was any statistical significance between using academic services and each of the categories and factors from the Institutional Integration Scales. No significant difference was found, p > .05. Additionally, Cohen's *d* was calculated and a small effect size was found for each category and factor, d < .3. Table 16 displays the results from each t-test run.

#### Table 16

	Mean	SD			
Category/Factor	difference	difference	t	р	d
Academic Integration	.01	.14	.07	.94	.02
Social Integration	.17	.16	1.04	.30	.27
Peer Group Interactions	.15	.18	.85	.40	.22
Interactions with Faculty	.18	.18	1.02	.31	.26
Faculty Concern for Student			10	0.6	<b>. .</b>
Development and Teaching	03	.15	18	.86	05
Academic and Intellectual Development	.05	.17	.28	.78	.07
Institutional Goals and					
Commitments	.02	.13	.13	.90	.03

Academic Services and Institutional Integration Scales Categories and Factors

Note: SD = standard deviation, t = t-value, p = significance, d = effect size.

# Social activities and peer group interactions and social integration.

Question six from the open-ended section of the survey asked "What college sponsored activities (career fairs, movie nights) have you attended?" The students either typed in the different activities, or said they had not attended any. The researcher coded these answers by type of activity and then coded these answers dichotomously, as yes or no. If the student said they had attended activities, they were coded as yes. If the student answered that they did not attend activities, they were coded as no. If the student did not answer, they were not coded. There were 35 students that indicated they attended social activities and 44 students that indicated they did not. To further explore the survey data, the researcher ran t-tests to determine if there was any statistical significance between attending social activities and each of the factors and categories from the Institutional Integration Scales. A significant difference was found for the factor of peer group interactions and the category of social integration.

An independent-samples t-test was run to explore if there were differences in peer group interactions scores between the two sets of students. There were no outliers, as assessed by inspection of a boxplot. Shapiro-Wilk's test indicated that the peer group interactions scores were normally distributed. Levene's test for equality of variances indicated there was heterogeneity of variances (p = .047), so equal variances were not assumed. There was a statistically significant difference in the peer group interactions scores between student's that attended social activities (M = 3.88, SD = .61) and students that did not (M = 3.46, SD = .74), with students that attended activities having higher scores, M = .42, SE = .15, t(76.9) = 2.73, p <.01). Cohen's d reveals a large effect size, d = .63. Table 17 depicts the results from the t-test.

#### Table 17

Social Activities and Peer Group Interactions Results

Group	Ν	Mean	SD	t	р	d	
Attended	35	3.88	.61	2.73	.01	.63	
Not Attended	44	3.46	.74				
Note: $N =$ sample size, SD = standard deviation, $t =$ t-value, $p =$ significance, $d =$ effect size.							

Because of the violation of homogeneity, a Kendall's tau-b correlation was run to determine the relationship between students reporting participation in school sponsored social activities and their peer group interactions score (Field, 2013; Laerd Statistics, 2015). There was a positive association between participation in social activities and peer group interactions score,  $\tau_b = .22$ , p = .02.

Additionally, an independent-samples t-test was run to explore if there were differences in social integration scores between the students that attended social activities and students that did not. Preliminary analyses showed there were no outliers, the social integration score was normally distributed, and there was homogeneity of variances. There was a statistically significant difference in the social integration scores between students that attended social activities (M = 3.91, SD = .57) and students that did not (M = 3.54, SD = .65), with students that attended activities having higher scores, M = .36, SE = .14, t(77) = 2.65, p = .01. Cohen's dreveals a large effect size, d = .61. Table 18 gives the results for the t-test.

## Table 18

Social Activities and Social Integration Results

Group	Ν	Mean	SD	t	р	d	
Attended	35	3.91	.57	2.65	.01	.61	
Not Attended	44	3.54	.65				
Note: $N =$ sample size, SD = standard deviation, $t =$ t-value, $p =$ significance, $d =$ effect size.							

Additionally, a point-biserial correlation was run between students reporting participation in school sponsored social activities and their social integration score. There was a statistically significant correlation between reported participation and social integration score,  $r_{pb}(79) = .29$ , p = .01, with students that participated in activities (M = 3.88, SD = .61) having higher social integration scores than students that did not participate in activities (M = 3.46, SD = .74).

Of the students interviewed, two of the seven indicated they attend social events on campus. Student 2 attends events three or four times a semester and goes with family and the friends that she has made at ACC. Student 5 attends the events when they are of interest to him, but goes by himself. Later in the interview, he mentioned the lack of social life at ACC, that students "come here [ACC] and go back home. They all have families. We all have lives."

# Studying outside of class and Institutional Integration Scales.

Question eight from the open-ended section of the survey asked "How do you spend your time outside of class?" The students typed in the different answers. Many indicated that they work and/or study outside of class. The researcher initially coded these answers dichotomously for studying outside of class. If the student specifically indicated that they spend time outside of class studying, they were coded as yes. If they did not state that they spent time studying outside of class, they were coded as no. Fifty-three students indicated they spend time studying outside of class. Thirty students did not indicate they spend time studying outside of class. To further explore the survey data, the researcher ran t-tests to determine if there was any statistical significance between studying outside of class and each of the categories and factors from the Institutional Integration Scales. No significant difference was found, p > .05. Additionally, Cohen's *d* was calculated and a small effect size was found for each category and factor, d < .3. Table 19 shows the results of the t-tests.

# Table 19

Mean	SD			
difference	difference	t	р	d
.07	.12	.54	.59	.12
14	1.5	00	20	01
.14	.15	.89	.38	.21
.27	.16	1.69	.10	.06
.00	.06	.02	.98	.00
.13	.13	.99	.33	.23
.00	.13	.01	.99	.00
07	.12	60	.55	14
	difference .07 .14 .27 .00 .13 .00	difference difference   .07 .12   .14 .15   .27 .16   .00 .06   .13 .13   .00 .13	difference   t     .07   .12   .54     .14   .15   .89     .27   .16   1.69     .00   .06   .02     .13   .13   .99     .00   .13   .01	difference   t   p     .07   .12   .54   .59     .14   .15   .89   .38     .27   .16   1.69   .10     .00   .06   .02   .98     .13   .13   .99   .33     .00   .13   .01   .99

Studying and Institutional Integration Scales Categories and Factors

Note: SD = standard deviation, t = t-value, p = significance, d = effect size.

# Working outside of class and institutional goals and commitments.

Additionally, the researcher coded question eight dichotomously for working outside of class. If the student specifically indicated that they spend time outside of class working, they were coded as yes. If they did not state that they spent time working outside of class, they were coded as no. Fifty-five students indicated they spend time working outside of class, and 28 students did not indicate they spend time working outside of class. To further explore the survey data, the researcher ran t-tests to determine if there was any statistical significance between

working outside of class and each of the categories and factors from the Institutional Integration Scales. Only one factor, institutional goals and commitments was found to have a significant difference.

An independent-samples t-test was run to explore the differences in the institutional goals and commitments score between students that indicated they spend time outside of class working. By looking at the boxplot, the researcher found five outliers. The researcher ran the ttest without the outliers, and found similar results. Therefore, the outliers were included in the final analysis. The scores were normally distributed, as observed by Normal Q-Q plots, and there was homogeneity of variances as assessed by Levene's test for equality of variance (p =.10). The institutional goals and commitments score for working students (M (55)= 4.58, SD =.45) was higher than the institutional goals and commitments score for non-working students (M(28)= 4.34, SD = .61). This difference was statically significant, M = .24, t(81) = 2.02, p = .04. The effect size calculations reveal a medium to large effect, d = .47. Table 20 shows the results from the t-test.

Table 20

Working and Institutional Goals and Commitments Results

Group	N	Mean	SD	t	р	d
Working	55	4.56	.10	2.02	.04	.47
Not Working	28	4.34	.61			
N + N 1 CD	. 1 1	1	. 1	• • • • •	1	• , •

Note: N = sample size, SD = standard deviation, t = t-value, p = significance, d = effect size.

Additionally, a point-biserial correlation was run to explore the correlation between students that indicated they work outside of class and students that did not indicate that they work outside of class and their perception of their institutional goals and commitments. There was a significant correlation, with the students that indicated they work having higher institutional goals and commitments scores that students that didn't indicate they work outside of class,  $r_{pb}(83) = .22$ , p < .05. This indicates a small correlation, with working outside of class accounting for 4.8% of the variability of the institutional goals and commitments scores.

## **Results for Research Question 3: Required Activities and Student Retention Rates**

The third question asked "Is there a relationship between the requirement of academic and social integration activities within the various Promise scholarship programs and student retention rates?" Again, the researcher utilized the supplied retention data from the individual institutions. The information provided from CCC did not appear to be comparable to the data provided from ACC and BCC. While ACC and BCC divided the data into Promise scholarship students, and non-Promise scholarship, full-time, degree seeking students, CCC gave Promise scholarship student data and full institutional data, but not non-Promise, full-time, degree seeking students. Therefore, data from CCC was excluded. Table 21 depicts the retention statistics for the academic year 2017-2018 separated by institution. Additionally, Table 22 shows the retention statistics for the academic year 2018-2019 separated by institution.

# Table 21

		ACC			BCC			
		Retention			Retention			
	Fall	(fall to	Retention	Fall	(fall to	Retention		
	enrollment	fall)	Percentage	enrollment	fall)	Percentage		
<b>Promise Students</b>	146	71	48.6%	89	45	50.6%		
Institution excluding								
Promise Students	2372	1132	47.7%	2991	1442	48.2%		
Total	2518	1230	47.8%	3080	1487	48.3%		

Retention Statistics by Institution 2017-2018

Note: Retention data included students continuing from fall to fall semester, may not be accounting for 1-year diploma graduates. Comparative data from was not supplied by CCC.

## Table 22

		ACC			BCC			
		Retention			Retention			
	Fall	(fall to	Retention	Fall	(fall to	Retention		
	enrollment	fall)	Percentage	enrollment	fall)	Percentage		
Promise Students	151	97	64.2%	143	94	68.7%		
Institution excluding								
Promise Students	2428	1117	46.0%	2780	1356	48.8%		
Total	2580	1214	47.1%	2923	1450	49.6%		

#### Retention Statistics by Institution 2018-2019

Note: Retention data included students continuing from fall to fall semester, may not be accounting for 1-year diploma graduates. Comparative data from was not supplied by CCC.

For the 2017-2018 academic year, the retention rate for the Promise scholarship students at ACC was 48.6%, compared to 47.7% for non-Promise scholarship students and 47.8% for the institution. At BCC, the retention rate for Promise scholarship students was 50.6%, compared to 48.2% for non-Promise scholarship students and 48.3% for the institution. The retention rate of 50.6% at BCC was 2% higher than the rate at ACC.

For the 2018-2019 academic year, the retention rate for the Promise scholarship students at ACC was 64.2%, compared to 46.0% for non-Promise scholarship students and 47.1% for the institution. At BCC, the retention rate for Promise scholarship students was 68.7%, compared to 48.8% for non-Promise scholarship students and 49.6% for the institution. The retention rate of 68.7% at BCC was 4.5% higher than the rate at ACC.

# Results for Research Question 4: Required Activities and Student Perception of Academic and Social Integration

The final question asked "Is there a relationship between the requirements of academic and social integration activities within the various Promise scholarship programs and a student's perception of their academic and social integration?" To answer this question, the researcher utilized the online survey and the interview discussions. Table 23 shows descriptive statistics from the individual institutions for each of the categories and factors from the IIS.

# Table 23

Category/Factor Descriptive Statistics Based on Institution
-------------------------------------------------------------

		CC = 58	$\frac{BCC}{n=20}$		$\begin{array}{c} \text{CCC} \\ n = 9 \end{array}$	
Category/Factor	Mean	SD	Mean	SD	Mean	SD
	Wiedii	50	Wiedin	50	Wiedii	50
Academic Integration	4.15	.57	4.01	.39	4.14	.64
Social Integration	3.72	.68	3.73	.52	3.59	.57
Peer Group Interactions	3.62	.76	3.77	.59	3.67	.68
Interactions with Faculty	3.81	.76	3.69	.50	3.51	.65
Faculty Concern for Student Development	5.01	.70	5.09	.50	5.51	.05
and Teaching	4.24	.61	4.00	.49	4.20	.53
Academic and Intellectual						
Development	4.06	.61	4.02	.37	4.08	.77
Institutional Goals and						
Commitments	4.54	.54	4.37	.39	4.60	.53

Average frequencies of each category and factor based on institution were also calculated. If a category or factor had an average score above 3, the researcher reported it as a positive frequency indicating the participant had a positive perception of the category or factor. Table 24 shows the frequency results for the two categories and five factors, including the reported frequency broken out by institutional location.

## Table 24

	ACC		BCO	C	CCC	
	n = 58		n = 20		<i>n</i> = 9	
	Reported		Reported		Reported	
	Frequency	$5 \ge M \ge$	Frequency	$5 \ge M \ge$	Frequency	$5 \ge M \ge$
Category/Factor	(M > 3)	4	(M > 3)	4	(M > 3)	4
Academic Integration	96.6%	62.1%	100%	30%	100%	55.6%
Social Integration	79.3%	41.4%	85%	40%	89.9%	22.2%
Peer Group						
Interactions	72.4%	43.1%	85%	55%	77.8%	33.3%
Interactions with						
Faculty	77.6%	44.8%	85%	35%	88.9%	33.3%
Faculty Concern for						
Student Development	96.6%	74.1%	100%	65%	100%	55.6%
and Teaching						
Academic and						
Intellectual	96.6%	56.9%	100%	65%	88.9%	55.6%
Development						
Institutional Goals and						
Commitments	98.3%	89.7%	100%	90%	100%	88.9%
Note: Dold in diaster nor			100/0	7070	10070	00.770

## Category/Factor Frequency Results Based on Institution

Note: Bold indicates reported frequency.

Similar to research question 1, the highest mean scores and reported frequencies were for the factors of faculty concern for student development and teaching, academic and intellectual development, and institutional goals and commitments. Regardless of the institution attended, the mean scores for these factors was above 4.0, while the mean score for peer group interactions and interactions with faculty were less than 4.0. The reported frequencies for the factors of faculty concern for student development and teaching, academic and intellectual development, and institutional goals and commitments were above 96.9% for ACC, and the reported frequencies for both BCC and CCC were 100% with the exception of academic and intellectual development at CCC. The reported frequencies for the factors of peer group interactions and interactions with faculty less than their academic integration counterparts. ACC reported frequencies were 77.4% and 77.6%, respectively. BCC reported frequencies were both 85%, and CCC reported frequencies were 77.8% and 88.9%, respectively. Also, the academic integration frequencies (96.6%) were higher than the social integration frequencies (79.3%) at ACC. Reported frequencies at BCC were higher for academic integration (100%) than for social integration (85%). Similarly, frequencies at CCC were higher for academic integration (100%) than for social integration (89.9%).

# **Institution and Institutional Integration Scales.**

To further explore the impact of the Promise scholarship program requirements on the students' perception of their academic and social integration, the researcher ran analysis of variance (ANOVA) tests to determine if the institution attended affected the student's scores for the IIS factors and categories. Each of the three institutions have different requirements to maintain the Promise scholarship, therefore, running an ANOVA to determine statistical significance between institutions may result in significance between the differing requirements. Table 25 illustrates the results from the ANOVA for each of the categories and factors, when using the individual institution as the independent variable.
## Table 25

# ANOVA Results by Institution

Calculated Mean						
Category/Factor	ACC	BCC	CCC	F	р	$n_{\rm p}^{2}$
Academic Integration	4.15	4.01	4.14	.53	.59	.01
Social Integration	3.72	3.73	3.59	.07	.84	.00
Peer Group Interactions	3.62	3.77	3.67	.32	.73	.01
Interactions with Faculty	3.81	3.69	3.51	.86	.43	.02
Faculty Concern for Student						
Development and Teaching	4.24	4.00	4.20	.89	.27	.03
Academic and Intellectual						
Development*	4.06	4.02	4.08	.08*	.92*	.00
Institutional Goals and						
Commitments	4.54	4.37	4.60	1.00	.37	.02

Note: \* indicates heterogeneity of variances, and Welch's F is presented,  $n_p^2 =$  effect size.

The academic integration scores increased from BCC (M = 4.01, SD = .39), to CCC (M = 4.14, SD = .64), to ACC (M = 4.15, SD = .57), but the differences between the institutions was not significant, F(2, 84) = .53, p = .59,  $n_p^2 = .01$ . The social integration scores increased from CCC (M = 3.59, SD = .57), to ACC (M = 3.72, SD = .68), to BCC (M = 3.73, SD = .52), but the differences between the institutions was not significant, F(2, 84) = .17, p = .84. The faculty concern for student learning and teaching scores increased from BCC (M = 4.00, SD = 0.49), to CCC (M = 4.20, SD = .60), to ACC (M = 4.24, SD = .61), but the differences between the institutions was not significant, F(2, 84) = .13, p = .27. The peer group interactions scores increased from ACC (M = 3.62, SD = .76), to CCC (M = 3.67, SD = .68), to BCC (M = 3.77, SD = .59), but the differences between the institutions was not significant, F(2, 84) = .13, p = .27. The peer group interactions scores increased from ACC (M = 3.62, SD = .76), to CCC (M = 3.67, SD = .68), to BCC (M = 3.77, SD = .59), but the differences between the institutions was not significant, F(2, 84) = .32, p = .73. The interactions with faculty scores increased from CCC (M = 3.51, SD = .65), to BCC (M = 3.70, SD = .50), to ACC (M = 3.81, SD = .76), but the differences between the institutions was not significant, F(2, 84) = .32, p = .73.

increased from BCC (M = 4.37, SD = .39), to ACC (M = 4.54, SD = .54), to CCC (M = 4.60, SD = .53), but the differences between the institutions was not significant, F(2, 84) = 1.00, p = .37. The factor of academic and intellectual development did violate the assumption of homogeneity of variances, so a Welch's ANOVA was conducted (Field, 2013; Laerd Statistics, 2015). The institutional goals and commitments scores increased from BCC (M = 4.02, SD = .37), to ACC (M = 4.07, SD = .61), to CCC (M = 4.08, SD = .77), but there was no statistically significant difference between the institutions, Welch's F(2, 20.04) = .08, p = .92.

#### Institution and question 23.

To further explore the survey information, the researcher ran an ANOVA to determine if there was any significant difference between the participant's institution and any of the questions from the Institutional Integration Scales. Significance was found between the institution attending and question 23: "most faculty members are genuinely interested in teaching." Observation of Normal Q-Q plots indicated normality of the data. While there were two outliers for BCC, the researcher determined to keep the outliers in the data. Homogeneity of variances was violated, as assessed by Levene's test (p = .01), so Welch's *F* was computed (Field, 2013; Laerd Statistics, 2015). The scores for question 23 were statistically significantly different between the three institutions, Welch *F*(2, 21.76) = 4.40, *p* =.03. Scores for question 23 were highest for CCC (n = 9, *M* = 4.56, *SD* = .53), followed by ACC (n = 58, *M* = 4.43, *SD* = .65), with BCC (n = 20, *M* = 4.05, *SD* = .51) having the lowest scores. Games-Howell post hoc analysis showed that the mean difference between ACC and BCC (*M* = .38) was statistically significant, *p* = .03. The effect size ( $n_p^2$ ) of the association was .08, for a small effect. Table 26 show the results for the ANOVA.

## Table 26

	Welch's					
Group	N	Mean	SD	F	р	$n_{\rm p}^{2}$
ACC	58	4.43	.65	4.40	.03	.08
BCC	20	4.05	.51			
CCC	9	4.56	.53			

# Institution and Question 23 Results

Note: N = sample size, SD = standard deviation, F = Welch's *F*-value, p = significance,  $n_p^2 =$  effect size.

During the qualitative interviews, the idea of the instructor's passion for teaching and the subject matter was mentioned nine separate times. Student 1 said he "really like[s] how passionate they [instructors] are just not about teaching, but really showing us the difference between good and bad." When asked to describe her instructors, Student 7 called them "passionate, responsive and intentional."

# **Additional Qualitative Results**

To support the explanatory sequential mixed methods research design, seven interviews were conducted to gather additional qualitative data (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). After each interview, the researcher made notes of his observations and the interviews were transcribed. Each interview was individually coded. The codes were then categorized into themes. Primary themes from the interviews included building relationships with instructors, the quality of instructors, and the benefit of the Promise scholarship.

## Faculty relationships.

Each of the interview participants made a reference to relationship building. If not directly stating that they built a relationship with an instructor, they mentioned words like

"understanding," and "relatable." A total of 35 statements regarding building relationships with instructors were given. Student 5 said his instructors "are more relatable. [You] are not just a number anymore." Another student added, "I have an instructor who actively reaches out to students who aren't performing well to see if everything is okay or if they needed help." Additionally, a third student stated that instructors "help you figure out, you know. They do things for you rather than just thinking about themselves, which is really refreshing." Table 27 illustrates the codes and frequencies relating to the theme of faculty relationships.

# Table 27

## Codes for Theme of Faculty Relationships

		Number of	Number of
Theme	Codes	Participants	References
Faculty	Friendly	3	5
Relationships	Helpful	3	5
•	Relatable	5	9
	Understanding/Compassion	7	16

# Quality instructors.

Additionally, the participants spoke about the quality of the instructors. Instructors were described as "passionate," knowledgeable," and "amazing.' Student 2 added that "instructors are great, because the instructors can really make or break the students academically." When describing her instructors, another student said, "I love them. They're amazing,... and you'll get one of the best education[s] out there in the state." A third stated, "Their [instructor's] expertise and guidance brought me to where I am today." Table 28 shows the codes and frequencies relating to quality instructors.

# Table 28

# Codes for Theme of Quality Instructors

		Number of	Number of
Theme	Codes	Participants	References
Quality Instructors	Amazing Instructors	4	5
	Knowledgeable	5	4
	Passionate	4	6
	Respect Students	2	2

## Benefit of Promise scholarship program.

Finally, the students described the benefits of the Promise scholarship program to them personally. They described the scholarship as being "an opportunity," and as relieving financial stress by being a "weight off [their] shoulders. Student 7 expressed the benefits of the Promise scholarship program by stating, "I literally wouldn't be able to do any of this without the Promise scholarship. My family and I are so thankful that I got this scholarship, it has truly changed my life." A second student explained how the Promise program:

makes college a lot easier, knowing that education won't be put on the line if I won't be able to come up with dollars each semester. It is kind of a weight off the shoulders and I can focus on the classes, and like the working aspect.

Table 29 explores the codes related to the theme of the benefits of the Promise scholarship program.

Table 29

Codes for Theme of Benefit of Promise Scholarship Program

Theme	Codes	Number of Participants	Number of References
Benefits of	Focus on Education	4	5
Promise Program	Opportunity/Gift	6	7
_	Relieve Monetary Stress	6	10

# Conclusion

Chapter IV provided the information on the data collection, participants, instrument validity and reliability, and both the quantitative and qualitative results regarding the effect of Promise program scholarships on retention and student's perceptions of their academic and social integration. The researcher used an explanatory sequential mixed methods research design, and collected quantitative data before conducting qualitative interviews (Creswell, 2015; Ivankova et al., 2006). The mixed methods approach was chosen to understand the data more thoroughly than if one method was used (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). The data was collected from the individual institutions, an online survey, and through one-on-one interviews. The researcher analyzed 87 survey responses and conducted seven interviews. The Likert scale questions for the Institutional Integration Scales (IIS) have been used in studies before and the reliability analysis for the survey questions had acceptable Cronbach's alpha values. An interview protocol was developed to maintain consistency and ensure validity and reliability (Creswell, 2015; Marshall & Rossman, 2016). The protocol was reviewed by two professionals, and a pilot was conducted to test the questions for understanding (Creswell, 2015; Marshall & Rossman, 2016).

Results from institutional data show an increase in the retention rates for Promise scholarship recipients from 49.4% in 2017-2018 to 65.6% in the 2018-2019 academic year. This compares to institutional retention rates of 47.6% in 2017-2018 and 47.5% in 2018-2019. When broken down by institution, the retention rates for Promise scholarship students at ACC increased from 48.6% in 2017-2018 to 64.2% in 2018-2019, compared to 47.7% and 46.0% respectively for the institutional rates. At BCC, the Promise scholarship student retention rate

increased from 50.6% in 2017-2018 to 68.7% in 2018-2019, compared to 48.2% and 48.8% respectively for the institution.

The online survey consisted of 30 Likert scale questions taken from the Institutional Integration Scales (IIS). Each question was categorized into one of five factors, and factors were combined to create the categories of academic integration and social integration. The survey scores were highest for the factors of faculty concern for student development and teaching, academic and intellectual development, and institutional goals and commitments. Each factor had a mean score greater than 4.0 and a reported frequency greater than 94%. Additionally, the category of academic integration had a mean score of 4.2 and a reported frequency of 97.7%. Nearly 20% of the survey respondents indicated they liked their instructors, and during the interviews, building relationships with faculty was mentioned 38 times.

Statistical tests were run to compare demographic data with the perception scores for the categories and factors of the IIS. There was a statistically significant difference in the peer group interactions score between male and female participants. The interactions with faculty score was statistically significant for the different matriculation years, with the decrease in scores from students starting in 2017 to students starting in 2019 being statistically significant. Students that were employed full-time had a significantly higher faculty concern for student development and teaching scores than students that worked only part-time. Also, students that attended college sponsored social events had significantly higher scores in the factor of peer group interactions and the category of social integration, than the students that did not attend social activities.

Analysis of variance (ANOVA) tests were run to compare category and factor scores of the participants from the three institutions. The two categories of academic and social integration did not show a significant difference between the institutions. Additionally, the five factors did not show a significant difference. The question on the IIS that stated "most faculty members are genuinely interested in teaching." The scores for this question were significantly different between the participants from ACC and BCC.

The qualitative interviews revealed primary themes of faculty relationships, quality instructors, and benefits of the Promise scholarship program. Participants built relationship with faculty that are understanding, comforting, and caring. Faculty members are knowledgeable and passionate. The Promise scholarship program is seen as an opportunity given to the students, and is a stress reliever that lifts a "weight off [their] shoulders."

# Chapter V

# Discussion

## Introduction

After the announcement of the America's College Promise initiative in 2015, individual states, communities, and community colleges proposed and implemented Promise scholarship programs (Paterson, 2018; Pierce 2015a, 2015b). Promise scholarship programs are designed to help students learn the skills needed to find employment by giving additional financial assistance to students that need it to further their education (Palmadessa, 2017; Pierce, 2015a; The White House, Office of the Press Secretary, 2015). Over 60% of the states in the United States have implemented or proposed legislation to implement Promise scholarship programs (Statewide Promise Status Update, 2019). As these programs are being implemented, they have their own unique requirements to receive and maintain the scholarship (Paterson, 2018; Pierce, 2015a, 2015b; U.S. Department of Education & Office of the Under Secretary, 2016). This research study explores the relationship between the Promise scholarship programs, student retention, and student perception of academic and social integration.

Student retention can be associated with academic and social integration (Hirschy et al., 2011; Swail et al., 2003; Tinto, 1975, 1993, 1999; Yu, 2015). Vincent Tinto's theory of persistence proposes that a student is more likely to persist in college if they are academically and socially integrated into their academic institution (1975). One instrument used to predict student persistence was created by Pascarella and Terenzini called the Institutional Integration Scales (IIS) (1980). The IIS consists of Likert scale questions that explore the student's perception of their academic integration, social integration, and institutional goals and commitments (Pascarella & Terenzini, 1980). This mixed methods research study used

institutional data, an online survey that consisted of the IIS and open-ended questions, and interviews to answer the following research questions:

1. How does participation in a Promise scholarship program affect retention of community college students in the Upper Midwest?

2. How does participation in a Promise scholarship program affect a student's perception of their academic and social integration?

3. Is there a relationship between the requirement of academic and social integration activities within the various Promise scholarship programs and student retention rates?4. Is there a relationship between the requirement of academic and social integration activities within the various Promise scholarship programs and a student's perception of their academic and social integration?

#### **Summary of the Results**

The focus of this mixed methods study was to explore the relationship and impact of the Promise scholarship program, students' retention, and academic and social integration. The researcher used an explanatory sequential mixed methods research design, which used qualitative data to enhance the quantitative data (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). The quantitative data included individual institutional retention data and the IIS survey. The qualitative data included answers from the open-ended survey questions and individual student interviews. By following the process for explanatory sequential mixed methods research, the quantitative data was collected and analyzed before the qualitative interviews were conducted (Creswell, 2015; Ivankova et al., 2006). This process uses the qualitative data to further explain the quantitative data (Creswell, 2015; Ivankova et al., 2006). Tota process the qualitative data to further explain the quantitative data (Creswell, 2015; Ivankova et al., 2006). This process uses the qualitative data to further explain the quantitative data (Creswell, 2015; Ivankova et al., 2006). This process uses the qualitative data to further explain the quantitative data (Creswell, 2015; Ivankova et al., 2006). This process uses the qualitative data to further explain the quantitative data (Creswell, 2015; Ivankova et al., 2006).

data, the accuracy and validity of the findings are increased through triangulation (Creswell, 2015; Ivankova et al., 2006; Marshall & Rossman, 2016; Tashakkori & Teddlie, 1998).

Data was collected from three community colleges in the Upper Midwest that had Promise scholarship programs. To protect the institution's identity, each community college was given a pseudonym: A Community College (ACC), B Community College (BCC), and C Community College (CCC). The researcher gathered retention data from each of the individual institutions. In coordination with the Promise scholarship program director, the researcher distributed online surveys to Promise scholarship recipients at each institution. The surveys consisted of demographic questions, the IIS Likert scale questions, and open-ended questions (Appendix C). Once completed, the data from the IIS survey was analyzed using SPSS statistical software and the short answer questions were coded and categorized using qualitative analysis methods.

Qualitative data was collected through seven researcher facilitated interviews. An interview protocol was developed by using the quantitative and qualitative analysis from the online survey (Appendix H). The protocol was reviewed by an expert panel and piloted before the interviews were conducted.

## **Research question 1: Promise scholarship program affect on retention.**

The first research question explored the relationship between receiving a Promise scholarship and student retention rates. The researcher requested institutional data from each of the research locations (Appendix N & O). The data provided from ACC and BCC included retention rates for Promise scholarship students, non-Promise scholarship students, and the institution. CCC did not supply information on non-Promise scholarship students. The data from CCC was not comparable and was not included. The researcher combined the data from ACC and BCC to calculate retention rates.

Retention rates for Promise scholarship students (49.4%) was comparable to non-Promise scholarship students (47.6%) for the 2017-2018 academic year. However, during the following year of the Promise scholarship program, the retention rate for Promise scholarship students was 65.6%, compared to 47.5% for non-Promise scholarship students. The Promise scholarship student retention rate increased by 18%, while the non-Promise scholarship student retention rate stayed relatively the same.

Student responses from the open-ended questions on the survey and the interviews indicated that the students feel the Promise scholarship program is a gift and an opportunity. Six of the seven interview participants echoed this feeling, and added that the program is a life changing opportunity. One student stated "It has truly changed my life." Another added, "I can focus on education, to better my life." A third stated, "Being in the Promise program has helped me ... for when I start a new chapter in my life."

# Research question 2: Promise scholarship program affect on student's perception of academic and social integration.

The relationship between participation in the Promise scholarship program and the student's perception of their academic and social integration was examined with research question 2. The quantitative data from the online survey, the open-ended survey questions, and the interviews were used to explore the relationship. The 30 scores from the IIS were categorized into five factors and two categories. Using SPSS statistical software, the researcher calculated descriptive statistics (mean, standard deviation, maximum, and minimum) and average frequencies for each of the factors and categories. The factors of faculty concern for

student development and teaching, academic and intellectual development, and institutional goals and commitments had the highest mean scores and highest reported frequencies. Each factor had a mean score above 4.0 and reported frequency above 94%. Also, a mean score of 4.12 and reported frequency of 97.7% was reported for the category of academic integration. The factors of peer group interactions and interactions with faculty are associated with social integration, and had mean scores of 3.66 and 3.75 respectively, and reported frequencies of 74.7% and 77.7% respectively. The category of social integration had a mean score of 3.71 and a reported frequency of 81.6%. The factors and categories for academic integration had higher mean scores and reported frequencies than the factors and categories for social integration.

During the interviews, the students commented on their relationships with and the quality of the faculty. Faculty relationships were mentioned 35 times, and five of the seven interviewees discussed the understanding nature of the faculty. Words that were used to describe the faculty were "passionate," "knowledgeable," and "amazing." One of the interview participants said, "You can go to your psychology teacher [or] your anatomy teacher and they'll all help you out.... They want the best for you, rather than them."

T-tests and analysis of variance (ANOVA) tests were run with each of the demographic questions and the categories and factors to further examine the impact of the Promise scholarship program on specific sets of students. The peer group interactions score for females was significantly higher than the score for males, M = .39, t(85) = 2.22, p = .03. Additionally, a significant correlation was found between gender and peer group interactions score, with gender accounting for 5.5% of the variability.

When looking at matriculation year, there was a significant difference in the interactions with faculty scores, F(2, 82) = 4.18, p = .02. The mean decrease for interactions with faculty

scores from 2017 to 2019 of .75 was statistically significant, p = .02. Students that had attended the school longer, had significantly higher interactions with faculty scores.

There was a significant difference in the faculty concern for student development and teaching scores between groups with different employment statuses. Students that were employed full-time had significantly higher faculty concern for student development and teaching scores that students that were employed part-time. The mean difference between full-time working students and part-time working students of .51 was statistically significant, p = .02). Students that work full-time have significantly higher scores than students that work part-time.

Students answered a question on the survey regarding attendance on social activities on campus. A significant difference was found between students that indicated they attend social activities and student that indicated they did not attend social activities when analyzing their peer group interactions scores. There was a positive association between attendance of social activities and peer group interactions scores,  $\tau_b = .22$ , p = .02. Additionally, there was a positive association between social integration scores and students that indicated attendance of social activities,  $r_{pb}(79) = .29$ , p = .01.

Another question on the survey asked how the students spent their time outside of class. A significant difference was found between students that indicated they work outside of class and students that did not indicate they work outside of class when comparing their institutional goals and commitments scores. Working students had higher intuitional goals and commitment scores than non-working students, and the difference was significant, M = .24, t(81) = 2.02, p < .05.

### **Research question 3: Required activities and student retention rates.**

The third research question compared retention rates between the three institutions and asked "is there a relationship between the requirements of academic and social integration activities within the various Promise scholarship programs and student retention rates?" Institutional data was compared between the research locations. ACC and BCC supplied retention data for Promise scholarship students and non-Promise scholarship students. The data provided from CCC did not include a breakdown of non-Promise scholarship students. The data from CCC did not compare to the data from ACC and BBC, and was not included.

In the 2017-2018 academic year, the retention rate for Promise scholarship students at BCC was 2.0% higher than the retention rate at ACC at 50.6%, compared to 48.6%. In the following year, 2018-2019, the retention rate at BCC was 68.7%, 4.5% higher than at ACC. Students at BCC have more requirements to maintain status in Promise scholarship program than students at ACC, and the Promise scholarship student retention rate at BCC is higher than at ACC.

# Research question 4: Required activities and student's perception of academic and social integration.

The final research question explored the relationship between Promise scholarship program requirements and student perception of academic and social integration. The IIS questions and open-ended questions on the online survey were used, as well as the interviews. Mean scores and reported frequencies were reported using SPSS statistical software. Echoing the answer to research question 1, the highest mean scores and reported frequencies were from the academic integration category and related factors, regardless of institution attended. The researcher ran analysis of variance (ANOVA) tests to further examine the impact of the Promise scholarship program requirements and the categories and factors from the IIS scales. Each of the categories and factors were the dependent variables, and the institution attended was the independent variable. No significant difference was found between any of the institutions and the categories and factors.

To further explore the impact of Promise scholarship program requirements the researcher ran an ANOVA for each of the individual questions of the IIS. Again, the institution attended was the independent variable. Significant difference was found when comparing institution attending and the scores for question 23: "most faculty members are genuinely interested in teaching." The scores for question 23 were highest for students at CCC, followed by ACC, with BCC having the lowest scores, Welch F(2, 21.76) = 4.40, p = .03. The difference of the scores between ACC and BCC was significant, M = .38, p = .03. Instructor passion for teaching was a consistent topic in the interviews. Students called the instructors "passionate" and "inspiring." Additionally, four of the seven participants called their instructors "amazing."

## Qualitative data.

Following the design for explanatory sequential mixed methods research, interviews were conducted to gather qualitative data and to add to the quantitative results (Creswell, 2015; Ivankova et al., 2006; Tashakkori & Teddlie, 1998). Seven interviews were conducted following the established interview protocol (Appendix H). Each interview was individually coded, and the codes were combined and categorized into themes. Three main themes emerged from the qualitative analysis: building relationships with instructors, the quality of instructors, and the benefit of the Promise scholarship. Each of the seven interview participants discussed the relationships they had with their instructors. Instructors were described as "understanding and compassionate," "friendly," and "relatable." Faculty relationships were mentioned 35 times throughout the interviews, and were mentioned by 100% of the interview participants.

Six of the seven interview participants spoke about the quality of the faculty. Faculty member were described as "knowledgeable," "passionate," and "amazing." A total of 17 references to the quality of instructors were made by five of the seven interview participants.

Finally, the majority of the interview participants expressed that the Promise scholarship program was a benefit to them. They described the program as an "opportunity" or "gift," a way to "focus on their education," and as a "weight off [their] shoulders" when referring to financial stress. The benefit of the Promise scholarship program was mentioned 22 times, by six of the seven interview participants.

## Conclusions

By looking at the results of research question 1, there does appear to be a positive relationship between the Promise scholarship program and student retention. The Promise scholarship student retention rate was higher than the non-Promise scholarship student retention rate in the second year of the Promise scholarship program. Both ACC and BCC have specific requirements for the students to maintain their status in the Promise scholarship program. It could be concluded that having some additional requirements may result in higher retention rates.

Analysis of the qualitative interviews indicate that many students that are part of the Promise scholarship program feel the Promise scholarship is a gift and an opportunity. Student 4 stated this very clearly: The Promise scholarship on top of that, that's an opportunity. So making sure not to take any of it for granted, and making sure you are doing the things on the due date. Because in the long run, it's helping you. Like everything is being paid for if your financial aid isn't covering it. You know. That's like a huge gift for some people that wouldn't be able to afford to go to college. So just making sure that, you know, you're appreciative of the opportunities that [ACC] has to offer, and not taking anything for granted.

Additionally, by receiving the scholarship, the students are able to focus more on learning and are less stressed by finances. This emphasis on learning may result in higher retention.

When looking at the institutions individually, through research question 3, data shows a slight difference in the retention rate of Promise scholarship students between ACC and BCC. The difference in the retention rate between ACC and BCC during the 2018-2019 academic year was 4.6%, with BCC's rate higher than the rate of ACC. For a student to maintain eligibility in the Promise scholarship program, they must be enrolled full-time, meet with an advisor every semester, and perform 8 hours of community service each semester. The requirements to maintain Promise scholarship program status at BCC included attending an orientation session, enrolling full-time, performing 8 hours of community service each semester, attending two workshops each semester, meeting with an advisor once per term, and being a student mentor. Because the retention rate at BCC was higher, and because BCC has more requirements to maintain the Promise scholarship, it could be concluded that the more requirements in place, the more likely the students are to be retained. While BCC has more specific requirements to maintain the Promise scholarship, both institutions do have some requirements, and certainly more requirements than non-Promise scholarship students. The retention rate at ACC was

higher for Promise scholarship students than for non-Promise scholarship students. Again, having some requirements may lead to higher retention rates.

All three research locations require students to meet to use advising services and perform community service hours every semester to maintain their Promise scholarship. Students that meet with advisors set academic goals, and academic plans to meet those goals (Center for Community College Student Engagement, 2018; Lynch & Lungrin, 2018; Surr, 2019). Meeting with an advisor keeps the students accountable for their education, and keeps them on track to graduate. Additionally, students that meet with their advisors are more engaged in their learning (Center for Community College Student Engagement, 2018). High quality advising can have a positive influence on GPA, retention, and graduation rates (Hatch & Garcia, 2017; Moore, Schrager, & Jaeger, 2018). Therefore, having advising sessions as requirements for the Promise scholarship program can lead to higher retention rates for Promise scholarship students.

Similar to advising, participation in community service activities has a positive impact on academic development (Astin, Vogelgesang, Ikeda, & Yee, 2000; Sax & Astin, 1997). Students that engage in community service tend to maintain or increase their course grades and spend more time on school related assignments than students that do not (Astin et al., 2000; Sax & Astin, 1997). Also, students that volunteer while in college are more likely to continue to participate in similar activities after college (Astin et al., 2000; Sax & Astin, 1997). One student from the interviews said, "It makes me a better person when I'm volunteering, or just helping your neighbors, or whatever it may be." The requirement of community service hours can lead to higher retention rates for Promise Scholarship students.

Research question 2 explored the relationship of the Promise scholarship program on a student's perception of their academic and social integration. The highest mean scores and

reported frequencies were for the categories and factors related to academic integration, and the lowest scores were related to social integration. The majority of requirements of the Promise scholarship programs are more academically related, such as meeting with an advisor and attending workshops. The academic activities correspond with the higher academic integration. During the interviews, students mentioned the lack of time to attend social activities. This echoes the conclusion that students at community colleges do become attached to their institutions, even if they do not have time to attend social activities (Karp et al., 2011). The students also struggle to build social relationships at their institution. Student 5 said his biggest challenge at school was making friends because students "come here and go back home."

When looking at the relationship between students that attended social activities and their peer group interactions and their social integration scores, there was a significant difference between students that did attend social activities and students that did not. However, the mean scores for the peer group interactions scores (M = 3.72) and social integration scores (M = 3.91) for students that attended social events were still lower than the academic integration factors and categories which all had mean scores above 4.0. This would indicate that even if additional social activities are required, the student may still be more academically integrated than socially integrated.

There was a significant difference in the student's interactions with faculty score based on the year they began taking classes. The students that matriculated in 2017 had significantly higher interactions with faculty scores than students that matriculated in 2019. The longer the time with the faculty leads to higher relationships with the faculty.

Students that work full-time outside of class have significantly higher scores for the factor of faculty concern for student development and teaching than students that work part-

time. While only a small effect  $(n_p^2 = .11)$ , this could be because students that work full-time have to balanced their schedule and be in communication with their instructors. One of the interview participants, who indicated she works full-time, said, "they [instructors] are more forgiving, because they'll work with you. If you sit down with them and say what's going on [and] I need help with this, or something came up and this is going on."

The final research question looked to explore the relationship between student perception of academic and social integration and the different Promise scholarship program requirements. The researcher compared data from the students at the three institutions to the IIS survey responses. There was no significant difference found between any of the IIS categories and factors and the students from the differing institutions. Because there was no significant difference, the quantity and types of required activities may not have an impact on the student's perception of their academic and social integration.

## **Recommendations for Further Research**

The cost of education is one of the primary factors regarding student retention and completion (Campbell et al., 2015; Mertes & Jankoviak, 2016). Promise scholarship programs have been created to help students with financial barriers complete college (The White House, Office of the Press Secretary, 2015.) This study adds to the research of retention in community colleges, specifically related to Promise scholarship programs.

One of the limitations of this study was the selection of the research locations. The researcher chose three institutions based on their differing student requirements for maintaining the Promise scholarship. Additional research could be done by expanding the number of research locations, both by quantity and by geographic location. Additionally, qualitative data was collected by conducting seven student interviews. All seven participants were from one

research location. The qualitative results may not be generalizable to the other research locations, and to other institutions. Additional research could be done by increasing the number of interviews, interviewing students at the other two research locations, and expanding the interviews to other institutions.

This study was inclusive of all Promise scholarship program participants and did not exclude students that attended branch campuses. However, there was not a question that asked if the student attended classes at the main campus or a branch campus, so there was no analysis related to this demographic. Two of the interview participants acknowledged that they do not attend classes at the institution's main campus. One attends the career training center, and the other attends a smaller branch campus. Both students spoke of the lack of activities at their educational sites, and that it was difficult to travel to the main campus due to distance and schedule. Additional research could be done by using the campus location (main, branch, career training center) as an independent variable.

The research institutions studied implemented their Promise scholarship programs in the fall semester of 2017, or in the case of CCC, fall semester of 2018. While the typical, or "normal," time to complete an associate degree is two years for full-time students, graduation rates are often measured in other lengths of time. The Integrated Postsecondary Education Data System (IPEDS) tracks students that have completed their degree within 150% of normal time (National Center for Education Statistics, 2018). Further research could be done at these institutions regarding completion rates following graduation in spring 2020. Additionally, one of the goals of Promise scholarship programs is to supply skilled workers to the workforce (Palmadessa, 2017; Pierce, 2015a; The White House, Office of the Press Secretary, 2015).

Future research could be completed regarding the employment of Promise scholarship students after graduation.

The three research locations for this study were all from the same geographic area. Because of this factor, the political environment surrounding these institutions were similar in nature. While they were not part of a statewide Promise scholarship program initiative, they were all part of the same state's community college system. Their Promise scholarship programs structures were similar, with the exception of the required activities. Additional research could be done in other geographic areas and/or with other political environments surrounding the Promise programs. Research could also be done within and comparing statewide Promise scholarship program initiatives.

The participants in this student were primarily Caucasian and Asian/Pacific Islander. There was not an overly diverse sample which is consistent with the demographics of the research institutions. Future studies could be done while being purposeful on gathering a more diverse sample.

Another important factor to consider is the growing enrollment and acceptance of online courses and programs (Allen & Seaman, 2017; Hillman, 2016; Tidwell, 2018). Results of this study support the requirements of advising services to aid student retention. Research could be done regarding virtual advising services and student retention and integration. Additionally, research could be done to compare the online environment to the face-to-face environment and how this affects Promise scholarship program participants.

Because this study was narrowly focused at only three institutions, and because there are no standards regarding the structure of the Promise scholarship programs, the findings may not be generalizable to other Promise scholarship programs. Future studies addressing Promise scholarship programs with similar structures and demographics may help reinforces these findings. Additionally, future research with more diverse populations based on ethnicity, geography, and/or political environment may reinforce the findings of this research.

# **Implications for Professional Practice**

As states and community colleges are implementing Promise scholarship programs, there is not a standard regarding required student activities (Pierce, 2015a). This study suggests that participation in the Promise scholarship program itself leads to higher retention. Additionally, this study has shown that the quantity and types of required activities may not be as important as is simply having required academic and social integration activities.

Regarding specific activities, all three research locations required Promise scholarship students to attend advising sessions and perform community service hours to maintain Promise scholarship eligibility. Both of these requirements are beneficial to student academic performance (Astin et al., 2000; Hatch & Garcia, 2017; Moore et al., 2018; Sax & Astin, 1997). As Promise scholarship programs are developed, this study suggest advising and community service should be considered as required components.

Social integration continues to be difficult at community colleges (Karp et al., 2011). However, social integration is an important aspect regarding student retention (Tinto's, 1975, 1993, 1999), and colleges can have an impact of student integration (Tinto, 1999). Community colleges should continue to work on ways to enhance these experiences for students and increase their social integration.

## Conclusion

The number of Promise scholarship programs has greatly increased from the announcement of the America's College Promise (ACP) initiative in 2015 (*College Promise* 

*Campaign*, 2018; Hiestand, 2018). Promise scholarship programs are designed to help students attend college and gain skills needed to enter the workforce (Palmadessa, 2017; Pierce, 2015a; The White House, Office of the Press Secretary, 2015). This explanatory sequential mixed methods study explored the relationship between Promise scholarship programs, students' retention, and academic and social integration.

Retention rates for Promise scholarship students were higher than non-Promise scholarship recipients in the second year of the program. All three research institutions require Promise scholarship recipients to use advising services and complete community service hours each semester. These activities have a positive impact on academic performance and development (Astin et al., 2000; Hatch & Garcia, 2017; Moore et al., 2018; Sax & Astin, 1997). Consequentially, Promise scholarship recipients report high levels of academic integration. Additionally, the Promise scholarship program allows students to focus more on their education and less on finances.

Promise scholarship programs are important to strengthen the economy. Not only do they help students gain important skills, but they also help fill the skilled worker shortage. Facilitating retention and completion of Promise scholarship recipients will be essential to make better lives for students, their families, and the communities in which they live.

## References

Allen, I., & Seaman, J. (2017). Digital learning compass: Distance education enrollment report2017. Babson Survey Research Group. Retrieved from

http://onlinelearningsurvey.com/reports/digtiallearningcompassenrollment2017.pdf

- American Association of Community Colleges. (2019). 2019 Fact Sheet. Retrieved from https://www.aacc.nche.edu/wp-content/uploads/2019/05/AACC2019FactSheet\_rev.pdf
- Astin, A., Vogelgesang, L., Ikeda, E., & Yee, J. (2000). How service learning affects students. *Higher Education*. Paper 144. Retrieved from ERIC database (ED445577)
- Attewell, P. & Douglas, D. (2014). Increasing the academic momentum of community college students. Society for Research on Educational Effectiveness. Retrieved from ERIC database. (ED562796)
- Attewell, P., & Monaghan, D. (2016). How many credits should an undergraduate take? *Research in Higher Education*, 57(6), 682–713. Retrieved from ERIC database. (EJ1109967)
- Bakker, C. J., Koffel, J. B., & Theis-Mahon, N. R. (2017). Measuring the health literacy of the Upper Midwest. *Journal of the Medical Library Association*, *105*(1), 34–43. a9h.
- Bartik, T. J., Hershbein, B. J., & Lachowska, M. (2017). The effects of the Kalamazoo promise scholarship on college enrollment, persistence, and completion. Upjohn Institute Working Paper, No. 15-229, W.E. Upjohn Institute for Employment Research, Kalamazoo, MI.
- Bartik, T. J., & Lachowska, M. (2014). The Kalamazoo promise scholarship. *Education Next*, 14(2), 72-78.

- Bartik, T. J., & Sotherland, N. (2015). Migration and housing price effects of place-based college scholarships. Upjohn Institute Working Paper, No. 15-245, W.E. Upjohn Institute for Employment Research, Kalamazoo, MI.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485–540.
- Belfield, C. R., & Bailey, T. (2011). The benefits of attending community college: A review of the evidence. *Community College Review*, 39(1), 46–68.
- Bers, T. H., & Smith, K. E. (1991). Persistence of community college students: The influence of student intent and academic and social integration. *Research in Higher Education*, 32(5), 539–556.
- Biersdorff, K. (2009). How many is enough? The quest for an acceptable survey response rate. Retrieved from https://kkbiersdorff.wordpress.com/2009/09/16/how-many-is-enough/
- Bird, K., & Castleman, B. (2016). Here today, gone tomorrow? Investigating rates and patterns of financial aid renewal among college freshmen. *Research in Higher Education*, 57(4), 395–422.
- Boatman, A., & Long, B. (2016). Does financial aid impact college student engagement? *Research in Higher Education*, 57(6), 653–681.
- Bowman, N., & Denson, N. (2014). A missing piece of the departure puzzle: Student-institution fit and intent to persist. *Research in Higher Education*, *55*(2), 123.
- 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.

- Cataldi, E. F., Bennett, C. T., & Chen, X. (2018). First-Generation Students: College Access, Persistence, and Postbachelor's Outcomes. Stats in Brief. NCES 2018-421. Retrieved from National Center for Education Statistics website.
- Campbell, C. A., Deil-Amen, R., & Rios-Aguilar, C. (2015). Do financial aid policies unintentionally punish the poor, and what can we do about it? *New Directions for Community Colleges*, 2015(172), 67–76
- Carnevale, A. P., Jayasundera, T., & Gulish, A. (2016). *America's divided recovery: College haves and have nots*. Retrieved from Georgetown Public Policy Institute Center on Education and the Workforce website: <u>https://cew.georgetown.edu/cew-reports/americasdivided-recovery/</u>
- Carnevale, A. P., Smith, N., Strohl, J. (2013). Recovery: Job growth and education requirements through 2020. Georgetown Public Policy Institute Center on Education and the Workforce. Retrieved from ERIC database. (ED584413)
- Castleman, B. L., & Page, L. C. (2016). Freshman year financial aid nudges. *Journal of Human Resources*, *51*(2), 389–415.
- Center for Community College Student Engagement. (2018). Show me the way: The power of advising in community colleges. Austin, TX: The University of Texas at Austin, College of Education, Department of Educational Leadership and Policy, Program in Higher Education Leadership.
- Cohen, A. M., & Brawer, F. B. (2008). *The American Community College* (5th ed.). San Francisco, CA: Jossey-Bass.

College Promise Campaign (n.d.). Retrieved from https://collegepromise.org/

College Promise Campaign [Brochure] (2018). Retrieved from the College Promise Campaign website: http://collegepromise.org/wp-

content/uploads/2018/04/71928\_CivicNation\_CPC\_Brochure.pdf

- Creswell, J. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* (5th ed.). Upper Saddle River, NJ: Pearson Education.
- Crookston, A., & Hooks, G. (2012). Community colleges, budget cuts, and jobs: The impact of community colleges on employment growth in rural U.S. counties, 1976-2004. *Sociology* of Education, 85(4), 350–372.
- Crosta, P. M. (2014). Intensity and attachment: How the chaotic enrollment patterns of community college students relate to educational outcomes. *Community College Review*, 42(2), 118–142.
- Cutler, D. M., & Lleras-Muney, A. (2010). Understanding differences in health behaviors by education. *Journal of Health Economics*, 29(1), 1–28.
- D'Amico, M. M., Morgan, G. B., Katsinas, S. G., & Friedel, J. N. (2015). State director views on community college workforce development. *Career & Technical Education Research*, 39(3), 191–211.
- Deil-Amen, R. (2011). Socio-academic integrative moments: Rethinking academic and social integration among two-year college students in career-related programs. *Journal of Higher Education*, 82(1), 54–91.
- Demetriou, C., & Schmitz-Sciborski, A. (2011). Integration, motivation, strengths and optimism: Retention theories past, present and future. *Proceedings of the 7th National Symposium* on Student Retention, 2011, Charleston, 300–312.

- DeNicco, J., Harrington, P., & Fogg, N. (2015). Factors of one-year college retention in a public state college system. *Research in Higher Education Journal*, 27. Retrieved from ERIC database (EJ1056244)
- Denning, J. T. (2017). College on the cheap: Consequences of community college tuition reductions. American Economic Journal. Economic Policy, 9(2), 155–188. <u>https://doi.org/10.1257/pol.20150374</u>
- Denson, N., & Bowman, N. (2015). The development and validation of an instrument assessing student-institution fit. *Assessment & Evaluation in Higher Education*, 40(8), 1104–1122.
- DeVellis, R. (2003). *Scale development: Theory and applications* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Doyle, W. R., & Skinner, B. T. (2016). Estimating the education-earnings equation using geographic variation. *Economics of Education Review*, *53*, 254–267.
- Dunn, M., & Kalleberg, A. L. (2017). Does college focus matter? Explaining differences in labor market outcomes among community colleges. *Journal of Educational Issues*, 3(1), 189–213.
- Dynarski, S., & Scott-Clayton, J. (2013). Financial aid policy: lessons from research. *The Future* of Children, 23(1), 67–91.

Economic Modeling Specialists Intl. (2014). Where value meets values: The economic impact of community colleges. Retrieved from https://www.empowererie.org/uploads/resources/796450 usa agg mainreport final 021

<u>114.pdf</u>

Economic Modeling Specialists Intl. (2017). *Economic value of Iowa's community colleges: Fact sheet.* Retrieved from

https://educateiowa.gov/sites/files/ed/documents/IowaAgg FactSheet 1415 Final.pdf

- Everett, J. B. (2015). Public community colleges: Creating access and opportunities for firstgeneration college students. *Delta Kappa Gamma Bulletin*, *81*(3), 52–55.
- Field, A. (2013). Discovering statistics using IBM SPSS. (4<sup>th</sup> ed.) Thousand Oaks, CA: Sage Publications.
- 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 persistence and retention: Snapshot report.* (2018). Retrieved from National Student Clearinghouse Research Center website: <u>https://nscresearchcenter.org/wp-</u> <u>content/uploads/SnapshotReport33.pdf</u>.
- French, B. F., & Oakes, W. (2004). Reliability and validity evidence for the institutional integration scale. *Educational and Psychological Measurement*, *64*(1), 88–98.
- Fuller, M. B. (2014). A history of financial aid to students. *Journal of Student Financial Aid*, 44(1), 42–68.
- Future Ready Iowa Act, Iowa Code §§ 2458. (2018).
- Ginder, S.A., Kelly-Reid, J.E., & Mann, F.B. (2017). Enrollment and Employees in Postsecondary Institutions, Fall 2016; and Financial Statistics and Academic Libraries, Fiscal Year 2016: First Look (Provisional Data) (NCES 2018- 002). Retrieved from National Center for Education Statistics. <u>http://nces.ed.gov/pubsearch</u>.

- Goldrick-Rab, S., Kelchen, R., Harris, D. N., & Benson, J. (2016). Reducing income inequality in educational attainment: Experimental evidence on the impact of financial aid on college completion. *American Journal of Sociology*, 121(6), 1762–1817.
- Grove, A. (2018). *What is a Community College?* Retrieved from https://www.thoughtco.com/what-is-community-college-788429
- Hagedorn, L. S. (2006). *How to Define Retention: A New Look at an Old Problem*. Retrieved from ERIC database. (ED493674)
- Hatch, D. K., & Garcia, C. E. (2017). Academic advising and the persistence intentions of community college students in their first weeks in college. *Review of Higher Education: Journal of the Association for the Study of Higher Education*, 40(3), 353–390.
  https://doi.org/10.1353/rhe.2017.0012
- Hegji, A. (2017). The Higher Education Act (HEA): A Primer. Congressional Research Service. Retrieved from <u>https://fas.org/sgp/crs/misc/R43351.pdf</u>
- Heller, D. E. (2011). The states and public higher education policy: Affordability, access, and accountability (2<sup>nd</sup> ed.). Baltimore, MD: Johns Hopkins University Press
- Hiestand, R. (2018). The promise of the College Promise (Policy Brief No. 1). Retrieved from the College Promise Campaign website: <u>https://collegepromise.org/policy-tools/the-</u> promise-of-the-college-promise.

Higher Education Act of 1965, 20 U.S.C. §§ 89-329. (1965).

Hillman, N. (2016). Geography of college opportunity: The case of education deserts. American Educational Research Journal, 53(4), 987-1021.

- Hirschy, A. S., Bremer, C. D., & Castellano, M. (2011). Career and technical education (CTE) student success in community colleges: A conceptual model. *Community College Review*, 39(3), 296–318.
- Hlinka, K. R. (2017). Tailoring retention theories to meet the needs of rural Appalachian community college students. *Community College Review*, 45(2), 144–164. <u>https://doi.org/10.1177/0091552116686403</u>
- Hlinka, K. R., Gericke, K. L., Akin, S. R., & Stephenson, L. G. (2018). Students' perspectives on a gap-funded program: The community scholarship program of McCracken County, Kentucky. *Journal of Student Financial Aid*, 48(1). 29-52.
- Holbrook, A., Krosnick, J., & Pfent, A., (2008). The causes and consequences of response rates in surveys by the news media and government contractor survey research firms. In J. Lepkowski, C. Tucker, M. Brick, E. de Leeuw, L. Japee, P. Lavrakas, M. Link, & R. Sangster (Eds.), *Advances in Telephone Survey Methodology* (p. 499-678). New York, NY: Wiley.
- Huelsman, M. (2015). The role of community colleges in advancing upward mobility: A demos perspective. *Community College Journal of Research and Practice*, *39*(10), 915–917.
- Ivankova, N., Creswell, J., & Stick, S. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Filed Methods*, 18(1), 3-20. doi:10.1177/1525822x05282260
- Jacobs, J. & Worth, J. (2019). *The revolving mission of workforce development in the community colleges.* (CCRC Working Paper No. 107). Retrieved from Community College Research Center website: <u>https://ccrc.tc.columbia.edu/publications/evolving-mission-workforce-</u> <u>development-community-college.html</u>

Johnstone, R. (2017). Making ends MEET: The role of community colleges in student financial health. 2017 Special Report. Center for Community College Student Engagement. Retrieved from ERIC database. (ED582825)

- Jones, S. (2015). The game changers: Strategies to boost college completion and close attainment gaps. *Change: The Magazine of Higher Learning*, 47(2), 24–29.
- Jurgens, J. (2010). The evolution of community colleges. *College Student Affairs Journal, 28*(2), 251-261.
- Karp, M. M., Hughes, K. L., & O'Gara, L. (2011). An exploration of Tinto's integration framework for community college students. *Journal of College Student Retention: Research, Theory & Practice*, 12(1), 69–86.
- Kasper, H. T. (2003). The Changing Role of Community College. *Occupational Outlook Quarterly*, 46(4), 14–21. Retrieved from ERIC database. (EJ662279)
- Keeter, S., Kennedy, C., Dimock, M., Best, J., & Craighill, O. (2006). Guaging the impact of growing nonresponse on estimated from a national RDD telephone survey. *Public Opinion Quarterly*, 70(5), 759-779.
- Kline, R. (2005). *Principles and practice of structured equation modeling* (2<sup>nd</sup> ed.). New York: Guildford.
- Kolenovic, Z., Linderman, D., & Karp, M. M. (2013). Improving student outcomes via comprehensive supports: Three-year outcomes from CUNY's accelerated study in associate programs (ASAP). *Community College Review*, 41(4), 271–291.
- Laerd Statistics (2015) *Statistical tutorials and software guides*. Retrieved from https://statistics.laerd.com/

- LeGower, M., & Walsh, R. (2017). Promise scholarship programs as place-making policy:
  Evidence from school enrollment and housing prices. *Journal of Urban Economics*, 101, 74–89.
- Levin, J. S., Viggiano, T., Damián, A. I. L., Vazquez, E. M., & Wolf, J.-P. (2017). Polymorphic students. *Community College Review*, 45(2), 119–143. https://doi.org/10.1177/0091552116679731
- Lynch, J., & Lungrin, T. (2018). Integrating Academic and Career Advising toward Student Success. *New Directions for Higher Education*, 2018(184), 69–79.
- Ma, J., Baum, S., Pender, M., & Welch, M. (2016). Trends in College Pricing, 2016. Trends in Higher Education Series. College Board.
- Mannan, M. A. (2001). An assessment of the academic and social integration as perceived by the students in the University of Papua New Guinea. *Higher Education*, *41*, 283-298.
- Marshall, C. & Rossman, G. (2016). *Designing qualitative research*. (6<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Matheny, C. J., Chan, H., & Wang, X. (2015). Assembling a career: Labor market outcomes for manufacturing program students in two-year technical colleges. *Community College Review*, 43(4), 380–406.
- Maxwell, J. A., (2013). *Qualitative research design: An interactive approach*. (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- McKinney, L., & Burridge, A. B. (2015). Helping or hindering? The effects of loans on community college student persistence. *Research in Higher Education*, *56*(4), 299–324.

- McKinney, L., Mukherjee, M., Wade, J., Shefman, P., & Breed, R. (2015). Community college students' assessments of the costs and benefits of borrowing to finance higher education. *Community College Review*, 43(4), 329–354.
- Mertes, S. J. (2015). Social integration in a community college environment. *Community College Journal of Research and Practice*, *39*(11), 1052–1064.

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.
 doi:10.1080/10668926.2012.711143

- Mertes, S. J., & Jankoviak, M. W. (2016). Creating a college-wide retention program: A mixed methods approach. *Community College Enterprise*, *22*(1), 9–27.
- Miller, N. (2017). A model for improving student retention in adult accelerated education programs. *Education*, *138*(1), 104–114.
- Millett, C. M., Saunders, S. R., & Fishstein, D. (2018). Examining how college promise programs promote student academic and financial readiness. Research Report. RR-18-41. *ETS Research Report Series*. Retrieved from ERIC database (EJ1202820)
- Minaya, V., & Scott-Clayton, J. (2017). Labor market trajectories for community college graduates: New evidence spanning the Great Recession. A CAPSEE Working Paper.
  Center for Analysis of Postsecondary Education and Employment. Retrieved from ERIC database. (ED 573962)
- Mishory, J (2018). *The future of statewide college promise programs*. Retrieved from Century Foundation website: <u>https://tcf.org/content/report/future-statewide-college-promise-programs/</u>

Mission & Goals. (n.d.). Retrieved January 13, 2018, from https://witcc.edu/about/index.cfm
- Moore, C., Schrager, C., & Jaeger, L., C. (2018). Destination Integration: Strategies to Improve Academic Advising. Education Insights Center. Retrieved from ERIC database. (ED 593453)
- Mukherjee, M., McKinney, L., Hagedorn, L. S., Purnamasari, A., & Martinez, F. S. (2017).
  Stretching every dollar: The impact of personal financial stress on the enrollment behaviors of working and nonworking community college students. *Community College Journal of Research and Practice*, 41(9), 551–565.
- National Center for Education Statistics. (2018). College navigator. Washington, D.C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.
- Nelson, V. (2013). *What does college "open admission" mean?* Retrieved from College Parent Central website: https://www.collegeparentcentral.com/2013/02/what-does-college-openadmission-mean/
- Nora, A., Barlow, L., & Crisp, G. (2006). Examining the tangible and psychosocial benefits of financial aid with student access, engagement, and degree attainment. *The American Behavioral Scientist*, 49(12), 1636–1651.
- Palmadessa, A. L. (2017). America's College Promise. *Community College Review*, 45(1), 52– 70. <u>doi.org/10.1177/0091552116673710</u>
- Pascarella, E. T., and Terenzini, P. T. (1980) Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *Journal of Higher Education*, *51*(1), 60-75.
- Paterson, J. (2018). Approaching the target. Journal of College Admission, 2018(240), 40-43.
- Perna, L. W., & Leigh, E. W. (2018). Understanding the promise: A typology of state and local college Promise programs. *Educational Researcher*, 47(3), 155–180.

- Pierce, D. (2015a). Out of the box: How some states are approaching college funding with groundbreaking programs. *Community College Journal*, *85*(5), 36–38.
- Pierce, D. (2015b). A promising development: "Promise" scholarships targeting individual communities reduce barriers to college access--and completion. *Community College Journal*, 86(2), 22–25.
- Pierce, D. (2016). Supporting students beyond financial aid: Low-income students need support that goes beyond tuition assistance. *Community College Journal*, *86*(4), 12–16.
- Pluhta, E. A., & Penny, G. R. (2013). The effect of a community college promise scholarship on access and success. *Community College Journal of Research and Practice*, 37(10), 723-734.
- Pratt, T. (2017). The open access dilemma: How can community colleges better serve underprepared students? *Education Next*, *17*(4), 34-41.
- Promise Programs. (n.d.) Retrieved April 3, 2019 from <u>https://www.wistechcolleges.org/preparing-college/financial-aid-basics/grants-loans-and-other-aid-programs/promise-programs</u>
- Ramshaw, A. (2019). The Complete Guide to Acceptable Survey Response Rates. Retrieved from https://www.genroe.com/blog/acceptable-survey-response-rate-2/11504
- Roman, M. A. (2007). Community college admission and student retention. *Journal of College Admission*, (194), 18–23. Retrieved from ERIC database. (EJ783945)

Sanburn, J. (2017). The case for community college. TIME Magazine, 189(22), 44-47.

Sax, L. J., & Astin, A. W. (1997). The benefits of service: Evidence from undergraduates. *Educational Record*, 78(3/4), 25.

- Schudde, L., & Scott-Clayton, J. (2016). Pell grants as performance-based scholarships? An examination of satisfactory academic progress requirements in the nation's largest needbased aid program. *Research in Higher Education*, 57(8), 943–967. https://doi.org/10.1007/s11162-016-9413-3
- Scott-Clayton, J. (2011). *The shapeless river: Does a lack of structure inhibit students' progress at community colleges?* (CCRC Working Paper No. 25). Retrieved from Community College Research Center website:

https://ccrc.tc.columbia.edu/media/k2/attachments/shapeless-river.pdf

- Shaffer, C., Sohl, A., & Steele, J. S. (2016). Back to the future of financial aid: From the net price calculator to the upcoming prior-prior year shift. *College and University*, 91(3), 55– 64, 66.
- Smith, J. F., & Bowyer, K. (2016). Tennessee promise: Implementation and outcomes at two diverse colleges. *Planning for Higher Education*, 45(1), 180–193.
- Sohn, H., Rubenstein, R., Murchie, J., & Bifulco, R. (2017). Assessing the effects of place-based scholarships on urban revitalization: The case of say yes to education. *Educational Evaluation and Policy Analysis*, 39(2), 198–222.
- Sorey, K. C., & Duggan, M. H. (2008). Differential predictors of persistence between community college adult and traditional-aged students. *Community College Journal of Research and Practice*, 32(2), 75–100.
- Statewide Promise Status Update. (2019). Retrieved from: <u>https://collegepromise.org/news/april-</u> 24-2019-statewide-promise-status-update/
- Stevens, A., Kurlaender, M., & Grosz, M. (2015). Career and technical education and labor market outcomes: Evidence from California community colleges. (NBER Working Paper

No. 21137). Retrieved from Center for Poverty Research website:

https://poverty.ucdavis.edu/sites/main/files/file-attachments/w21137\_0.pdf

- Stockard, S. (2019). Workforce development: Facing a shortage of skilled labor. *Economic Development Journal*, 18(3), 45–50.
- Stuart, G. R., Rios-Aguilar, C., & Deil-Amen, R. (2014). "How much economic value does my credential have?": Reformulating Tinto's model to study students' persistence in community colleges. *Community College Review*, 42(4), 327–341.
- Surr, W. (2019). Student Advising: An Evidence-Based Practice. Midwest Comprehensive Center. Retrieved from ERIC database. (ED599037)
- Swail, W. S., Redd, K. E., & Perna, L. W. (2003). Retaining Minority Students in Higher Education: A Framework for Success. ASHE-ERIC Higher Education Report, Vol. 30, No. 2. San Francisco, CA: Jossey-Bass.
- Swanger, D. (2016). Community colleges: Partners in community development. *Planning for Higher Education*, 45(1), 13–49. Retrieved from ProQuest Central Essentials. (1871513816)
- Swanson, E., Watson, A., Ritter, G., & Nichols, M. (2017). Promises fulfilled? A systematic review of the impacts of Promise programs. (EDRE Working Paper No. 2016-16). Retrieved from htts://ssrn.com/abstract=2849194
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Applied Social Research Methods Series, vol. 46. Thousand Oaks, CA: Sage Publications.
- The National Center for Higher Education Management Systems (2020). *Finance: Diagram*. Retrieved from http://www.higheredinfo.org/catcontent/cat8.php

- The White House, Office of the Press Secretary. (2015). White House unveils America's College Promise proposal: Tuition-free community college for responsible students. [Fact sheet]. Retrieved from <u>https://obamawhitehouse.archives.gov/the-press-office/2015/01/09/fact-sheet-white-house-unveils-america-s-college-promise-proposal-tuitio</u>
- Tidwell, K. (2018). Investigating predictive factors for online college coursework success among high school students (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses database (10838510).
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, *45*(1), 89–125.
- Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition. (2nd ed.).Chicago, IL: University of Chicago Press.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of Higher Education, 67,* 599-623.
- Tinto, V. (1999). Taking retention seriously: Rethinking the first year of college. *NACADA* Journal, 19(2), 5–9.
- U.S. Department of Education & Office of the Under Secretary. (2016). *America's College Promise Playbook.* Washington, D. C. Retrieved from https://www2.ed.gov/documents/press-releases/college-promise-playbook.pdf
- U.S. Department of Labor, Bureau of Labor Statistics. (2019). *Employment projections*. Last modified September 4, 2019. Retrieved from <u>https://www.bls.gov/emp/chart-unemployment-earnings-education.htm</u>
- Van Noy, M., Trimble, M., Jenkins, D., Barnett, E., & Wachen, J. (2016). Guided pathways to careers. *Community College Review*, 44(4), 263–285.

- Vaughan, G. B., (1985). *The Community College in America: A Short History. Revised.*Washington DC: American Association of Community and Junior Colleges. Retrieved from ERIC database. (ED255267)
- Weissman, E., & O'Connell, J. (2016). Aid like a paycheck: Engaging with policymakers and practitioners to evaluate and improve financial aid. Society for Research on Educational Effectiveness. Retrieved from ERIC database. (ED567207)
- Windham, M. H., Rehfuss, M. C., Williams, C. R., Pugh, J. V., & Tincher-Ladner, L. (2014). Retention of first-year community college students. *Community College Journal of Research and Practice*, 38(5), 466–477.
- Witteveen, D., & Attewell, P. (2017). The college completion puzzle: A Hidden Markov model Approach. *Research in Higher Education*, 58(4), 449–467. Retrieved from ERIC database. (EJ1138403)
- Wray, J., Aspland, J., & Barrett, D. (2014). Choosing to stay: looking at retention from a different perspective. *Studies in Higher Education*, 39(9), 1700–1714.
- Yu, H. (2015). Student retention at two-year community colleges: A structural equation modeling approach. *International Journal of Continuing Education & Lifelong Learning*, 8(1), 85–101.

# Appendix A

# National Institutes of Health (NIH) Certificate of Completion



### **Appendix B**

### **Email Recruitment Letter**

Date

Dear Participant

My name is Michael Rohlena, and I am a Doctoral Student at Northwest Nazarene University. I am conducting a research study for my dissertation titled "Academic and Social Integration in America's College Promise Scholarship Programs." This research has been approved by the Human Research Review Committee at Northwest Nazarene University. The purpose of this email is to solicit your support and participation.

This study will explore the impact the academic and social integration activities in the Promise Scholarships have on retention at the community colleges. It will gather information from scholarship recipients to help determine the benefits to the program, and to determine the processes and procedures that help make the program successful.

If you are willing to participate, please click on the link below and take the survey. This survey includes 10 demographic questions, 31 Likert scale questions, and 12 open-ended questions. It will take you approximately 15 minutes to complete. By clicking on the link below you consent to participate in the study. You may skip any questions you do not wish to answer and you may withdraw from this study at any time. At the end of the survey, you will be asked if you wish to participate in an interview to share more information. Participation in both the survey and interview is completely voluntary.

By participating in this study, there are no known risks. It is not possible to identify all potential risks in research procedures, but the researcher have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

If you have questions or concerns about participation in this study, you should first talk with the researcher. Michael Rohlena can be contacted via email at mrohlena@nnu.edu, or via telephone at 712-898-5538. You may also contact Dr. Eric Studebaker at ericjamesstudebaker@gmail.com, or via telephone at 208-404-1532.

Please click here to access the survey: http://nnu.co1.qualtrics.com/jfe/form/SV\_81efzROpNvB7JFX

Sincerely,

Michael Rohlena, PhDc, MFA Northwest Nazarene University <u>mrohlena@nnu.edu</u> 712-898-5538

### Appendix C

## **Online Survey Questions**

Please choose the appropriate response for the following items:

- 1. What is your gender?
  - a. Male
  - b. Female
  - c. Prefer not to answer
- 2. What is your age?
  - a. 18-24 years old
  - b. 25-34 years old
  - c. 35-44 years old
  - d. 45-54 years old
  - e. Over 55
- 3. What college are you attending, or did you attend?
  - a. Fox Valley Technical College
  - b. Madison Area Technical College
  - c. Lakeshore Technical College
  - d. Moraine Park Technical College
- 4. What year did you start at this college:
  - a. 2016
  - b. 2017
  - c. 2018
  - d. 2019
- 5. Are you currently enrolled in classes?
  - a. Yes, I am currently enrolled.
  - b. No, I completed an Associate's degree.
  - c. No, I completed a diploma and am no longer enrolled.
  - d. No, I am not currently enrolled due to life circumstances.
    - i. Please explain why you are no longer enrolled in classes.
- 6. What is your race/ethnicity?
  - a. African-American
  - b. Asian/Pacific Islander
  - c. Caucasian
  - d. Native American
  - e. Spanish/Hispanic
  - f. Other
  - g. Prefer not to answer
- 7. Do you have a job outside of college?
  - a. Yes, I work full-time (40+ hours a week)
  - b. Yes, I work part-time (less than 40 hours a week)
  - c. No
  - d. No, put I am employed at the college. (work-study)
- 8. What is your approximate Grade Point Average (GPA) in college?

- a. A-4.0
- b. B-3.0
- c. C 2.0
- d. D 1.0
- e. F below 1.0
- f. Unknown or just started college
- 9. Would you characterize yourself as a first-generation college student, meaning that your parents did not attend college?
  - a. Yes
  - b. No
- 10. Are you receiving need-based financial aid?
  - a. Yes
  - b. No
  - c. Unknown

For each of the following statements, please choose the answer that best indicates the extent of your agreement or disagreement as it describes your personal experience at this community college.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

- 1. I have developed close personal relationships with other students.
- 2. My non-classroom interactions with faculty have had a positive influence on my personal growth, values, and attitudes.
- 3. Many of the faculty members I have had contact with are generally interested in students.
- 4. I am satisfied with the extent of my intellectual development since enrolling in this community college.
- 5. I am confident that I made the right decision in choosing to attend this community college.
- 6. The student friendships I have developed have been personally satisfying.
- 7. My non-classroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas.
- 8. Many of the faculty members I have had contact with are generally outstanding or superior teachers.
- 9. My academic experience has had a positive influence on my intellectual growth.
- 10. It is likely that I will register for classes at this college next fall.
- 11. My interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values.
- 12. My non-classroom interactions with faculty have had a positive influence on my career goals and aspirations.
- 13. Many of the faculty members are willing to spend time outside of class to discuss issues of interest and importance to students.
- 14. I am satisfied with my academic experience.
- 15. It is important that I graduate from college.

- 16. My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas.
- 17. I have developed a close, personal relationship with at least one faculty member.
- 18. Most of the faculty members are interested in helping students grow in more than just academic areas.
- 19. Many of my courses have been intellectually stimulating
- 20. I have an idea of what I want to major in.
- 21. It has been easy for me to meet and make friends with other students.
- 22. I am satisfied with the opportunities to meet and interact informally with faculty members.
- 23. Most faculty members are genuinely interested in teaching.
- 24. My interest in ideas and intellectual matters has increased since coming to this community college.
- 25. Getting good grades is important to me.
- 26. Many of the students I know would be willing to listen to me and help me if I had a personal problem.
- 27. I am more likely to attend a cultural event (i.e., concert, lecture, art show) now than I was before coming to this community college.
- 28. It is important for me to graduate from this community college.
- 29. Most students at this university have values and attitudes similar to my own.
- 30. I am satisfied with the opportunities to participate in organized extracurricular activities at this community college.
- 31. I have performed academically as well as I anticipated I would.

Additional short answer questions: please fully answer the following items:

- 1. Why did you choose to come to this college?
- 2. What are you studying, or did you study?
- 3. What do you hope to do when you graduate?
- 4. What do you like best about this college?
- 5. What additional services (tutoring, advising, workshops) have you used?
- 6. What college sponsored activities (career fairs, movie nights) have you attended?
- 7. What is your impression of the college?
- 8. How do/did you spend your time outside of class?
- 9. Who do/did you spend it with?
- 10. What would you say has been your biggest challenge attending school?
- 11. Are you glad you chose to attend school at this college?
- 12. Is there anything additional you would like to add?

Would you be willing to participate in a focus group interview to further explain your answers? If so, please provide your email address

## **Appendix D**

# **Survey Reminder Email**

Date

Dear Participant

This is a reminder email to complete the online survey that was sent to you two weeks ago. Once again this survey is for my dissertation titled "Academic and Social Integration in America's College Promise Scholarship Programs." This study will explore the impact the Promise Scholarships have on retention at the community colleges, specifically related to the various academic and social requirements of the program. It will gather information from scholarship recipients to help determine the benefits of the program.

If you have already completed the survey, please disregard this email. If you have not completed it and are willing to participate, please click on the link below and take the survey. It will take you approximately 15 minutes to complete. By clicking on the link below you consent to participate in the study. You may skip any questions you do not wish to answer and you may withdraw from this study at any time. At the end of the survey, you will be asked if you wish to participate in an interview to share more information. Participation in both the survey and interview is completely voluntary.

By participating in this study, there are no known risks. It is not possible to identify all potential risks in research procedures, but the researcher have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

Once again, if you have questions or concerns about participation in this study, you should first talk with the researcher. Michael Rohlena can be contacted via email at <u>mrohlena@nnu.edu</u>, or via telephone at 712-898-5538. You may also contact Dr. Eric Studebaker at <u>ericjamesstudebaker@gmail.com</u>, or via telephone at 208-404-1532.

Please click here to access the survey: http://nnu.co1.qualtrics.com/jfe/form/SV\_81efzROpNvB7JFX

Sincerely,

Michael Rohlena, PhDc, MFA

Northwest Nazarene University

mrohlena@nnu.edu

712-898-5538

# Appendix E

### **Additional Information Request Letter - Interview**

Dear Student,

I apologize that I was not able to schedule a time that worked in everyone's schedule to conduct a focus group discussion for my dissertation research. In order to maintain the integrity of my research, I am looking to gather additional information through separate phone interviews.

The purpose of this email is to solicit your support and participation in obtaining additional data for my dissertation research. I am looking to conduct the phone interviews during the week of December 9-15, and to schedule them at convenient times for the participants. The discussion will take approximately 20-30 minutes.

If you had completed my previous survey "Academic and Social Integration in America's College Promise Scholarship Programs" and would like to be considered to participate in a phone interview, please contact me via email at <u>mrohlena@nnu.edu</u>, or via telephone at 712-898-5538. Participants that are selected will be given a \$10 gift card after the interview as a token of appreciation.

Thank you for your consideration.

Sincerely,

Michael Rohlena, PhDc, MFA

Northwest Nazarene University

mrohlena@nnu.edu

712-898-5538

# Appendix F

## **Interview Informed Consent**

Participant's name (Please Print):

I authorize Michael Rohlena of the Education Department, Northwest Nazarene University, Nampa, Idaho, and/or any designated research assistants to gather information from me on the topic of academic and social integration in America's Promise scholarship programs.

I understand that the general purposes of the research are to explore the impact academic and social integration activities required in the Promise Scholarships have on retention at community colleges, that I will be asked to participate in an online survey, and potentially take part in an interview (in person, by phone, or electronically). I understand that the approximate total time of my involvement will be around thirty minutes for the survey and around one hour for the interview.

I am aware that I may choose not to answer any questions that I find embarrassing or offensive.

I understand that my participation is voluntary and that I may refuse to participate or discontinue my participation at any time without penalty or loss of benefits to which I am otherwise entitled.

I understand that if, after my participation, I experience any undue anxiety or stress or have questions about the research or my rights as a participant, that may have been provoked by the experience, (name of researcher) will be available for consultation, and will also be available to provide direction regarding medical assistance in the unlikely event of injury incurred during participation in the research.

Confidentiality of research results will be maintained by the researcher. My individual results will not be released without my written consent.

There are no direct benefits to you for participating in the study. However, the information you provide may help aid policymakers on the development of future Promise scholarship programs and modifications of existing ones.

If you have questions or concerns about participation in this study, you should first talk with the researcher. Michael Rohlena can be contacted via email at mrohlena@nnu.edu, or via telephone at 712-898-5538. You may also contact Dr. Eric Studebaker at <u>ericjamesstudebaker@gmail.com</u>, or via telephone at 208-404-1532.

I give my consent to participate in this study:

Signature of Study Participant

I give my consent for the interview and discussion to be audio taped in this study:

# Signature of Study Participant

I give my consent for direct quotes to be used in this study:

**Signature of Study Participant** 

Signature of Participant

Date

Date

Date

# Appendix G

# **Interview Instructions**

Hi\_\_\_\_\_!

Thank you for your willingness to participate in this study.

# Semi-Structured, Audio-Recorded Interviews

A semi-structured, audio-recorded interview will be conducted with each participant. These procedures will be completed by phone at a convenient time and will take a total of about 15-20 minutes.

I will be conducting the interview on <date> at <time> at <location>. This process is completely voluntary and you can select to suspend your involvement at any time. You can select to answer questions that are of comfort to you and not obligated to answer all of the questions.

Please, find the attached interview questions. If you have any questions, please do not hesitate to call me or contact me via email. I look forward to our discussion and to learn about your college experiences.

Thank you for your participation.

Michael Rohlena, PhDc, MFA Northwest Nazarene University <u>mrohlena@nnu.edu</u> 712-898-5538

## Appendix H

### **Interview Protocol/Questions**

Project: Academic and Social Integration in America's College Promise Scholarship Programs

Date and Time: Interviewer: M. Rohlena Participant:

Description of the research proposal. Introduction of the researcher.

Have the participants read and sign the consent forms Turn on tape recorder and test it.

Questions:

- 1. Why did you choose to come to <insert name of community college>?
  - a. What are you studying?
  - b. What do you hope to do when you graduate?
- 2. How did you hear about the Promise scholarship program?
- 3. Can you tell me the requirements for you to keep the scholarship?
  - a. Have you participated in these requirements so far?
  - b. If so, please tell me more.
  - c. If not, when do you plan on doing so?
- 4. What college sponsored activities (career fairs, movie nights) have you attended?
  - a. Can you tell me about them?
  - b. Who do you go with?
  - c. How often do you go?
  - d. If you haven't attended any, why not? And do you plan to?
- 5. What academic services have you utilized? (Tutoring, study session, instructor lead study groups, etc.)
  - a. Can you tell me about them?
  - b. Who do you go with?
  - c. How often do you go?
  - d. If you haven't attended any, why not? And do you plan to?
- 6. How would you describe your instructors?
  - a. Name three characteristics that would describe instructors at <insert name of community college >.
- 7. How would you describe <insert name of community college > to someone who wants to attend?

- a. Name three characteristics that would describe <insert name of community college >.
- 8. What would you say is your biggest challenge while attending school?
- 9. Of all the things we discussed today, what do you think is most important?
- 10. Is there anything else you wish to share today?
  - a. About the Promise scholarship program?
  - b. About <insert name of community college> in general.

Thank the participant and assure them of confidentiality.

#### **Appendix I**

#### **Member Checking Email**

Date

Dear---

Thank you for your participation in the study this past semester. I wanted to let you know some of the themes that resulted from the interviews of all participants (see below). Please let me know if these accurately depicted our conversation. If you have any suggestions or modifications, please let me know as well.

Faculty relationships Friendly Helpful Relatable Understanding/Compassion Quality faculty Amazing Instructors Knowledgeable Passionate Respect Students Benefit of Promise scholarship program Focus on Education Opportunity/Gift Relieve Monetary Stress

Thank you again for your help and I look forward to hearing from you.

Michael Rohlena, PhDc, MFA Northwest Nazarene University <u>mrohlena@nnu.edu</u> 712-898-5538

# Appendix J

# **NNU IRB Approval Letter**

New Message

From: Northwest Nazarene University To: Michael Rohlena Subject: RE: [Northwest Nazarene University] 4022019 - Academic and Social Integration in America's College Promise Programs Dear Michael,

The IRB has reviewed your protocol: 4022019 - Academic and Social Integration in America's College Promise Programs. You received "Full Approval". Congratulations, you may begin your research. If you have any questions, let me know.

Northwest Nazarene University Kimberly Lowe IRB Member 623 S University Blvd Nampa, ID 83686Show Less

S Reply

4 days ago

# Appendix K

# IRB Approval – A Community College

Exempt Review Form Page 1			
7 1261 2019 Date Submitted	Institutional Review	Board	
Exempt R	esearch Approval	<b>Request Form</b>	
Academic and Social Integration	in America's Promise	Programs (Doctoral	Dissertation)
Michael Rohlena Northwes Principal Investigator/Project Director	t Nazarene University Department	712-898-5538 m Phone	nrohlena@nnu.edu Email address
Co-investigator/Student Investigator	Department	Phone Extension	Email address
-	., 2020 months Pr	ojected Starting Date: ojected Completion ite:	August, 2019 May, 2020
Other organizations and/or agencies, i study:	f any, involved in the		
Exempt under code (see definitions on J	page two- check one) 1	2 2 3 0 4	5 6
Has the researcher contacted the leadershi will be the focus of the research study and Comments: <u>Researcher has received appro</u>	received annound to con	rector) of the area when host the proposed resear a VP of Studer	ch? Yes No
Has the IRB of the researcher's institution protection of human subjects? Yes Nazarene University IR			earch including oval from the Northwest
Does the research activity interrupt the tea	ching/learning/working en	vironment of the college	e to any extent?
SUMMARY ABSTRACT: Please suppl the location(s) of the project, the procedur anonymous, disposition of the data, who w and/or the measures (questionnaires) to be	res to be used for data colle will have access to the data	ction, whether data will	be confidential or
RESPONSIBILITIES OF THE PRINC • Any additions or changes in procedur to these changes being implemented	res in the protocol will be s	ubmitted to the IRB for	
<ul> <li>Any problems connected with the use the IRB Chair</li> </ul>	of human subjects once the	e project has begun mus	st be communicated to
<ul> <li>The principal investigator is responsil after the project</li> </ul>		consent documents for a	period of three years
Principal Investigator Signature	Co-Investiga	ator/Student Signature (ii	f appropriate)
Signature of IRB Completee Chair:	PAN		Date: 7 /29/ 2019
IRB Chair: Check 1 box: Approved	d Approved with Con	ditions Refer to F	i uil Committee Review

# Appendix L

# IRB Approval – B Community College

Expedited Review Form Page 2			
8 112 1 19 Date Submitted	Institutional Review B	oard	IRB 880 I File Number
Expedie	ted Review of Res	earch Form	
Title of Research Project	Academic and Social In Programs (Doctoral Dir	ntegration in America's Cossertation)	ollege Promise
Principal Investigator/Project Director	Department Northwest	Phone Extension	Email address
Michael Rohlena	Nazarene University	712-898-5538	mrohlena@nnu.edu
Co-investigator/Student Investigator	Department	Phone Extension	Email address
Co-investigator/Student Investigator	Department	Phone Extension	Email address
Anticipated Funding Source:			
Projected Duration of Research:	4 months Pro	jected Starting Date:	July, 2019
Projected Duration of Research: Other organizations and/or agencies, if a Technical College, Moraine Park Techn	any, involved in the stud	_	July, 2019
Other organizations and/or agencies, if a	any, involved in the stud ical College	y:	
Other organizations and/or agencies, if a Technical College, Moraine Park Techn	any, involved in the stud ical College ries on page 1-checkone supply the followin e location(s) of the p be confidential or al <u>Attach conv</u> of the In	y: 2 3 4 C g information below roject, the procedur nonymous, dispositio	5 □ 6 □ 7 X BRIEF es to be used for on of the data,
Other organizations and/or agencies, if a Technical College, Moraine Park Techn Expedited Review Category (see categor SUMMARY ABSTRACT: Please description of the participants, th data collection, whether data will who will have access to the data. a measures (questionnaires) to be u RESPONSIBILITIES OF THE P • Any additions or changes in pro written approval prior to these c • Any problems connected with th	any, involved in the stud ical College ries on page 1-checkone e supply the following e location(s) of the p be confidential or at <u>Attach conv</u> of the In sed in the project. <b>RINCIPAL INVEST</b> cedures in the protoco hanges being implem he use of human subje	y: 2 3 4 c g information below roject, the procedur nonymous, disposition formed Consent For FIGATOR: bl will be submitted to ented	5 6 7 7
Other organizations and/or agencies, if a Technical College, Moraine Park Techn Expedited Review Category (see categor SUMMARY ABSTRACT: Please description of the participants, th data collection, whether data will who will have access to the data. , measures (questionnaires) to be u RESPONSIBILITIES OF THE P • Any additions or changes in pro written approval prior to these c	any, involved in the stud ical College ries on page 1-checkone; supply the following the location(s) of the p be confidential or at <u>Attach conv</u> of the In sed in the project. <b>RINCIPAL INVEST</b> cedures in the protoco hanges being implem he use of human subject	y: 2 3 4 c g information below roject, the procedur nonymous, disposition formed Consent For FIGATOR: bl will be submitted to ented exts once the project h	BRIEF es to be used for on of the data, rm and/or the the IRB for as begun must be
Other organizations and/or agencies, if a Technical College, Moraine Park Techn Expedited Review Category (see categor SUMMARY ABSTRACT: Please description of the participants, th data collection, whether data will who will have access to the data. <i>A</i> measures (questionnaires) to be u RESPONSIBILITIES OF THE P • Any additions or changes in pro written approval prior to these c • Any problems connected with th communicated to the IRB Chair • The principal investigator is responded of these years after the pr	any, involved in the stud ical College ries on page 1-checkone e supply the following e location(s) of the p be confidential or at <u>Attach conv</u> of the In sed in the project. <b>RINCIPAL INVEST</b> cedures in the protoco hanges being implem he use of human subject ponsible for retaining roject.	y: 2 3 4 c g information below roject, the procedur nonymous, disposition formed Consent For FIGATOR: bl will be submitted to ented exts once the project h	S □ 6 □ 7 X BRIEF es to be used for on of the data, rm and/or the the IRB for as begun must be cuments for a
Other organizations and/or agencies, if a Technical College, Moraine Park Techni Expedited Review Category (see categor SUMMARY ABSTRACT: Please description of the participants, th data collection, whether data will who will have access to the data. <i>J</i> measures (questionnaires) to be u RESPONSIBILITIES OF THE P • Any additions or changes in pro written approval prior to these c • Any problems connected with th communicated to the IRB Chair • The principal investigator is responded of three years after the pro-	any, involved in the stud ical College ries on page 1-checkone e supply the following e location(s) of the p be confidential or at <u>Attach conv</u> of the In sed in the project. <b>RINCIPAL INVEST</b> cedures in the protoco hanges being implem he use of human subject ponsible for retaining roject.	y: 2 3 4 5 g information below roject, the procedur nonymous, disposition formed Consent For FIGATOR: of will be submitted to ented tots once the project h informed consent door pr/Student Signature (if app	5 G 6 7 X BRIEF es to be used for on of the data, rm and/or the the IRB for as begun must be cuments for a

#### Appendix M

#### IRB Approval – C Community College

INSTITUTIONAL REVIEW BOARD
October, 8th 2019
Protocol #: MTCPIRB 20191008-1
Project Title: Academic and Social Integration in America's Promise Programs
Dear Michael Rohlena
Thank you for submitting your application for exemption to the <b>Constitution</b> Institutional Review Board (MPTC IRB). The IRB appreciates your work in completing the proposal. Your proposal was evaluated in light of the federal regulations that govern the protection of human subjects.
Specifically, 45 CFR 46.101(b) (2) identifies studies that are exempt from IRB review, including: Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey

Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

The IRB has determined that your proposed project employs surveys that pose no more than minimal risk to the participants. The information will be obtained in such a way that one's responses will not be linked to one's identity or identifying information. Moreover, accidental disclosure of the participants' responses would not have the potential to harm to the person's reputation, employability, financial status, or legal standing. For these reasons, the MPTC IRB has determined that your proposed study is exempt from further IRB review.

Even though your project is exempt from IRB review, the research must be conducted according to the proposal submitted to the MPTC IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For *any* proposed changes in your research protocol, please submit a Request for Modification form to the MPTC IRB. Please be aware that changes to the research protocol may prevent the research from qualifying for exempt review and require submission of a new IRB application or other materials to the MPTC IRB.

#### 157



A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the MPTC IRB as soon as possible. If notified, we will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact me.

Sincerely,



President

## Appendix N

## **Data Request Emails**

Good morning,

Thank you for your assistance in sending my research survey to students. Please let me know what the best way to receive the data requested in the attached spreadsheet regarding the students at <insert community college>.

If you have any questions, please let me know, -Michael-

Hello,

I am just following up regarding my data request for institutional and Promise student data. If you need further clarification on the request, please let me know.

Thank you for your help, -Michael-

# Appendix O

# Institutional Data Request Spreadsheet

		Acader	nic Year							
	2016-2017			2017-2018			2018-2019		2019-2020	
	Institution	Retention	2-year	3-year	Institution	Retention	2-year	Institution	Retention	Institution
	Data	(fall to fall)	Completion	Completion	Data	(fall to fall)	Completion	Data	(fall to fall)	Data
Institutional Data										
Total Student Population										
Enrollment Status										
Full-Time										
Part-Time										
Gender										
Female										
Male										
Age Range										
18-24										
25-34										
35-44										
45-54										
over 55										
Race/Ethnicity										
African-American										
Asian/Pacific Islander										
Caucasian										
Native American										
Spanish/Hispanic										
Other										
Pell Eligibility										
Promise Recipient Data										
Promise Students										
Institution excluding Promise Students										
Enrollment Status										
Full-Time										
Part-Time										
Gender										
Female										
Male										
Age Range										
18-24 25-34										
35-44										
43-34 over 55										
Race/Ethnicity										
African-American										
Asian/Pacific Islander										
Asian/Pacific Islander Caucasian										
Native American										
Spanish/Hispanic										
Other										
Pell Eligibility										
Fell Eligibility										