

ASSESSING THE EFFECTIVENESS OF A COMPREHENSIVE
RETENTION IMPROVEMENT INITIATIVE:
STUDYING THE SUCCESS PROGRAM

by

Sandra Jean Bauman

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

Doctor of Education

in

Adult and Higher Education

MONTANA STATE UNIVERSITY
Bozeman, Montana

November 2017

©COPYRIGHT

by

Sandra Jean Bauman

2017

All Rights Reserved

DEDICATION

For my family. Thank you for all the support and patience.

For the students of Great Falls College; the inspiration for this work.

ACKNOWLEDGMENTS

I have several groups of people to thank for their guidance, support, and help. I could not have completed this project without the assistance of each of them.

First, I would like to thank my dissertation committee: Dr. Tricia Seifert, Dr. Carrie Myers, Dr. Bryce Hughes, and Dr. Sweeney Windchief. Your expertise and direction has helped me reach a new level understanding in my field. I am better able to serve my students and my college thanks to your guidance.

Next, I acknowledge my classmates – Eleazar, Elfie, and Leanne. I am so glad we embarked on this adventure together. Thank you to each of you for the ideas, writing tips, and pep talks. We did it!

Thanks also to the students, faculty, and staff at Great Falls College who gave freely of their time and thoughts and made this project an authentic work and valuable tool for the college.

Last, and certainly not least, thank you to Darrell, Hannah, and Olivia; my personal support system. The proofreading, the middle of the night cookies, and the reminders about how hard work pays off made all the difference.

TABLE OF CONTENTS

1. INTRODUCTION	1
Background and Statement of Problem.....	1
Purpose of Study	7
Guiding Research Questions	8
Conceptual Framework	8
Conceptual Model.....	10
Theoretical Framework.....	11
Learning Communities.....	14
Study Skills/Student Success Course.....	14
Accelerated Courses.....	14
Mandatory Tutoring.....	14
Skills Workshops	15
Intrusive Academic Advising	15
Research Design	15
Participants	16
Definitions	17
Assumptions	18
Limitations.....	18
Significance of the Study	19
Chapter Summary	20
2. REVIEW OF THE LITERATURE	22
Introduction	22
Reasons for Student Departure.....	23
Precollege Student Characteristics.....	24
Sociodemographic Characteristics.....	24
Student Disposition.....	26
Organizational Context	28
Individual Student Experiences	30
Theoretical Understanding of Student Retention	30
Engagement.....	31
Educationally Effective Practices	33
Existing Initiatives.....	36
Learning Communities.....	37
Tutoring.....	39
Accelerated Coursework.....	40
Academic Advising.....	41
First-year Experience/Academic Success Course.....	43

TABLE OF CONTENTS CONTINUED

Skills Workshops	45
Comprehensive Programs	46
Chapter Summary	49
3. METHODS	51
Introduction	51
Research Design	52
Qualitative Approach	52
Bounded Context of the Case	53
Learning Communities.....	54
Study Skills/Student Success Course.....	54
Accelerated Courses.....	54
Mandatory Tutoring.....	54
Skills Workshops	55
Intrusive Academic Advising	55
Participants.....	55
Role of the Researcher	57
Data Collection.....	59
Focus Groups	61
Interviews.....	62
Document Review.....	63
Observations	66
Data Analysis	67
Coding and Exploration of Themes	67
Organizational Categorization	68
Substantive Coding	69
Cross-unit Comparison	74
Quantitative Results	75
Trustworthiness	77
Limitations.....	79
Chapter Summary.....	80
4. RESULTS	81
Introduction	81
Analytic Approach and Themes	82
Results	83
Students.....	83
Organizational Categorization	84
Substantive Themes	84
Benefits	84

TABLE OF CONTENTS CONTINUED

Challenges.....	87
Recommendations for Improvement.....	88
Reasons for Leaving	89
Reasons for Staying	90
Summary of Substantive Themes	91
Faculty.....	92
Organizational Categorization	92
Substantive Themes	93
Benefits	93
Challenges.....	95
Recommendations for Improvement.....	97
Reasons for Leaving	99
Reasons for Staying	100
Summary of Substantive Themes	100
Staff.....	101
Organizational Categorization	101
Substantive Themes	102
Benefits	102
Challenges.....	103
Recommendations for Improvement.....	104
Reasons for Leaving	105
Reasons for Staying	105
Summary of Substantive Themes	106
Administration	106
Organizational Categorization	106
Substantive Coding	107
Benefits	107
Challenges.....	108
Recommendations for Improvement.....	110
Reasons for Leaving	111
Summary of Substantive Themes	112
Cross-unit Analysis.....	112
Benefits	114
Challenges.....	116
Recommendations for Improvement.....	118
Reasons for Leaving	121
Reasons for Staying	122
Relevant Quantitative Data	122
Chapter Summary.....	123
5. DISCUSSION	125

TABLE OF CONTENTS CONTINUED

Introduction	125
Revisiting the Conceptual Model.....	126
Discussion	132
Research Question 1	132
Research Question 2	136
Implications for Practice	138
Recommendation 1 – Continuation of Learning Community Structure	139
Recommendation 2 – Improve Scheduling Process.....	140
Recommendation 3 – Continuation of Eight-week Courses.....	141
Recommendation 4 – Improve Communication of Program Requirements	143
Recommendation 5 – Continue Collaborative Nature of Project Development.....	144
Limitations.....	145
Areas for Further Study.....	146
Chapter Summary	147
REFERENCES CITED.....	150
APPENDICES	163
APPENDIX A: Table of Specifications.....	164
APPENDIX B: Consent Form	167
APPENDIX C: Guiding Interview Questions.....	170

LIST OF TABLES

Table	Page
1. Participants in Study of SUCCESS Program	56
2. Data Collection Summary	60
3. Document Review Summary.....	64
4. Demonstrative Examples of Tag Revisions During Coding	69
5. Summary List of Observed Benefits	71
6. Summary List of Observed Challenges.....	72
7. Summary List of Observed Recommendations for Improvement.....	73
8. Summary List of Observed Reasons for Leaving	74
9. Summary List of Observed Reasons for Staying	74
10. Summary of Data Collection of Quantitative Data	77
11. Initial Broad Themes for Student Group.....	84
12. Initial Broad Themes for Faculty Group	92
13. Initial Broad Themes for Staff Group	102
14. Initial Broad Themes for Administration Group.....	106
15. Cross-unit Analysis Comparison of Substantive Themes	113

LIST OF FIGURES

Figure	Page
1. Conceptual Framework.....	9
2. Areas of Review.....	23
3. Document Review Protocol	65
4. Observation Protocol	67
5. Chart Used for Cross-Unit Analysis	75

ABSTRACT

The mission of the community college is to increase access to higher education for all students. Low retention and completion rates make achieving this mission difficult. This qualitative case study explored the Students Using Core Completion to Excel with Support Strategies (SUCCESS) program, a retention improvement initiative developed at a small, two-year college in Montana. The program was offered during the 2016-2017 academic year in a trial phase to determine which parts of the program were most effective. This research project sought to understand the program through the experience of the four major groups of participants: students, faculty, staff, and administration. From a pragmatic perspective, the goal was gaining understanding to inform efforts to modify and improve future versions of the program. Initial categorization of data examined the benefits, challenges, and recommendations for improvement of the program; as well as participants' thoughts on reasons for leaving or staying in school. Analysis showed that offering accelerated courses, scheduling courses in an efficient manner, and providing a mechanism for students to form relationships were major benefits to participating in the program. Faculty, staff, and administration also saw the value of the process as an opportunity to try new things and to develop relationships with peers across campus. Communication and lack of developed policies were highlighted as the biggest challenges, but were also offered with specific recommendations as areas for improvement.

CHAPTER ONE: INTRODUCTION

Background and Statement of Problem

Since the Great Recession, America's job landscape has changed dramatically which has increased the demand for our citizens to hold some type of postsecondary credential; however, working adults and people from low socioeconomic backgrounds have less opportunity for this type of training (Lumina Foundation, 2016). As an institutional type, the community college is the champion of the Access Agenda "opening the door to higher education for students who never dreamed of going to college" (O'Banion, 2013, p. 1). In Montana, 32,473 students were enrolled in postsecondary education during the 2014-2015 academic year, and of that number, 10,445 were enrolled in two-year institutions (Montana University System, 2015). Census data from 2014 show nationally 45.3% of the population have earned some type of postsecondary credential, while in Montana this figure is only 41.6% of citizens (Lumina Foundation, 2016). With the mission statement of "To Educate and Inspire You" (Great Falls College MSU, 2016), Great Falls College MSU (GFC) is working to increase the percentage of people with a postsecondary credential for the Northcentral region of Montana. In order to fulfill this mission, it is important for the college to find means of assisting students to reach the goal of graduation or transfer to a four-year institution; however, low retention and completion rates demonstrate the college is falling short of fulfilling its mission. Published statistics show 47% of first-time students return for the second year of classes, but only 39% graduate or transfer to another institute to continue their education without

a gap in enrollment – 20% graduate, 19% transfer - within three years for first-time, full-time students (Great Falls College MSU, 2017). Although the college's mission is admirable, these low rates of retention and completion must be addressed in order to realize its goal of increasing the population of area residents with postsecondary credentials.

The population served is mainly comprised of students that are at higher risk of not completing their education. Information taken from the 2014-2015 Report to the Community shows 70% are working at least part-time, 37% are first-generation college students, 36% are raising children, and the average student age is 29 (Great Falls College MSU, 2015). Additionally, consumer information shows 65% of full-time students receive a federal Pell Grant (Great Falls College MSU, 2017), indicating low socio-economic status. These data demonstrate why completion is such a concern for GFC. "Reality No. 1: Most students leave school because they are working to support themselves and going to school at the same time. At some point, the stress of work and study just becomes too much" (Johnson & Rochkind, 2009, p. 5). Responses on the Community College Survey of Student Engagement indicate that for almost half of students, financial concerns are an issue that could force them to withdraw from college (Center for Community College Student Engagement, 2017). Working at least part-time creates stress for students and causes them to be less involved with other students and faculty (Engle, 2007; Mehta, Newbold, & O'Rourke, 2011). First-generation students are at a disadvantage because parents are often unable to explain the expectations or processes involved in attending college, and they are more likely to be less academically

prepared (Bui, 2002; Engle, 2007; Renn & Reason, 2013; Stephens, Hamedani, & Destin, 2014). Food and housing insecurity are more common for students who are raising children (Goldrick-Rab, Richardson, & Hernandez, 2017), creating additional issues that detract from the ability to complete a college degree.

As a means of addressing the low retention rates of students, GFC piloted a retention improvement program for the 2016-2017 academic year which incorporated several best practices from the literature. This project has been named the Students Using Core Completion to Excel with Support Strategies (SUCCESS) program. The program was offered to academically underprepared students not eligible to enroll in college level math based on placement scores. There was a cohort of 15 students that formed a learning community and took all of their courses together. In addition to the learning community model, students enrolled in accelerated courses, attended mandatory skills workshops and biweekly advising appointments, took a college success course, and participated in both mandatory tutoring sessions as well as courses with embedded tutors. Students were expected to enroll in 17-18 credits each semester, and be on campus five days per week.

Although the research demonstrates the practices included in the SUCCESS Program are effective in improving student retention and completion (Kuh, Kinzie, Schuh, & Whitt, 2005; Mayhew, Rockenbach, Bowman, Seifert, & Wolniak, 2016; Pascarella & Terenzini, 2005), offering these services presents challenges at an institution with a small student population and limited resources. In a call to action concerning the

importance of redesigning the community college, the Center for Community College Student Engagement (2014) summarized these competing realities stating

With today's reality of growing demand for higher education, constrained budgets, and greater accountability, acting on such data is more important than ever. Colleges have to make difficult choices about time, money, and other resources. And every one of those decisions should be guided by a single question: What action will help the most students succeed? (p. 2).

This is not a localized issue. GFC has low graduation and retention rates on par with national rates. Data from the National Center for Education Statistics (2015) show 60% of students at two-year institutions return for the second year of classes, but only 29% graduate within three years, and according to O'Banion (2013), 14% do not complete any credits in their first semester. CCSSE data gathered from community colleges around the country show risk factors to persistence and graduation are

- being academically underprepared,
- not entering college directly after high school,
- attending part time,
- caring for children in the home and/or being a single-parent,
- being financially independent rather than a dependent of parents,
- working more than 30 hours per week, and
- being a first-generation college student (Kuh, 2007, p. 40).

Compounding the problem of low graduation and retention rates is the high rate of students in developmental education courses. US Department of Education data show

42% of first year students enrolled in a community college are in at least one remedial or developmental course, and only 28% of students in remedial courses will obtain a credential within eight and half years of beginning coursework (Brock, 2010). Developmental math placement was found to have a negative impact on completion, even when controlling for academic ability (Bremer et al., 2013). Although this information highlights a real problem, research has shown successful completion of developmental education classes can help students succeed. A meta-analysis of California community college students showed that for those students who do complete the sequence of math remediation, the completion and transfer rates compare to those of students who started in college level math (Bahr, 2008b); however, the time involved in moving through multiple levels of developmental courses creates a barrier to completion (Bahr, 2010). A potential benefit of the current project is identifying a process through which students are successfully moved through developmental education courses at a pace that helps them persist to their goals.

In addition to the impact on college mission fulfillment, it is important to understand the financial considerations involved in low retention and completion rates. This problem affects students in two ways; reduced earnings and increased debt. “*More college means more income* has become the underlying rationale for attending college” (O’Banion, 2013, p. 7). There is a positive impact on occupational opportunities and earnings for students who complete an associate’s degree. In an extensive review of the literature, Mayhew et al. (2016) found that “associate’s and vocational degrees appear to generate 3 to 7% higher earnings” (p. 433). A comparison of two-year college students

found that those who complete an associate's degree earn 9% more than those who do not finish (Light & Strayer, 2004). A 2017 review of labor markets showed the difference to be an average career net financial gain of \$82,180 (Belfield & Bailey, 2017). Students who drop out of college are not only earning less, but they are often also in debt and required to pay back student loans. A 2005 study published by the US Department of Education found student loan borrowers at two-year colleges who dropped out were much more likely to be unemployed, and had a median salary of nearly \$9000 less per year than those who graduated (Gladieux & Perna, 2005). These students also had a 25% rate of default on student loans as compared to only 6% of those who completed (Gladieux & Perna, 2005).

The economic and social benefits of improving postsecondary education completion go beyond the students. A joint report from corporate CEOs and college presidents shows 75% of business leaders believe "improving postsecondary completion will have an extremely or very positive impact on the U.S. economy and workforce productivity" (Bridgeland, Milano, & Rosenblum, 2011, p.4). The United States Department of Education reported government benefits from increased education in the form of higher tax revenues (O'Banion, 2013). Census bureau data show areas of job growth increasingly require postsecondary training (Carnevale, Smith, & Strohl, 2013). In the time period from 1989 to 2012, there has been a 41% increase in jobs that require an associate's and an 82% increase in those requiring a bachelor's degree, while in the same period, a 14% decline in jobs for those with a high school education. These statistics reinforce the societal need for a trained workforce. As stated by Price and Tovar

(2014, p. 767) “the bottom line is that employers need workers with college credentials, and college credentials yield higher earnings for people who attain them.”

For the college, there is a significant financial impact based on retention and graduation rates. Montana has recently implemented a performance-based funding model for public institutions. Based on metrics used to fund two-year institutions, student retention rates and number of degrees awarded are two of the measurements used to award 8% of the college’s funding for the 2016-2017 year (Montana University System, 2016). In addition, traditional state funding, which continues to comprise 92% of the allocation, is based on full-time equivalency numbers (FTE) of enrolled students, which is directly tied to retention.

Purpose of Study

The purpose of this qualitative case study was to understand the experience of implementing and participating in the SUCCESS Program. From a pragmatic perspective, the goal was that the results will inform efforts to modify and improve future versions of the program. The qualitative case study methodology was created to gain a deep understanding of the SUCCESS project through the perceptions and interpretations of the campus stakeholders and participants to glean information on how best to address the issue of low retention rates while best meeting the needs of the specific population. The college recognizes the importance of evaluation and improvement of processes in order to best serve the students. Writing about the importance of understanding which features of programs are effective, Hatch (2012) stated “In an era of dwindling resources

and increasing demand for higher education access and student success, this understanding is critical for utilizing scarce resources and developing programs with the most impact” (p. 903). Offering this program in a pilot phase while this in-depth analysis is conducted allows for the SUCCESS Program to be made better through understanding the experience of the participants. It is imperative to complete this work to make best use of resources in ways that have the most impact on student success.

Guiding Research Questions

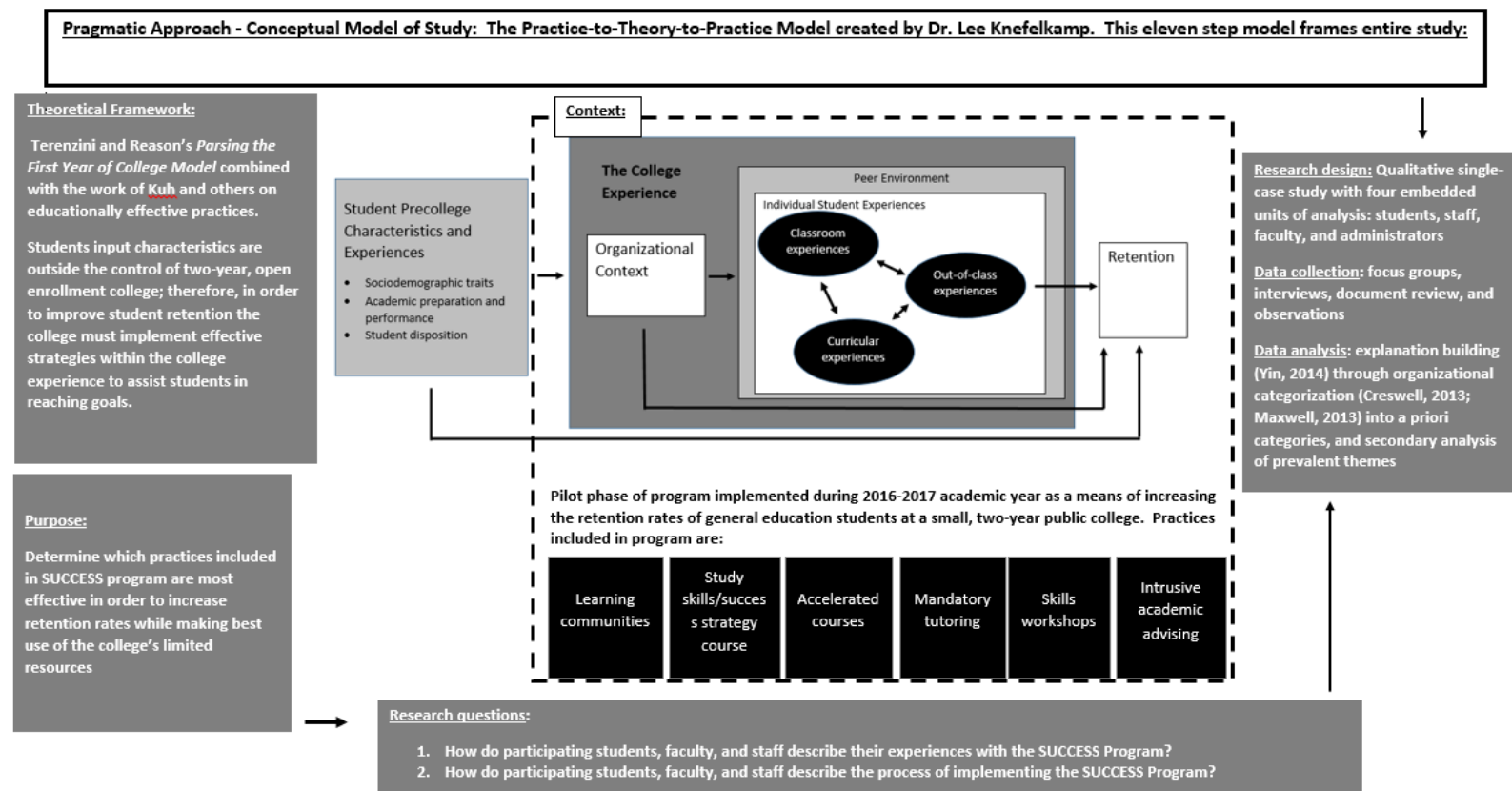
There were two questions guiding this qualitative case study:

1. How do participating students, faculty, and staff describe their experiences with the SUCCESS Program?
2. How do participating students, faculty, and staff describe the process of implementing the SUCCESS Program?

Conceptual Framework

The conceptual framework is “the overarching argument for the work – both why it is worth doing and how it should be done” (Ravitch & Riggan, 2017, p. 8). For this study, the conceptual model guides the selection of the methodology, and the theoretical framework guides evaluation of the case under investigation and the development of the research questions. The context and the methods are logically drawn from both. Figure 1 presents this framework graphically as a preview for the written description.

Figure 1. Conceptual Framework. The conceptual model that guides the study is the Practice-to-Theory-to-Practice model (Evans, Forney, Guido, Patton, & Renn, 2010) which provides a structure for linking the theoretical framework to the context, research design, and research questions. Terenzini and Reason's Parsing the First Year of College Model (Reason, 2009; Renn & Reason, 2013) combined the work of Kuh et al. (2005; 2007) on educationally effective practices creates the theoretical framework. This explains that students' input characteristics are outside the control of two-year, open enrollment colleges; therefore, in order to improve student persistence, the institutions must implement effective strategies within the college experience to assist students in reaching goals.



Conceptual Model

The conceptual model that guides all aspects of this study is the Practice-to-Theory-to-Practice (PTP) Model proposed by Dr. Lee Knefelkamp. This eleven step process model outlines a means for examining issues and potential solutions through a theoretical lens, and then studying the results of programs in a systematic way (Evans et al., 2010). Briefly stated, the eleven steps of the model are to

1. identify concerns or enhancement opportunities,
2. determine goals,
3. identify useful theory(ies) for understanding problems and solutions,
4. examine student characteristics in light of theory(ies),
5. analyze environment using theory(ies),
6. identify challenges and supports,
7. reexamine goals and modify if necessary,
8. design intervention,
9. implement,
10. evaluate outcomes, and
11. redesign as necessary.

These eleven steps serve to provide a means of formatting this study and forming the conceptual framework. The first two steps relate to the problem being addressed. The remaining nine steps focus the theoretical framework and the research design to be used.

Theoretical Framework

The theoretical framework for this work begins with the Parsing the First Year of College Model created by Terenzini and Reason in 2005 (Reason, 2009; Renn & Reason, 2013). This model expands on Alexander Astin's I-E-O model of college impact (1993) by further differentiating the components of the college experience by examining "the organizational context, the peer environment, and individual student experiences" (Renn & Reason, 2013, p. 187). This framework is helpful for understanding the importance of all of these areas as components of the SUCCESS program.

In addition to this model, as a means of focusing the research, is the work of John Braxton, George Kuh and others detailing best practices in higher education. Development of these best practices was informed by the work of Vincent Tinto (1987) surrounding student departure from college as a result of a lack of integration into the college experience (Braxton, 2000; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007; Renn & Reason, 2013). Another building block of these practices is the work of Bean and Eaton (2000) explaining that students' prior expectations and interactions with the college shape their attitudes while enrolled and, therefore, their decisions to stay or not (Kuh et al., 2007; Renn & Reason, 2013). This longtime work has led to Kuh's assertion that "institutions should seek ways to channel student energy toward educationally effective activities, especially for those who start college with two or more 'risk' factors" (2009, p. 688). Keeping the student population of GFC in mind, this effort is important for the college.

The college experience component of the theoretical framework creates the context for the study of the pilot program, which was developed based on these educationally effective practices. The specific practices of forming a learning community, requiring attendance at skills workshops, implementing biweekly advising appointments, condensing course length to eight weeks, mandating use of tutoring services, and requiring enrollment in a college success course were selected by the college for this program to fit the specific student population of GFC. “Student success indicators must broaden to take into account different types of students...” (Kuh et al., 2007, p. 9). Pascarella and Terenzini (2005) found support for each of these practices while conducting in-depth research on existing programs and literature for *How College Affects Students: A Third Decade of Research*.

Context

Because community college retention is such an important issue to address for a multitude of reasons, there are recommendations for practice by multiple organizations such as the Center for Community College Engagement, The Community College Research Center, and the Bill and Melinda Gates Foundation (O’Banion, 2013). The vast amount of information available coupled with the ambiguity of language used to described existing programs creates a challenge for developing specific guidelines (Hatch, 2016; Seifert, Bowman, Wolniak, Rockenbach, & Mayhew, 2017). The League for Innovation in the Community College has worked to produce a list of recommendations for program development that incorporates ideas from all of these

organizations, which leads to practical application (O'Banion, 2013). The SUCCESS program at GFC was created following these six guidelines:

1. Students will make a significant connection with another person at the college as soon as possible.
2. Key intake programs including orientation, assessment, advisement, and placement testing will be mandatory for students.
3. Students will be placed in a program of study from day one: undecided students will be placed in a mandatory program of study designed to help them decide.
4. Students will be carefully monitored throughout the college experience – especially in the first term – to ensure successful progress; the college will make interventions immediately to keep students on track.
5. Students will engage in courses and experiences designed to broaden and deepen their learning.
6. Students will participate as full partners in navigating college services and the curriculum and will take primary responsibility for their own success.

This is a case study of the SUCCESS Program at GFC; a small, open enrollment, public two-year college located in a Northcentral Montana. No attempt was made to control for outside factors that may influence the retention rate of students participating in the project. The students were selected to participate in the program based on placement into developmental math. As was indicated in the conceptual framework, and shown in figure 1, this study examined the pilot phase of a program intended to increase the retention rate of general education students by incorporating several educationally

effective practices (Kuh et al., 2005). At the time of its development, these practices included:

Learning Communities. Students were in a group of 15 students, all enrolled in the same courses. The original plan was three groups of 25 students; however, due to limited student interest, only one small cohort enrolled in the program.

Study Skills/Student Success Course. All students participated in a one credit, graded course that focused on both study skills and effective characteristics of successful students.

Accelerated Courses. To allow students to complete developmental education courses in less time, as well as allowing students to complete all Montana University System general education requirements in one year, students enrolled in condensed courses. They were able to complete two levels of math in one semester by completing one entire course in the first half of the term and moving to the second course for the final eight weeks. College writing and communications were also completed as eight-week courses in the first semester. Science, fine arts, and humanities core requirements were completed in an eight-week format during the second semester. There were also full-semester courses as part of the schedule in both semesters.

Mandatory Tutoring. Tutoring was part of the program both by embedding tutors in the developmental math, history, and chemistry courses; and by requiring students to utilizing the Academic Success Center on campus.

Skills Workshops. Attendance at skills workshops throughout the first semester was required of students participating in the program.

Intrusive Academic Advising. Students in the SUCCESS program agreed to meet with academic advisor biweekly for updates, as well as agreeing to a very structured schedule and the expectation of spending Monday through Friday on campus for classes and required activities.

Research Design

A single-case study with four embedded units of analysis was used to explore the research questions in this study. Interviews, focus groups, document review, and observations were used to gather pertinent data related to the implementation, execution, and results of the SUCCESS Program. The four units of analysis were the groups of campus stakeholders directly involved in the program: students, faculty, staff, and administration. This design was appropriate based on the goal of this study to gain an in depth understanding of the program so the college can use the information to make improvements to its retention initiatives in an informed manner (Yin, 2014). Qualitative research is intended to give a deeper understanding of the experience through participant description.

Data analysis was conducted using the methodology recommended by Creswell (2013) and Maxwell (2013) in which data is first sorted into organizational categories based on “prior ideas of what is important” (Maxwell, p. 107). For this study, the organizational categories were benefits, challenges, recommendations for improvement,

reasons for leaving, and reasons for staying. Following organizational categorization of the data, secondary analysis revealed substantive subcategories within each area (Maxwell, 2013). When discussing case study data analysis, Stake (1995) described the importance of this stage by stating “the search for meaning often is the search for patterns” (p. 78). Finally, upon completion of organizational categorization and substantive coding for each of the four units of analysis, cross-unit analysis was completed as a means of tying the work together. Yin (2014) reinforces the importance of returning findings from subunits to a description of the whole case as a crucial step in the data analysis process.

Participants

Using a purposeful selection strategy (Maxwell, 2013), the individuals invited to participate in this study were the students, staff, faculty, and administrators at GFC that have a connection with the offering of the SUCCESS Program. In addition to the students who chose to participate, this included any college employees who helped plan, assisted in implementations, taught, or reviewed the process.

Inviting all of these stakeholders to participate met the important goals of the project. This purposeful selection helped “adequately capture the heterogeneity in the population” (Maxwell, 2013, p. 98) by considering the perceptions of very diverse groups of stakeholders with very different goals of their own for participating in the project. Another goal of purposeful sampling is to test theory (Maxwell, 2013). The project was based on theory and research into educationally effective practices, and

examining the participants shed light on the applicability of these concepts to retention improvement efforts at GFC.

Definitions

Several terms used throughout this study could be defined and interpreted in multiple ways. For the purposes of this work the following definitions are assumed: SUCCESS Program – Official name of the project under investigation utilizing all interventions detailed in the context section above. The acronym stands for Students Using Core Completion to Excel with Support Strategies. Throughout the paper the terms pilot program, project, or SUCCESS Program are all used to refer to this program.

Stakeholders – Campus students and personnel played a role in the creation, implementation, or evaluation of the SUCCESS Program.

Participants – All students, faculty, and campus personnel who directly participated in this case study.

Retention – For this project, retention of students was defined as meeting one of three outcomes: completion of Certificate of General Studies, returning to GFC for the following fall semester, or transfer to a four-year institution.

Student Success – While it is recognized that student success can be defined in many ways, because the goal of this project is to improve the retention rates of students at GFC, when student success is discussed in this paper, the reference is to retention.

Educationally Effective Practices – This term is used throughout the literature to describe practices in higher education that have a measured impact on student success in one or more ways. In this study, this term will be used interchangeably with best practices.

Assumptions

For this case study, it was assumed that the college experience plays a part in student persistence, and the introduction of the SUCCESS Program will lead to higher retention rates for the college because of the purposeful strategies introduced into the experience. This assumption was based on the work of Astin, Tinto, Bean and Eaton, Terenzini and Reason, and Kuh which lead to the theoretical framework (Kuh et al., 2005; Renn & Reason, 2013). This qualitative research project was created to gain a deep understanding of the SUCCESS program through the perceptions and interpretations of the campus stakeholders and participants. It was assumed the participants in the study were open and honest about their experiences and their perceptions about best practices.

Limitations

This study is a qualitative examination of the SUCCESS Program at one small, two-year institution. There was no attempt made to assess the statistical significance of the program; but rather to understand the experiences of the participants. Selection of participants was not random, and there may be factors outside the scope of this project that impact student success. The choice of conducting a pragmatic case study also

directed the examination toward problem solving strategies, which may have precluded highlighting other important aspects of the experience.

Significance of the Study

The value of localized, action research is the potential of using theory to solve “local and specific problems” (Belzer & Ryan, 2013, p. 197). This research addressed a very practical matter for GFC; that of gaining an in depth understanding of a retention improvement program implemented in the 2016-2017 academic year. This is important to the college for both mission fulfillment and financial reasons. The financial considerations are twofold. First, funding of the college is based on enrollment and graduation of students which is impacted by the retention rate. Second, the interventions included in the SUCCESS program were expensive to implement at a small institution. It was critical to determine which practices were effective so that the limited resources of the campus can be best utilized. While writing about institutional theory and student departure from college, Laden, Milem, and Crowson (2000) support this assertion stating, “The realization is that despite the press toward mimicry, individual organizations can be expected to exercise varying degrees of strategic choice (in responding to their own special environments)” (p. 247). Use of existing literature on best practices must be supported by research into the unique needs of each place.

While the immediate goal of the case study was to provide practical information for Great Falls College, other similar institutions will benefit from the knowledge gained through the process. There are also important implications of this study that can be used

to add to the literature in this area. Much has been written about the practices included in the SUCCESS Program, both as stand-alone practices and as part of a comprehensive retention strategy. Incorporation of these concepts varies greatly from campus to campus as it should to meet the needs of students (Kuh et al., 2005) so a study of this unique combination of services provides useful information about an intensive program launched altogether. When examining academic interventions, Mayhew et al. (2016) found stronger support for comprehensive programs than for stand-alone services.

Additionally, many studies have been completed examining the effectiveness of retention initiatives; however, few exist using a qualitative methodology to give voice to the participants' perceptions of benefits and challenges of the use of a very structured protocol. Kuh (2009) described a need to understand "the key factors and features of student participation in different activities" (p. 694). The level of description utilized in this project sought to address this need, and compliment the quantitative descriptions of results of such intervention programs. Writing about the challenges surrounding the study of effectiveness of retention improvement programs, Hatch and Bohlig (2016) reinforce the importance of reporting findings based on "what they do, rather than by their names" (p. 72). The use of qualitative description of the effective elements of the experience contributes to this area of the literature.

Chapter Summary

Retention of community college students is an important problem to address for many reasons. There are documented financial and occupational benefits for those

students who complete a program of study, and negative consequences for those who do not. Colleges are also negatively impacted when students are not retained. The goal of this study was to add to the existing literature on the effectiveness of targeted intervention programs and add a perspective uniquely from the voice of the participants.

CHAPTER TWO: REVIEW OF THE LITERATURE

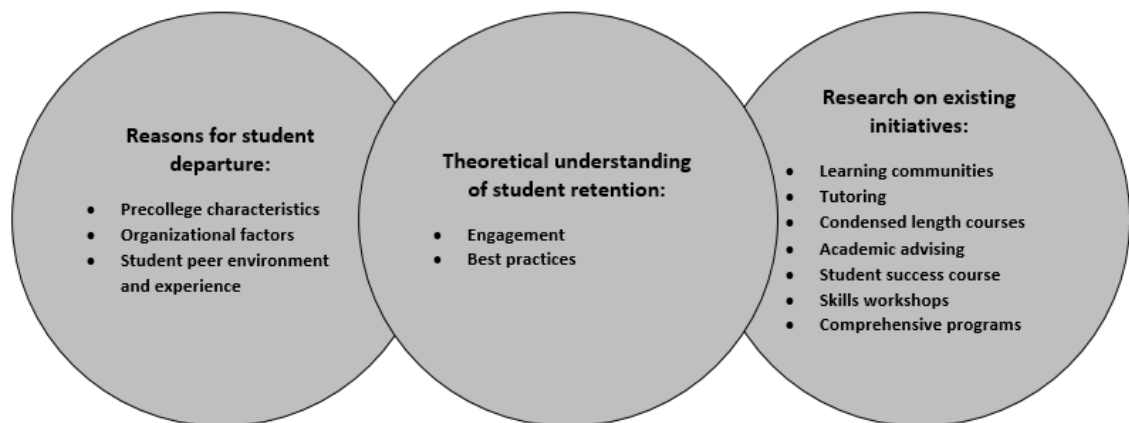
Introduction

The topic of college student departure and the attempts to address this issue are prevalent in the literature. The problem which faces the college under review for this study, that of low retention and completion rates, is one that faces community colleges around the country and has been studied extensively. For this research project, the review of the literature began with an examination of three books which led to further ideas for areas of interest, keys words, and authors to examine. The first of these books was *College Students in the United States: Characteristics, Experiences, and Outcomes* by Renn and Reason (2013) which provides introductory information on the concept of student input characteristics combined with experiences lead to specific outcomes. The second book was *Student Success in College: Creating Conditions That Matter* by Kuh et al. (2005) which provides information on the importance of student engagement and educationally effective practices. Third was *How College Affects Students: 21st Century Evidence that Higher Education Works* (Mayhew et al., 2016) which provided a comprehensive review of the most recent literature on the impact of higher education practices.

As can be seen in Figure 2, this literature review focuses on three areas of study. The overlapping circles are intended to represent the fact that although the review examines distinct areas of the literature, there is a relationship between all three which is important to recognize. These three areas of research are a direct result of utilizing the

theoretical framework of Terenzini and Reason's (2009) Parsing the First Year of College Model with the input characteristics tying into reasons for student departure, the college experience tying to the theoretical understanding of student retention, and the outcomes tying to the research of existing initiative and the success of those programs. This also corresponds with the conceptual model of the study which uses recommendations of the PTP model as a strategic approach to program development at the campus level (Evans et al., 2010).

Figure 2. Areas of literature reviewed



Reasons for Student Departure

The first four steps of the PTP model are:

1. Identify concerns or enhancement opportunities
2. Determine goals
3. Identify useful theory(ies) for understanding the problem

4. Examine student characteristics in light of theory(ies) (Evans et al., 2010).

Taken together, these four steps lead to the need for research on data concerning and theoretical understanding of student departure from higher education. Alexander Astin's (1993) I-E-O model is helpful for understanding the college experience, and why some students do not realize the goal of completing a program of study. This model explains that the relationship between students' input characteristics and their college experiences strongly influence the outcome (Renn & Reason, 2013). Building on the I-E-O model is the Parsing the First Year Experience model which further defines each of the components from Astin's model (Reason, 2009; Renn & Reason, 2013). Exploring the areas of precollege characteristics of students, organizational factors, and student peer environment and individual experience gives an understanding of factors impacting student retention (Reason, 2009).

Precollege Student Characteristics

Sociodemographic Characteristics. Stage and Hossler (2000) address the importance of precollege characteristics in their Student-Centered Theory of Persistence. Their theory ties together background characteristics and K-12 school experiences as critical elements that shape intentions and behaviors upon entry into college (Stage & Hossler, 2000). Students bring with them to college various sociodemographic traits, levels of academic preparation, experiences, and goals, all of which have an impact on student persistence (Reason, 2009). Using data gathered on the Community College

Survey of Student Engagement (CCSSE), Kuh et al. (2007) list the risk factors to persistence and graduation as

- being academically underprepared,
- not entering college directly after high school,
- attending part time,
- caring for children in the home and/or being a single-parent,
- being financially independent rather than a dependent of parents,
- working more than 30 hours per week, and
- being a first-generation college student (p. 40).

Citing a report by ACT, Reason (2009) states that high school grade point average is the strongest predictor of college success, followed by socioeconomic status. Often low socioeconomic status, insufficient academic preparation, and first-generation status are interrelated (Cho, Hudley, Lee, Barry, & Kelly, 2008; Engle, 2007). This information provides support for Stage and Hossler's (2000) assertion that background characteristics shape middle and high school educational experience, which in turn have an impact on students' feelings of efficacy and, therefore, the choices they make in college. Gender, age, and race all have an impact on persistence rates; however, when academic preparation and socioeconomic status are controlled for, the difference is minimized (Pascarella & Terenzini, 2005; Reason, 2009).

Student Disposition. Student disposition is another area of precollege characteristics that affects outcomes (Reason, 2009). Three prevalent themes in the literature surrounding student disposition and success in college are personality traits, time management, and coping with stress and anxiety.

Much research has been done on the impact of student personality characteristics and the effect on academic achievement. These personality characteristics are commonly called the Big Five personality traits and are described as conscientiousness, openness, neuroticism, agreeableness, and extroversion (Conrad, 2006). The trait of conscientiousness includes “the will to achieve, self-control, persistence, and dependability” (Busato, Prins, Elshout, & Hamaker, 2000, p. 1059), and has been consistently shown to have a major impact on academic achievement. Several studies have found this characteristic has a stronger correlation with academic achievement than does intellectual ability or academic preparation (Busato et al., 2000; Conrad, 2006; O’Connor & Paunonen, 2007). Additionally, the characteristic of conscientiousness has been shown to be associated with behaviors that lead to success such as time management, course attendance, strategic learning approaches (Conrad, 2006; Dollinger, Matyja, & Huber, 2008; Duff, Boyle, Dunleavy, & Ferguson, 2004; MacCann, Fogarty, & Roberts, 2012), and use of tutoring services (Laskey & Hetzel, 2011). There is conflicting information about whether or not the personality trait of neuroticism, defined as having high levels of anxiety, has a significantly detrimental impact on academic achievement. A meta-analysis performed by O’Connor and Paunonen (2007) found while there is a difference in achievement in students based on emotional stability level,

the effect is not strong. In a study of academically underprepared students conditionally admitted to a midsize university, neuroticism was positively correlated with grade point average (Laskey & Hetzel, 2011).

Research on community college students found time management had a significant effect on academic performance (Misra & McKean, 2000), especially for non-traditional and part-time students (MacCann et al., 2012). Forbus, Newbold, and Mehta (2011) also found non-traditional students had lower stress and higher academic achievement due to better time management than their traditional age counterparts did. A study of traditional age students also found a positive relationship between time management and both academic performance and anxiety reduction (Misra & McKean, 2000). Marrs and Sigler (2012) studied both community college and university students and found women had significantly higher time management scores than men.

Academic self-efficacy has a positive correlation with ability to manage stress. Zajacova, Lynch, & Espenshade, (2005) state “the extent to which a person feels confident about his or her competence to handle a given situation affects whether a given task is perceived as stressful or threatening, rather than as a challenge” (p. 680). A study of anxiety and time management showed an inverse relationship; as anxiety increased, time management decreased (Kaya, Kaya, Pallos, & Küçük, 2012). In a 2011 examination of university students, non-traditional students were shown to have higher levels of stress, but achieve higher GPAs than traditional age students due to active coping strategies such as prioritizing, looking at broad context, and efficient scheduling of competing responsibilities (Forbus et al., 2011). Positive thinking and utilizing social

networks for emotional support are coping strategies used by upper-class nursing students (Wolf, Stidham, & Ross, 2015).

Organizational Context

Reason (2009) states “institutional effects on college student outcomes (including persistence) are less about what an institution is than about what an institution does” (p. 669). Regardless of institutional type, intentional focus on providing quality services for students is important. Chickering and Reisser (1993) introduced the seven institutional factors that are key influences on student development as

1. institutional objectives that clearly direct action toward a common focus;
2. institutional size managed in such a way that students are given opportunity for engagement;
3. student-faculty relationships to allow students to feel valued as member of community beyond classroom;
4. relevant curriculum to allow for connections to be made between past experience and new information;
5. quality teaching including active learning strategies, timely feedback, respect, and high expectations;
6. development of communities of students to provide opportunities for collaboration, sense of belonging and social growth; and

7. collaboration between academic and student affairs to build a cohesive, support environment for students.

In an in-depth review of research surrounding organizational behavior and student persistence, Berger (2002) found consistent evidence that students' perception of "participation, communication, and fairness play a role in fostering social integration" (p.10). Furthermore, persistence improves when students' expectations of the institution match the reality of their experiences (Berger, 2002) and they perceive the campus climate in a positive way (Mayhew et al., 2016). This demonstrates the importance of organizational dedication to staying true to institutional mission and communicating this clearly to students from recruitment to completion. It is very important for students to feel they are treated fairly in regard to both academic and social aspects of campus life; therefore, clearly identified means of acting with impartiality are shown to improve persistence (Berger, 2002; Reason, 2009).

Writing specifically about commuter colleges, Braxton, Hirschy, and McClendon (2004) reinforce the importance of institutional commitment to student welfare and integrity. For the student in the commuter college there is less chance to develop strong ties to other students; therefore, it is very important for the student to develop a strong tie to the institution (Braxton et al., 2004). These ties to the college lead to academic and intellectual development, which in turn lead to higher rates of persistence (Braxton et al., 2014).

Braxton et al. (2014) examined policies and practices that influence student perception of institutional integrity. Among the practices that have a positive influence

are faculty concern for students, quality academic advising, extended hours for campus services, convenient class times, sufficient parking, computers and internet available for student use, and informative orientation programs (Braxton et al., 2014).

Individual Student Experiences

An analysis of the empirical research of Tinto's assertion that academic and social integration is critical to retention showed strong evidence to support the importance of social integration based on the logical connection between commitment to the institution and persistence (Braxton et al., 2004). This assertion receives further support in the most recent edition of *How College Affects Students* (Mayhew et al., 2016) as the authors state "The quality of interpersonal relationships with college peers contributes to great retention and graduation" (p. 418). A difficult issue to overcome is that attending college is a major social and cultural adaptation for many students, particularly first-generation students. For these reasons, Kuh et al. (2007) recommend that at commuter institutions, the classroom should become the "locus of community" (p. 117) and intentional practices such as learning communities and first-year seminars should be put in place to help foster relationships and help students feel a sense of fit with the campus culture.

Theoretical Understanding of Student Retention

Understanding the relationship between students' precollege characteristics, and their experiences in college is an important first step in implementing programs to address these issues. Exploring the body of literature regarding ways to build student engagement, and educationally effective practices shown to increase success is crucial for

creating strategies that work for the unique needs of each institution. Steps five through seven of the PTP model guide the second stage of the literature review. Briefly stated these are:

5. Analyze the environment using theory(ies)
6. Identify challenges and supports
7. Reexamine goals and modify if necessary (Evans et al., 2010).

This guides the research toward a need to review existing information on rationale for creating specific retention intervention programs. Again, special attention should be paid toward differences in student characteristics and institution type. This stage ties to the college experience component of the theoretical framework, and to the work done on student engagement and best practices in higher education.

Engagement

The theory explaining the importance of engagement builds on the work of Alexander Astin concerning student involvement and its contribution to student success (Wolf-Wendel, Ward, & Kinzie, 2009). Astin (1984) defined student involvement as “the amount of physical and psychological energy that the student devotes to the academic experience” (p. 297). The five main postulates of the theory tell us that involvement

1. is an investment of both physical and psychological energy;
2. is not constant, but rather occurs along a continuum between and within students;
3. has both quantitative and qualitative elements;
4. is proportional to learning and development; and

5. is tied to effective policy in that success of policy relates to institutional ability to increase student involvement (Astin, 1984).

The element not specifically addressed in the theory of student involvement is institutional action (Wolf-Wendel et al., 2009). George Kuh (2009) defines engagement as “the time and effort students devote to activities that are empirically linked to desired outcomes of college *and* what institutions do to induce students to participate in these activities” (p. 683). In an interview about the differences between involvement and engagement, he explained, “the larger construct of engagement puts more responsibility on the institution – which is an important tweak” (Wolf-Wendel et al., 2009, p. 417). His research and that of many others support the notion that student engagement is linked to student retention (for example, Pascarella & Terenzini, 2005; Wolf-Wendal et al., 2009). Pruett and Absher (2015) found evidence to support this claim using CCSSE data of self-reported community college levels of engagement and retention. In fact, there is an even greater impact on those students who are less academically prepared for college level work (Kuh, 2009).

Related work also provides support for the importance of engagement. Vincent Tinto (1987) developed his Theory of Student Departure based on the idea that students continually assess their level of integration into the institution based on both academic and social fit, and make the decision to stay or to leave based on this feeling of fit. Similarly, but with greater emphasis on students’ sense of personal adequacy, Bean and Eaton (2000) support the importance of student integration with campus in order to persist. Their Psychological Model of College Student Retention explains that the

psychological processes of students, including coping behaviors and attribution, combine with institutional factors to create a sense of fit that leads to decisions about whether or not to persist (Bean & Eaton, 2000). Both theories build the foundation for the recognition of the importance of student engagement in the effort to improve retention rates.

There have been questions raised about the applicability of the importance of engagement for those who are not full-time, traditional-aged students (Kuh, 2009). Work has been done to investigate this concept relative to community college students. A correlational examination of graduation records of 261 community colleges and the scores of student engagement from the same schools on the Community College Survey of Student Engagement showed a significant positive relationship between the two (Price & Tovar, 2014). A group of community college students interviewed for a qualitative paper expressed the sense of community created through shared struggle and supportive faculty and staff as major contributors to their persistence (Clark, 2012).

Educationally Effective Practices

Referring back to the definition above for engagement highlights a need to understand which activities are empirically linked to desired outcomes. To begin this examination, it is helpful to understand recommendations related to institutional best practices and how they relate to student development. Based on a synthesis of a body of empirical literature, Chickering and Gamson (1987) introduced seven principles for good practices in education that include

1. frequent interaction of students with faculty,

2. cooperation among students,
3. active learning techniques used in instruction,
4. prompt feedback on work,
5. time on task,
6. communication of high expectations, and
7. respect for diversity of students and learning styles.

George Kuh and others have built on these ideas to develop specific recommendations for effective educational practices. Key to these recommendations is the notion that no two institutions are alike and it is critical for campuses to find the specific practices which fit the unique needs of its students, location, size, and mission. “No blueprint exists” (Kuh et al., 2005, p. 21) to create the perfect program; what is important is shared understanding of the institutional mission and goals, exploring and implementing programs with focus on student success, assessment of results, and continuous improvement. Programs developed to promote student success through educationally effective practice should include academic challenge, active and collaborative learning, student interaction with faculty, enriching educational experiences, and supportive campus environments (NSSE, 2000). Using these principles to design curriculum and co-curricular campus activities provides the foundation for student engagement. Kinzie (2015) describes the “student engagement trifecta” (slide 14) as a joint effort between students, faculty, and institutional leaders and staff. Students must put forth quality effort and associate with faculty and peers, faculty must develop curricula using the principles of good practice and clearly articulate expectations and

feedback, and leaders must provide resources and create supportive learning environments (Kinzie, 2015).

The Center for Community College Student Engagement (2014) further defines educationally effective practices that have a positive impact on retention and completion of students at the two-year institution. Understanding that “community college students will be more likely to persist and succeed in programs that are tightly and consciously structured” leads to the recommended practices of:

- orientation to familiarize students with resources,
- accelerated education,
- first-year success courses,
- student success courses,
- learning communities,
- academic goal setting and planning with advisor,
- experiential learning, and
- tutoring and supplemental instruction (Center for Community College Student Engagement, 2014, p. 4).

Empirical research demonstrates the value of educationally effective activities on student engagement and persistence. A study of students in 18 baccalaureate-granting institutions found a positive relationship between engagement in educationally purposeful activities and student persistence, when controlling for background characteristics such as academic preparation and parental education level (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008). This study also showed an even great benefit for those students who

come to college with lower academic preparation (Kuh, et al., 2008), which draws a parallel between this finding and the work being done at GFC. A study of over 50,000 students enrolled in baccalaureate programs supported the importance of holding high expectations and contextualizing material to increase student engagement (Hu & Kuh, 2002). The results of this study also support the elements included in the SUCCESS Program.

Existing Initiatives

The review of the theoretical principles of student engagement and best practices combined with the targeted information about community college students provides a rationale for the importance of campuses to develop programs that incorporate these ideas. In order to create an intervention informed by past practices, the review should include examination of strategies implemented at other institutions to improve retention, and the results of the attempts. This guides an informed development of an intervention, as well as providing areas for consideration based on results of analyses.

The final area of literature relates to the final component of the theoretical framework; that of outcomes. Specifically for this project, we are concerned with the outcome of student retention rates. This ties the work back to the conceptual model and the final four steps in the PTP model. These steps are:

8. Design intervention
9. Implement
10. Evaluate outcomes

11. Redesign as necessary (Evans et al., 2010).

Much has been published about each of the individual interventions planned as part of the SUCCESS Program at GFC. Additionally, studies of the impact of various comprehensive retention improvement programs have been conducted for several types of institutions. Examining the effectiveness of these program is important for a well-informed study of the current project. The volume of literature on the topic is staggering. What is included here is intended to be explanatory, but is in no way exhaustive. One of the issues when searching for information on success initiatives in higher education is the variety of definitions assigned to programs using the same general name (Hatch, 2016). Compounding this problem for researchers is the focus on non-academic supports such as community building within a variety of academic programs which further complicates the ability to isolate specific outcomes within initiatives (Karp, 2011).

Learning Communities

The structure of learning communities varies from an approach where two courses are tied together to a group of students taking classes together as a cohort (Tinto, 2012; Weiss, Visher, Weissman, & Wathington, 2015b). Irrespective of the form, the common benefits of learning communities include a way to build supportive peer groups, bridge social differences through common experiences, and increase involvement with peers (Tinto, 2000). A literature review of the outcomes from high-impact practices showed learning communities, while offered in many different variations, have a positive impact on retention; however, the magnitude of the impact varies by type of institution

(Brownell & Swaner, 2009). The impact at selective institutions is not as great as at institutions with focus on art or sciences (Kuh, 2009), or students enrolled in technical or vocational programs (Crisp & Taggart, 2013). Studying the impact for community college students specifically, Weiss et al. (2015b) found a modest, positive impact on retention rates of students in development education courses. Learning communities were shown to have a larger impact when combined with other services (Visher, Weiss, Weissman, Wathington, 2012; Weis et al., 2015b). When responding to the CCSSE, students have consistently said that someone knowing their name is the biggest factor in keeping them in school, indicating that human connection is extremely important for them (O'Banion, 2013). Another in-depth review of the literature specifically around community colleges and learning communities showed an overall positive impact on retention, although this varied by academic program (Crisp & Taggart, 2013). Through case study analysis and longitudinal interviews of students at 3 two-year and 2 four-year colleges, Tinto (2012) determined that academically underprepared students benefited from participation in learning communities both in levels of engagement, and in persistence to the second year. This analysis found a difference of over 5% increase in persistence for two-year college students (Tinto, 2012). Braxton et al. (2004) describe the increased importance of building a sense of academic community through learning communities at commuter colleges due to the lack of other opportunities to build strong connections with other students. An examination of 10 years of research into the effectiveness of learning communities concluded they are "primarily effective when they integrate student services and/or other resources" (Seifert et al., 2017).

As an example of the effectiveness of learning communities, a program implemented at Kingsborough Community College had students who were enrolled in developmental education English courses take a combination of college level courses as a group (Tinto, 2012; Weiss et al., 2015a). Analysis of the program found students earned more credits and were more likely to be enrolled the following year than a control group. Weiss et al. (2015a) followed the program for 7 years and found that the positive impact on retention and completion rates continued at modest rates. Another study which followed a learning community model at a two-year college for four years found higher fall-to-spring retention rates for students in the program as compared with peers in similar non-linked courses (Popiolek, Fine, & Eilman, 2013).

Tutoring

Tutoring has been described as “an effective strategy for improving academic performance and can level the playing field even for students who exhibit characteristics of less academically prepared learners” (Drago, Rheinheimer, & Detweiler, 2016, p. 16). Their study found tutoring had a significant benefit on grades and credits earned, especially for students entering college with lower SAT scores (Drago et al., 2016). The impact of receiving tutoring has been studied extensively with mixed results. A study of the impact of using a drop-in tutoring center on grades showed that visitors to the center entered college with lower standardized test scores, but finished the first year of college with no significant difference in grades than their peers who did not use the center (Ticknor, Shaw, & Howard, 2014). The findings in studies related to GPA are important for a discussion of retention based on the fact that “college grades may well be the single

best predictors of student persistence, degree completion...” (Pascarella & Terenzini, 2005, p. 396). Additional relevant findings of this study showed that users of the tutoring center had significantly lower rates of withdrawal or incomplete in the courses examined, and that visiting early in the semester was most beneficial (Ticknor et al., 2014). Using data from CCSSE, Pruett and Absher (2015) found no improvement in retention rates of community college students based on use of tutoring. A study conducted in Spain was also unable to conclude that tutoring had a direct impact on grades or student retention; however, it was shown to have a positive impact on study skills and metacognitive strategies (Arco-Tirado, Fernandez-Martin, & Fernandez-Balboa, 2011). Contrary to these findings is a study of community college students from three separate institutions in different states taking developmental education courses which found tutoring had a positive impact on fall to fall retention of students and on GPA (Bremer et al., 2013). A study of first year students in Maine who received tutoring also showed strong, positive impact on retention to the second year (Coladarci, Willett, & Allen, 2013).

Accelerated Coursework

Improving the success rates for those students who begin college in developmental education courses is a topic receiving much attention. US Department of Education data show 42% of first year students enrolled in a community college are in at least one developmental course and that only 28% of students in these courses will obtain a credential within eight and half years of beginning coursework (Brock, 2010). External factors that force students to leave school are in part responsible for this statistic (Jaggars, Hodara, Cho, & Xu, 2015). One such initiative aimed at improving the completion rates

is offering these courses in a condensed timeframe or concurrently with college level work. Reducing the amount of time to completion is aimed at reducing the impact of these external factors (Jaggars et al., 2015).

Empirical research on the topic has been limited, but overall shows positive results (Jaggars et al., 2015). Accelerated coursework is offered in many variations on campuses, which makes assessment of effectiveness as a stand-alone intervention difficult (Hatch & Bohlig, 2016). A study conducted by examining the academic records of over 20,000 community college students in California showed a significant increase in success rates of students enrolled in condensed length courses for developmental math (Sheldon & Durdella, 2009). A qualitative study of students who had previously failed a course and were now repeating it in a compressed timeframe showed very favorable ratings from students and an improved success rate of 98% completion (Gajewski & Mather, 2015). The Community College of Baltimore has accelerated the rate of students through developmental writing by having them complete both a basic skills course and college writing in the same semester, which has improved the pass rate in the college level course from 27% to 63% for students placing into the remedial course (Tinto, 2012).

Academic Advising

The term underprepared students most often brings to mind academic challenges; however, students often are also lacking an understanding of the culture and social expectations of higher education. This presents an opportunity for academic advisors to work with these students to make a major difference in acquiring the necessary skills by

utilizing a developmental advising approach (Steele & McDonald, 2008). Developmental advising moves the role of the advisor beyond helping with decisions on courses to “facilitating student’s rational processes, environmental, and interpersonal interactions, behavioral awareness, and problem-solving, decision-making, and evaluating skills” (Crookston as cited in Hagen & Jordan, 2008, p. 19). Higher education has a culture and terminology all its own, and the academic advisor has an important opportunity to assist in student success by serving as a “cultural navigator” while students are learning this culture (Strayhorn, 2015). Karp (2011) advocates for “clarifying aspirations and enhancing commitments” and “developing college know-how” (p. 6) as important elements of student success; two areas where advisors have an opportunity to have an impact.

Results have been mixed in studies of the impact of intensive academic advising efforts on student retention. Schwebel, Walburn, Klyce, and Jerrolds (2012) failed to find any difference in persistence and graduation of two groups of students in an experimental study of intensive promotion of academic advising at a large public university. This would suggest simply having students attend an increased number of advising appointments is not enough to make a difference in retention, an assertion backed up by findings of Pruett and Absner (2015) in a study of community college students. A program at two community colleges in Ohio which incentivized students to participate in intensive academic advising by paying them a stipend showed only temporary gains in persistence (Brock, 2010). Conversely, a study of first-generation students found a significant relationship between the number of advising appointments

and retention (Swecker, Fifolt, & Searby, 2013). Analysis in this study showed “that for every meeting with an advisor the odds that a student is retained increased by 13%” (Swecker et al., 2013, p. 49). Meeting with academic advisors also showed a positive relationship with completion of developmental math and transfer to bachelor’s degree programs for community college students (Bahr, 2008a; Mayhew et al., 2016). These conflicting findings may indicate certain populations of students benefit more from increased advising. This would support the assertion of the importance of the advisor to act as cultural navigator for some populations of students.

First-year Experience/Academic Success Course

Data gathered through multiple college engagement surveys show students do not take advantage of the resources on campus, both academic and student support services. The Center for Community College Student Engagement reported 27 % of students did not know the school offered tutoring services and over 30 % had not met with an academic advisor (Kuh, 2009). This lack of awareness and underutilization of services supports the need for first-year experience courses in some variation.

An issue for understanding the effectiveness of these courses is the lack of precision between colleges on how these terms are defined (Hatch & Bohlig, 2016). In an extensive review of the literature concerning high-impact educational practices, Brownell and Swaner (2009) found that although first-year experience and student success courses are defined differently through higher education, there is broad support for these practices in regard to retention. A meta-analytic review of studies examining the relationship between first-year-experience courses and retention showed a significant,

positive result (Robbins, Oh, Lee, & Button, 2009). Crisp and Taggart (2013) also reviewed the research on the impact of student success courses on community college students and found broad support for improvements in retention rates based on these courses, but less clear results for improvement of grades. Mayhew et al. (2016) found positive relationships between these courses and graduation rates in an examination of empirical research on the topic, with a stronger positive impact on those who are less academically prepared.

A program at Chaffey College which required a study skills course in addition to utilization of the Success Center for tutoring showed a large and significant increase in credits earned per semester (Brock, 2010). An examination of students enrolled in community colleges in Florida found that when controlling for background characteristics, students who enrolled in a student success course were more likely to earn a credential, transfer to a 4-year university, or remain enrolled into their fifth year (Zeidenberg, Jenkins, & Calcagno, 2007). Guilford Technical Community College implemented a success course that included instruction on both study skills and psychosocial development (Rutschow, Cullinan, & Welback, 2012). A study of results using a randomly selected group of developmental education students compared with a control group found there was a positive impact on affective characteristics such as self-management, self-awareness, and emotional intelligence; however, there was no significant difference in academic achievement (Rutschow et al., 2012). An examination of students at a large southwestern research university found no difference in GPA or retention rates of students who completed a student success course and those who did not;

however, the students did test higher in self-regulated learning behaviors (Hoops, Yu, Backscheider Burridge, & Wolters, 2015). This program was offered to students later in their academic career leading the researchers to recommend offering the course to first-term students in order to increase effectiveness (Hoops et al., 2015).

Skills Workshops

Academic self-efficacy, students' belief that they have the tools and ability to be successful in school, is positively related to academic success (Chemers, Hu, & Garcia, 2001; Krumrei-Mancuso, Newton, Kim, & Wilcox, 2013; Zajacova et al., 2005). Krumrei-Mancuso et al. (2013) make recommendations for campuses to provide opportunities to increase students' feelings of self-efficacy. In an extensive review of intervention programs, Karp (2011) found that developing college know-how, including specific skills related to academic work, is an important mechanism for success.

The Colorado School of Mines began offering Academic Excellence Workshops to support first-generation and low-income students in STEM courses and found through binomial probability testing a statistically significant increase in course grades (Steveler, 2001). A survey of participating students in this project also showed an overwhelming majority of students who felt their ability to work with others had improved, as had their overall understanding of course material (Steveler, 2001). Although this project was implemented at a four-year institution, the target population is similar to GFC and provides helpful information to guide this project. A study of the effectiveness of the use of online learning strategy modules for developmental math students showed through a pre-test/post-test methodology significant reductions in anxiety, an increase in positive

attitude toward mathematics, improved concentration and information processing, and an increase in self-motivation (Mireles, Offer, Ward, & Dochen, 2011).

Comprehensive Programs

As effective as individual interventions have been, there is growing research on comprehensive student support programs. Mayhew et al. (2016) found that comprehensive programs had a stronger impact on retention than stand-alone interventions. When studying learning communities, Visher et al. (2012) found the program that was most effective combined learning communities with other support services. Writing in 1993, Vincent Tinto recommended that quality retention programs must contain the following elements:

1. Institutional commitment to the welfare of students above other interests
2. Education of all students is valued equally
3. Academic programs and support systems are employed to help students become members of the community.

Tinto (2012) continues to support these basic tenets in his more recent work, stating that institutional frameworks for student success must include clear expectations, support programs, assessment and feedback, and opportunities for involvement. Karp (2011) found four mechanisms that improve student retention, regardless of type of program, are:

1. Creating social relationships
2. Clarifying aspirations and enhancing commitments
3. Developing college know-how

4. Making college life feasible (p. 6)

These recommendations provide a means for exploring quality retention programs that can be used to inform this paper. Karp's recommendations add specificity to those advocated by Tinto. A review of several programs, which have been analyzed for effectiveness, is an important part of the background for the current study of the SUCCESS Program at GFC. Several empirical studies have been done on the results of such programs. To provide examples of this research, descriptions of a variety of retention programs are included here.

The City University of New York (CUNY) system has implemented a program for community college students with elements similar to the SUCCESS Program at GFC. The Accelerated Study in Associate Programs (ASAP) includes block-scheduled courses, a student success seminar, developmental coursework, and regular advising meetings (Scrivener & Weiss, 2103). Additionally, students are required to enroll full-time, attend tutoring sessions, and meet with career services specialists (Scrivener & Weiss, 2013). For those students meeting program requirements, there is also financial compensation included in the form of free public transportation and free textbooks, and some tuition and fee assistance. A comparison of students in the program with a control group showed significant results, including higher levels of earned credits, higher rates of transfer and higher rates of associate degree completions (Scrivener & Weiss, 2013). An important attribute to note about the ASAP program is the average age of students is 21.5 years old (Mayhew et al., 2016), which is very different than the average age of GFC student at 29 years old (Great Falls College MSU, 2015).

Another example of a program with positive results is the Freshman Academic Support and Tracking (FAST) program at the University of Arkansas (Braxton et al., 2004). Although this program takes place at a large four-year institution, many of the components are similar to those making up the initiative under review in this case study. Students participating in this program are retained through graduation at a higher rate than their peers even though they score lower in college entrance exams and social evaluations than their peers (Braxton et al., 2004). There are learning communities and extended interaction with faculty and students through organized social and academic programs.

The Successful Transitions and Retention Track (START!) program has helped students at Idaho State University who are entering with a GED instead of high school diploma achieve a 70% persistence rate and an average 3.5 GPA by combining a student success course, intensive academic and career counseling, tutoring, and required skills workshops (Nix & Michalak, 2012). A similar program requiring academically underprepared students to complete a study skills course and attend mandatory tutoring showed higher grade achievement than similar students who either just attended the course on a voluntary basis, or did neither (Bender, 2001).

The Conditional Acceptance Program (CAP) at a midsize private university admits students with a high school GPA of less than 2.0 on the condition they enroll in first-year experience course, attend weekly tutoring, take developmental education courses, and meet in small peer groups (Laskey & Hetzel, 2011). A three-year study of this program showed that 66% of students were retained to the second year, and that

tutoring had a significant effect on GPA and retention; however, the other components of the program were not studied (Laskey & Hetzel, 2011).

The Pathways to Success Program was shown to improve GPA, increase rate of students in good academic standing, increase pass rate of development education courses, and improve the one-year retention rate of underprepared students. This program combining intensive advising, tutoring, first-year success class, and developmental coursework (Fowler & Boylan, 2010).

To address problems with completion rates, a nursing program implemented the Northern Nevada Nursing Retention Program (NNNRP) that included a comprehensive orientation program, learning communities, tutoring, individualized academic planning, counseling, community peer mentoring, and a stipend (Fontaine, 2014). Results showed the combination of these services improved retention rates 10% for the six semesters of the program, and student surveys showed greatest satisfaction with tutoring and comprehensive orientation (Fontaine, 2014). In the report of the NNNRP, Fontaine (2014) discusses the need for research to determine which parts of the program are most impactful. This provides further support for the contribution of the current qualitative project studying the SUCCESS Program.

Chapter Summary

Using the PTP Model provides direction for this literature review. Because the model is intended for practitioners studying and implementing change on campus (Evans et al., 2010), the overall concept is helpful for this project. As a case study of an

intervention program piloted on a two-year campus, following the recommended decision-making process in the creation of a project provides a logical, systematic framework for the examination of relevant literature.

The issue of improving the retention rates of college students is multi-faceted and complex. Student characteristics and organizational behaviors both have a significant impact. The mission of the two-year college to provide open access to all students creates challenges that must be addressed through the use of carefully implemented practices informed through theory and empirical research.

CHAPTER THREE: METHODS

Introduction

The mission of two-year colleges is to provide access to higher education, often to those students who might otherwise not have the opportunity for post-secondary education (O'Banion, 2013). The increased access to higher education to greater numbers of students also creates challenges. Student success rates are lower because of several precollege characteristics (Brock, 2010; O'Banion, 2013). It is incumbent upon these institutions to work to improve success rates in order to fulfill their responsibility to the students they serve, and the taxpayers who provide funding. Great Falls College MSU conducted a pilot of a project during the 2016-2017 academic year with the goal of improving the success rate of general education students. Offering this program in a pilot phase allowed for in-depth analysis to ensure future versions of the program, or other retention improvement initiatives, are based on informed understanding of the experience. The purpose of this case study was to gain knowledge of the challenges, best practices, and recommendations for improvement of the SUCCESS Program so that this program can continue to serve as a means to improve the retention rate of GFC students. The format was a qualitative case study allowing knowledge to be generated by understanding the experiences, perceptions, and interpretations of the campus stakeholders and participants. Yin (2014) supports this methodology by stating that case study is "especially helpful when the initiative has complex coordination or organizational features" (p. 222).

A pragmatic interpretive framework is appropriate when the aim of the project is to understand the outcomes and consequences of an issue or phenomenon (Creswell, 2013). This paradigmatic focus on outcomes makes pragmatism a logical viewpoint for the current project as the intended goal is to understand the experience and implementation process of the SUCCESS Program in order to ensure future versions include those elements which are the most effective in order to increase the retention rate while making the best use of the college's limited resources. Using this interpretive framework leads to the overarching goal of understanding how participants describe the development, implementation, experience, and assessment of the SUCCESS Program. This goal leads to the following two guiding research questions:

- 1) How do participating students, faculty, and staff describe their experiences with the SUCCESS Program?
- 2) How do participating students, faculty, and staff describe the process of implementing the SUCCESS Program?

Research Design

Qualitative Approach

A single case study with four embedded units of analysis was used as the design for this study. Rationale for this approach comes from Creswell (2013) who recommends the use of a case study methodology when the goal is to examine “a real-life, contemporary bounded system...over time, through detailed, in-depth data collection..., and report a case description and case themes” (p. 97). The SUCCESS Program offered

at GFC during the 2016-2017 academic year was the case under investigation and each of the major groups of stakeholders involved in the project constituted the four units of analysis. These four groups were students, staff, faculty, and administrators. There was no attempt to create a control group or manipulate behaviors, which also fits well with the case study methodology (Yin, 2014). Although no control group was utilized in the sense of an experimental design, for purposes of descriptive comparison, new full-time students enrolled in the same developmental math course were tracked for retention.

Yin (2014) further supports the selection of case study as a means to analyze the SUCCESS Program based on the need to use “multiple sources of evidence...needing to converge in a triangulating fashion” (p. 17) and because the program itself and the study “benefit from the prior development of theoretical propositions” (p. 17).

Bounded Context of the Case

This study was conducted at GFC, a small, open enrollment, public two-year college located in a Northcentral Montana. For the 2016-2017 academic year, the General Studies division of the college conducted a pilot of a retention improvement program named the SUCCESS Program. No attempt was made to control for outside factors that may influence the retention rate of students participating in the project. The students were selected to enroll in the program based on placement into one level of developmental math. Participation in the program was capped at 25 students, with a final enrollment of 15. The original intent was to include three groups of students with 25 in each group; however, the college cancelled two of the groups due to low enrollment. Recruiting of participants for the program was done almost exclusively

through individual advising sessions between prospective students and academic advisors. Limited marketing was conducted through print and radio advertisements.

As was indicated in the theoretical framework, this was a program intended to increase retention rates of general education students by incorporating several educationally effective practices. These practices included:

Learning Communities. Students were in a group of 15 students all coded as general education majors and enrolled in the same courses.

Study Skills/Student Success Course. All students participated in a one credit, graded course that focused on both study skills and affective characteristics of successful students.

Accelerated Courses. In order to allow students to complete developmental education courses in less time as well as allowing students to complete all Montana University System general education requirements in one year, students were enrolled in condensed courses for two levels of math, college writing, and communications in the fall semester. During spring term, the students enrolled in eight-week courses for chemistry, biology, music, and philosophy. There were also full-semester courses as part of the schedule in both semesters, psychology and the student success course in the fall and history in the spring.

Mandatory Tutoring. Tutoring was part of the program both by embedding tutors in the developmental math, chemistry, and history courses; and by requiring students to

utilize the Academic Success Center on campus at least once per week. The embedded tutors attended all class meetings and assisted the instructors with the course activities.

Skills Workshops. Attendance at skills workshops throughout the first semester was required of students participating in the program. Topics for the workshops included:

- use of the college's learning management system, D2L/Brightspace,
- use of the math software utilized in the courses,
- effective time management and goal setting,
- strategies for reading a textbook effectively,
- suggestions for preparing for math tests,
- instruction on properly answering essay questions on exams, and
- instruction on completing math conversions required in chemistry course.

Intrusive Academic Advising. Students in the SUCCESS program were to meet with their academic advisors every other week for updates, as well as agreeing to a very structured schedule and the expectation of spending Monday through Friday on campus for classes and required activities.

Participants

Participants were invited using a purposeful selection strategy where individuals are selected deliberately based on activities or characteristics (Maxwell, 2013). For this study, the individuals invited to participate were the students, staff, faculty, and administrators at Great Falls College MSU that have a connection with the offering of the

SUCCESS Program. This includes any college employees who helped plan, assisted in implementation, taught, or reviewed the process. Table 3.1 provides information on these participants.

Table 3.1. Participants in study of SUCCESS Program

Group	Participants
Students	15 students who voluntarily participated in SUCCESS Program all coded as general education students
Faculty	full-time faculty and adjunct instructors who taught a course in the success program - 1 writing faculty 3 math faculty 1 student success instructor 1 psychology faculty 1 communications faculty 1 philosophy instructor 1 music faculty 1 history instructor 1 chemistry instructor 1 biology faculty
Staff	college employees with responsibilities within the program, but with no decision making authority over the program - 4 academic advisors 6 tutors
Administration	college employees directly involved in the projects with decision making authority - Director of General Studies Director of Financial Aid Registrar Chief Financial Officer Director of Bookstore Director of Academic Advising

Inviting all of these stakeholders to participate met the important goals of the project. This purposeful selection helped “adequately capture the heterogeneity in the population” (Maxwell, 2013, p. 98) by considering the perceptions of diverse groups of stakeholders with different goals of their own for participating in the project. Another goal of purposeful sampling is to test theory (Maxwell, 2013). The SUCCESS Program was based on theory and research into educationally effective practices, and examining the participants’ experiences shed light on the applicability of these concepts to retention improvement efforts at GFC.

Role of the Researcher

I came to this project in the role of participant-observer. Yin (2014) describes this as having at least some level of interaction with participants beyond passive observer. In my position at the college as Director of Academic Success, I am very interested in this research. My 20 years of working in higher education have shown me the impact a college degree has on people’s lives, and that has given me a passion to continue working in this field. It is my job to find practical ideas that will assist students in persisting to completion of coursework. I also work directly with faculty to increase awareness and incorporation of effective academic practices. Understanding the results of this program will allow me to provide important information to both groups.

Additionally, I oversee the operation of tutoring functions on our campus, and the coordination of the student success course; both of which were included as components of this project. Information gathered in this process will help me improve both areas.

This role does create a definite stance for me in that I came to the project with an in-depth understanding of these areas (Yin, 2014), a belief in the effectiveness of the interventions, and a vested interest in the success of the project. The case study methodology, as a description of the perceptions and interpretations of the participants as a means for improving the program in latter versions, worked to reduce the threat of this bias because the goal was understanding issues as part of a continuous improvement process, rather than championing or critiquing any component. An iterative process of member checking was used as an additional means of ensuring the report was an accurate representation of participant experience and not researcher prior knowledge. This process involved typing detailed notes of conversations and interviews within one day of meeting, sending the notes to participants for review, and requesting comments or changes. Any changes or comments were then made to the notes and returned to the participant for further review. This exchange continued until both parties were satisfied the notes were accurate. Also important was the practice of bracketing, intentional suspension of preconceived ideas, while conducting the study (Leedy and Ormrod, 2013). Bracketing as a practice in qualitative research has an imprecise definition and has been explained in many different ways (Tufford & Newman, 2010). For my study, this began with an acknowledgment of my expectations of the project through the writing process as recommended by Creswell and Miller (2000). As a person who has studied student success initiatives, it is impossible to come to this study without expectations of the results. The literature review served as an important part of the bracketing process by searching for empirical evidence that not only supported these expectations, but also

research that did not. Yin (2014) supports this search for negative case evidence as a method of keeping an open mind. To assist with the bracketing process throughout the study, a standard template was used when gathering and analyzing data.

Data Collection

Multiple data sources were used to provide a solid understanding of the SUCCESS Program. A complete table of specifications detailing how each data element connects to the guiding research questions of the study is included as Appendix A. To support the development of a full understanding of the cohort group, focus groups and interviews of individual participants were supplemented with other sources of information. Prior to collecting data, all participants signed a consent form (see Appendix B) and were given an overview of the purpose of the project. Group observations and document review were also utilized to gather data. Justification for each is provided below. Data was collected at multiple points throughout the program to provide a means of tracking changes in perception, and gathering information on any alterations to the program that may occur. Table 3.2 provides a summary of data collection elements, timeframes, and participant groups. The table is then followed by a more detailed description of each method of data collection.

Table 3.2. Summary of Data Collection

Participant Group	<u>Students:</u> students who enrolled in the SUCCESS Program during fall semester; continuously tracked whether or not continued to participate in spring semester	<u>Faculty:</u> faculty who participated the development of the program and/or taught courses in fall 16 or spring 17 semester	<u>Staff:</u> tutors and academic advisors who participated in the program during the fall 16 or spring 17 semester	<u>Administrators:</u> administrators who had a role in the development and/or management of the SUCCESS Program
Data collection technique and timeframe	<u>Observations:</u> conducted in the classroom, Academic Success Center, and informal gathering spaces throughout the program	<u>Observations:</u> conducted in the classroom and informal gathering spaces throughout the program	<u>Focus groups:</u> held with academic advising staff in December 2016 to discuss experience with the SUCCESS Program	<u>Interviews:</u> individual, semi-structured interviews conducted beginning December 2016
	<u>Document review:</u> examination of forms including course grades, workshop attendance sheets, tutor reports, drop cards and withdrawal paperwork	<u>Memoing:</u> faculty recorded impressions and thoughts of experience and process throughout program	<u>Document review:</u> examination of advising notes and workshop materials	<u>Document review:</u> examination of forms including email correspondence, meeting minutes, and promotional materials for program
	<u>Focus group:</u> discussion with all participating students about experiences and implementation process conducted December 2016 individual interview was offered as an alternative	<u>Document review:</u> examination of forms included email correspondence, registration, and final grades	<u>Memoing:</u> tutors and advisors recorded impressions and thoughts about experience and the implementation process throughout the program	<u>Memoing:</u> administrators recorded impressions and thoughts of experience and process of implementation throughout program
		<u>Interviews:</u> conducted starting in December 2016 as courses concluded	<u>Interviews:</u> conducted with tutors during course involvement or date of workshop, starting in fall 2016	

Focus Groups

Focus groups were held with two of the four participant categories that make up the units of analysis for this project. Yin (2014) supports this data collection strategy in order to learn the participants' interpretation of events. A benefit of the focus group is the use of group interaction to generate insights and momentum for continued explanation (Morgan, 1997).

The students who participated in the program during fall semester were all invited to participate in this event at the end of the fall semester. This focus group was held December 2, 2016 and lasted for two hours. Students who were not able to attend were contacted for individual interviews. Eight of the students participated in the focus group and two others agreed to be interviewed. A separate focus group was held December 9, 2016 with the academic advisors as staff members involved in the process. All four of the academic advisors were present for the focus group. This focus group was scheduled for one hour, but based on conversation lasted for 45 extra minutes.

For each focus groups, questions representing the five major themes under investigation - benefits, challenges, recommendations for improvement, reasons for staying, and reasons for leaving - were written on white boards around the room. These broad questions were:

1. Which part(s) of the program are helpful and why?
2. What are the challenges?
3. How did you overcome these challenges?
4. What worked well?

5. Are there elements of this program that you feel are unnecessary or ineffective?
6. What changes would you make?
7. What keeps you here? (for the advisors this questions was modified to “them here”)
8. Other comments?

Each attendee was given a marker and asked to write comments about each area.

Following the written comments, a discussion was held with the entire group to elaborate and draw out further ideas. As a means of starting conversation, I went around the room and began to read the written statements and ask for elaboration. During the sessions, notes were taken of all comments. While taking notes, I read back my comments and asked for clarification and accuracy in an iterative manner until everyone felt the notes were correct. Photos were taken of the written statements and used for quotes from the participants. Immediately following the focus groups, the notes were transcribed and sent to all participants for member checking of accuracy and thorough reporting. The students made no corrections to the notes; however, two of the advisors replied with changes.

Interviews

A major goal of the project was to ensure the results were an authentic reflection of the participants' experience, and interviews provided a means for data collection and reporting using their voices. Interviews were conducted with administrators, faculty members, tutors, and students who were unable to attend the focus group. Questions were written to address the five broad themes under investigation. A small group of participants, two faculty members and one administrator, served as a pilot group to

ensure the interview questions were addressing the guiding research questions of the study (Creswell, 2013; Yin, 2014). Prior to each interview, a list of questions was provided to participants to allow time for reflection before conversation. This list of questions is included as Appendix C. The questions were used only as a guide to start the conversation, and interviewees could discuss the project in their own way. Based on request of faculty members, interviews were not audio-recorded. Yin (2014) supports this approach when it makes people more comfortable. Because there was no audio-recording for later reference, thorough notes were taken of all comments, and given to participants within one day of interview for review. Corrections were made to notes through an iterative process until both parties felt notes were an accurate reflection of the interview. The average length of interview was 40 minutes; however, most participants sent back additional comments in writing when reviewing the notes from the session. These comments along with direct quotes written during interview were used to capture their voices in documentation.

Document Review

Academic records of course completion, grades, registrations, drops, withdrawals, and tutoring center usage were used to provide background description of the experience. Email correspondence, advising notes, and notes from planning meetings also provided information on the process. Table 3.3 further defines each of these records, and describes how they were collected.

Table 3.3. Document Review Summary

Document Type	Date(s) Collected	Method of Collection
Grades – midterm and final grades of students in cohort and comparison group	Midterm grades – October 16 and March 17; Final grades – December 16 and May 17	Manual review of each student in college's electronic database (Banner) which was then entered into spreadsheet for analysis
Registration records – fall 16, spring 17, fall 17 records for students in cohort and comparison group	First day of class for each semester: Fall 16 – August 29, 2016 Spring 17 – January 11, 2017 Fall 17 – August 28, 2017	Manual review of each student in college's electronic database (Banner) which was then entered into spreadsheet for analysis
Drop cards – official document used by college for student to drop one or more course when student is not completing withdrawing from college	Throughout the project as cohort students dropped classes	Copies of all forms where gathered by the academic advisor working with students and delivered to me
Withdrawal forms – official document used by college when student is withdrawing from all courses in a semester	Throughout the project as cohort students withdrew from college	Copies of all forms where gathered by the academic advisor working with students and delivered to me
Advising notes – notes kept by academic advisors of all meetings with prospective and current students	Throughout the project as advisors met with students	Advising notes were collected in 3 ways: 1. Paper form given to me 2. Copy of notes sent electronically 3. Retrieved by me in college's advisor tracking software system (GradesFirst)
Tutoring center usage reports – computerized records kept by college to track number of student visits to center	At the end of each month throughout the fall 16 and spring 17 semesters	Manual review of each cohort student in college's electronic database (GradesFirst) which was then entered into spreadsheet for analysis
Email – email of memoed thoughts sent to me during study by participants to document thoughts throughout the process, also email conversations sent to groups of employees planning and coordinating the program	Throughout the project	Participants sent directly to my official college email address and/or I was included in email distributions lists during the process
Meeting notes – official minutes taken at campus meetings where the project was discussed, or notes taken by me while attending meetings as either a participant or observer	Throughout the project	Meeting notes were gathered in 3 ways: 1. Retrieved from school website once posted as official minutes 2. Minutes received as email attachment 3. Notes taken by me while attending meetings

As a means of conducting the review in a consistent manner, the template shown in Figure 3.1 was used when examining all documents. The coding system provided a means of keeping review focused on major themes under investigation. Protocol development in a case study is important due to the large volume of information (Yin, 2014).

Figure 3.1. Document Review Protocol

Document type: Date of document: Individuals included (if applicable):	
Information obtained. If quoting, attribution.	Reflections and Inferences

Codes:

- 1 = Benefit; 2 = Challenge; 3 = Reason for staying; 4 = Reason for leaving; 5 = Recommendations for improvement; 6 = Other

These documents were used as a means of triangulating information provided in interviews, focus groups, and observations and as a means of understanding the experience of those students who were unable or unwilling to be interviewed or participate in the focus group. Yin (2014) describes the advantage of multiple sources of data as “the development of converging lines of inquiry (p. 120). For this study, I began this convergence during the initial coding process by placing information into one of five a priori categories. When themes arose within these categories during the substantive

coding process, I was cognizant of reviewing different types of data to support or as counterevidence. This is discussed in more detailed as part of data analysis.

Observations

I observed class sessions and informal gatherings of students throughout the year in the role of observer-as-participant. Johnson and Christensen (2014) define this as observation during which the participants are aware they are being observed and have spent a limited amount of time with the researcher. Use of an observational protocol as recommended by Creswell (2013) served to provide a method of documenting events and reflecting on the meanings. Notes of each session contained description of events, dates, participants, and activities. Memos of my interpretations were kept for each observation. As was the case in document review, the key of codes provided a means of keeping observations focused on major themes under investigation in this study related to experience of participants. Figure 3.2 provides a sample of the observation protocol.

Figure 3.2. Observation Protocol

Header - Data, Location, Event, Participants:	
Description of Behaviors and Events	Reflections and Inferences

Codes:

1 = faculty/student interaction 2 = student/student interaction 3 = academic support 4 = challenge 5 = other

Data Analysis

Case study as a methodology has no “fixed formula or cookbook recipes” built in for data analysis (Yin, 2014, p. 133). Both Stake (1995) and Yin (2014) describe this as a benefit when using this method to understand the multiple issues associated with a contemporary, bounded case. The analysis should be formatted to best fit the unique circumstances of each project; however, having a general strategy developed prior to conducting the study is important for keeping the process true to the goals and as a means for increasing validity (Yin, 2014). In addition to looking for themes, the pragmatic nature of this project also led to the need for a reporting of the success rates of the program defined as pass rates in courses, completion of university system core requirements, and either persistence to second year or transfer to four-year institution. This was not a quantitative examination of statistical significance, but rather a reporting of details compared with past data from the college to help inform decisions about the best ways to improve the program. The use of both qualitative and quantitative data fit well into a case study design as a means of describing the phenomenon, explaining presumed links, and illustrating important findings (Yin, 2014).

Coding and Exploration of Themes

Coding and exploration of themes followed a three step process. The first step was the arranging of data into five broad a priori categories that come from the research questions and pragmatic nature of the study. The next step was to explore the frequency of codes that arose within each area through substantive coding. The final step in the

coding process was a cross-unit analysis of themes to explore how the different participant groups perceived the program.

Organizational Categorization. Following the methodology recommended by Creswell (2013) and Maxwell (2013), data analysis began with sorting of data into organizational categories. For this study, organizational categories were created based on the literature and goal of the college to use this information to make future versions of the SUCCESS Program better. Belzer and Ryan (2013) support the use of theory to inform data analysis in practice-based research. Because the initial coding stage of the analysis should be very open to allow natural themes to come from the data (Stake, 1995), the notes were placed into five broad topics that come from the research questions. These categories were benefits, challenges, recommendations for improvement, reasons for leaving, and reasons for staying. Documents included notes from interviews, records from focus groups, notes from observation sessions, comments and notes from official college forms, and meeting summary sheets from academic advising sessions. At times, there were pieces of data that fit more than one category and a judgement call had to be made as to where it fit. Some data was used for multiple categories. For example, a student stated “We need written documentation of the parts of the program so they are all used” as a recommendation for improvement. This also illustrated a challenge in that it showed that some elements were not utilized because of lack of initial communication. As a case study with four embedded units of analysis, the initial categorization of data was completed separately for each group. Notes for each document were entered into four different spreadsheets to allow for visual inspection of common themes.

Substantive Coding. This initial review of the documents identified broad themes within each of these areas to begin the next stage in the analysis process. Themes provided a means for focusing the work, and a structure to begin interpretation of data (Eisner, 1998). The development of themes was a very visual and iterative process. As notes were placed into broad categories, words used to summarize the essence of the element were added as tags in the Excel tracking sheets. Throughout data collection, these tags were constantly reviewed and consolidated or further refined as appropriate. To better visualize the data accumulating within each of the five categories, use of Excel spreadsheets was supplemented by handwritten summaries written on whiteboards for easy viewing and comparison. As elements were moved or expanded, photos were taken of the notes to keep a historical record of the evolution of the project. To represent this refinement process, Table 3.4 provides both an example of a consolidation of a tag and an expansion. Even though the data from each of the groups of participants were kept separately, refinement of tags was done in a consistent manner. That is to say, when a tag was considered for either consolidation or expansion for one group, it was explored with each of the other groups before a final decision was made as to whether or not the change was appropriate.

Table 3.4. Demonstrative Examples of Tag Revisions During Coding

Process	Original tag(s)	Final themes
Consolidation	Friendship, student/faculty relationship, belonging	Community
Expansion	Pace	Pace of courses, pace of program

Following organizational categorization of the data, secondary analysis revealed substantive themes within each area. Creswell (2013) defines themes as “broad units of information that consist of several codes aggregated to form a common idea” (p. 186). The tag words developed and refined in organizational categorization provided the themes to be examined and sorted. When discussing case study data analysis, Stake (1995) described the importance of this stage by stating “the search for meaning often is the search for patterns” (p. 78). Stake (1995) continues, the volume of information gathered in case study research makes it impossible to “give equal attention to all data” (p. 84), and this stage provides a way to continue to focus on the most important issues. Once data was coded, each theme was explored for issues and concepts that were discussed repeatedly by participants. Within each group, those theme which were mentioned most often rose to level of substantive theme (Maxwell, 2013).

Secondary analysis was completed separately for each of the four units of analysis, in this case, the four groups of participants. While the themes that were developed from the tags in the initial categorization process were not present for each group, there was consistency of use between groups when present. Tables 3.5-3.9 summarize the list of themes within each category, and for which group(s) the theme was observed, no matter how frequently.

Table 3.5. Summary List of Observed Benefits

Theme	Conceptualization	Groups in which theme was present
Community	Feeling of belonging and comradery between participants	Students Faculty Staff
Pace of courses	Delivery of semester course in eight-week format	Students Faculty Staff Administration
Extra support	Services provided to campus to assist students	Students Staff Administration
Structured schedule	Efficient block of day in which classes and supports were offered	Students Faculty staff
Confidence	Feeling of belief in ability to succeed	Students Faculty Staff Administration
Academic gains	Subject matter mastery	Students Faculty
Pace of program	Ability to finish associate's degree in 2-years	Students Faculty Staff Administration
Teaching style	Way instructor explained material and managed class	Students
Accountability	Student feeling of obligation to group	Faculty Administration
Opportunity to try new things	Excitement to explore new ways to help students or deliver course content	Faculty Administration
Relationships among employees	Opportunity to work with colleagues across campus	Faculty Administration
Rapid engagement	Rate at which students actively participated in class and subject matter	Faculty
Tutor development	Increased understanding of material and improvement ability to assist students by tutors, as well as other professional skills	Faculty Staff

Table 3.6. Summary List of Observed Challenges

Theme	Conceptualization	Groups in which theme was present
Initial communication to students	Information given to students prior to start of fall 16 semester	Students Faculty Staff Administration
Adjustment to pace	Adjustment to workload associated with coursework	Students Faculty Staff
Mid-semester issues	Problems that arose from changing courses after first eight-week block of each semester	Students Faculty Staff Administration
Technology	Difficulties associated with use of college's learning management system (D2L) and online math supplement (My Math Lab)	Students
Schedule challenges	Ability to balance outside obligations with school obligations	Students
Tutoring process	Use of tutors as embedded tutors and expectation of all students to visit Academic Success Center	Students
Scheduling difficulties	Challenges associated with staffing sections of courses and fitting eight-week and 16-week classes into a semester	Faculty Staff Administration
Other class issues	Problems with class that were not directly related to the program	Faculty
Internal resistance to change	Faculty/staff resistance to upset of the way things have traditionally been done on campus	Faculty Administration
Internal communication	Lack of clear communication of program to faculty and staff	Faculty
Cumbersome/manual process	Increase workload created by need to complete tasks outside normal processes	Administration
Expensive	Costs associated with delivery of program	Faculty Administration

Table 3.7. Summary List of Observed Recommendations for Improvement

Theme	Conceptualization	Groups in which theme was present
Better initial communication of program	Provide better, more clear direction to students at time of registration	Students Faculty Staff Administration
Defined policies for eight-week courses	Establish consistence, written guidelines specifically for the eight-week courses	Students Faculty Staff Administration
Workshop improvements	Change delivery of workshops	Students Faculty Staff
Formalize tutoring process	Create clear expectations of responsibilities of embedded tutors and requirements for students to utilize tutoring services	Students Faculty Staff
Standardize technology	Standardize use of learning management system between courses	Students
Schedule improvements	More thoughtful creation of class schedule	Students Faculty Staff Administration
Ongoing faculty/staff meetings	Recurring, scheduled meetings for faculty and staff to work together to exchange ideas	Faculty Staff Administration
Link course materials	Faculty work together to tie concepts between courses together as a means of improved student learning	Faculty Staff
Other class improvements	Other ideas to improve course delivery, not related to this project specifically	Faculty
Explore which courses should be accelerated	Study which courses fit best into the eight-week delivery method and which should remain as full-semester courses	Faculty Staff

Table 3.8. Summary List of Observed Reasons for Leaving

Theme	Conceptualization	Groups in which theme was present
Non-academic issues	Personal circumstances unrelated to course materials	Students Faculty Staff Administration
Not ready for school	Student not prepared either academically or socially for college level work	Students Staff
Pace of courses	Rate of delivery of coursework	Students Faculty
Moving into specific academic program	Selection of major makes continuing in this program impractical	Students Staff

Table 3.9. Summary List of Observed Reasons for Staying

Theme	Conceptualization	Groups in which theme was present
Community	Feeling of belonging and comradery between participants	Students
Structured schedule	Efficient block of day in which classes and supports were offered	Students
Extra support	Services provided to campus to assist students	Students Faculty Staff
Accountability	Sense of obligation to be there for the other students in the group	Students Faculty
Confidence	Feeling of belief in ability to succeed	Students
Pace of program	Ability to finish associate's degree in 2-years	Students

Cross-unit Comparison. As a third step in the data analysis process, cross case comparison was completed on the four units of analysis. Concentrating on frequency of codes and how the groups compare provided analytic strength to findings as a means of building an explanation of the entire case (Yin, 2014). To complete this process, I focused only on those themes that occurred frequently enough within each group to be

labeled as substantive themes. As can be seen above in Tables XX-XX, many themes were mentioned at least once by multiple groups; however, in the interest of focusing on the most important information (Stake, 1995), infrequent occurrences were not included.

To complete the cross-unit comparison, I started with a chart for each of the five broad organizational categories of benefits, challenges, recommendations for improvement, reasons for leaving, and reasons for staying. Each chart contained a column with a row for each theme that rose to the level of substantive within at least one of the groups. There were also columns to indicate how many of the groups in which this theme was identified as substantive. Figure 3.3 below shows the structure of the chart used to begin the comparison process.

Figure 3.3. Chart Used for Cross-unit Analysis

Category	Groups for which theme was determined to be substantive			
Theme	4 groups	3 groups	2 groups	1 group
(substantive theme listed in this column)	(listing of groups that saw this as substantive placed here if all 4)			
(substantive theme listed in this column)		(listing of groups that saw this as substantive placed here if 3)		
(substantive theme listed in this column)			(listing of groups that saw this as substantive placed here if all 4)	
(substantive theme listed in this column)				(listing of groups that saw this as substantive placed here if all 4)

Upon determining how the themes overlapped and were distinct between groups, each was explored again using data elements to examine the ways in which themes were

manifest within each group. This process provided interesting insights which are discussed in the results section of Chapter 4.

Quantitative Results

A background to the themes that emerge surrounding the research question was the retention rates of participants in the program. The hope of creators of the SUCCESS Program was the retention rate would improve for general education students enrolled in the program. Whether or not this happens does not change the need for analysis of the results, but it is important information to be gathered as part of the complete report on the project. Results were tracked for each student in the SUCCESS Program, as well as the comparison group of students. This comparison group is comprised of new students not participating in the program, but enrolled in the same math course. This group was selected for comparison because of the two criteria used by the academic advisors to determine eligibility for the program: new students and placement into Introductory Algebra.

Data was gathered on grade point average (GPA), academic standing, credits completed, and retention to next semester for both groups. This was done manually by retrieving information from the college's database of student records (Banner), and entering information into an Excel spreadsheet for calculation of averages. No identifying information was stored for students in the comparison group. Class lists provided student identification numbers to be used to retrieve information. Table 3.10 details each element and the timing of retrieval of information.

Table 3.10 – Summary of Data Collection of Quantitative Data

Data element	Definition	Timing of retrieval
GPA	Cumulative GPA of student on standard 4.0 point scale	Retrieved at the end of both fall 16 and spring 17 semesters
Academic standing	As determined by GFC policy stating 2.0 GPA is required to remain in good standing. Possible results include: Good standing Probation (first semester below 2.0) Probation continued (second or more below 2.0 cumulative GPA, but semester GPA above 2.0) Suspension (second semester below 2.0 GPA)	Retrieved at the end of both fall 16 and spring 17 semesters
Credits earned	Cumulative number of credits earned at the end of each semester	Retrieved at the end of both fall 16 and spring 17 semesters
Retention	Student is enrolled in at least one credit on the first day of classes in the subsequent semester	Retrieved on the first day of class for both spring 17 and fall 17 classes.

Trustworthiness

A strength of the case study methodology for increasing the trustworthiness of the work is the collection of data from multiple sources (Yin, 2014). True triangulations of data means that findings are supported by more than one source of data and leads to increased construct validity (Yin, 2014); therefore, this work benefits from the use of observation, focus groups, open-ended interviews, and document review to gather information. Eisner (1998) refers to this as “structural corroboration” (p. 111) which provides weight to the findings. In this work, the four units of analysis also serve to provide weight to the findings as different groups on campus addressed the same themes.

In order to make this a credible work, it was important to accurately represent the ideas and perceptions of the participants. Triangulation of data sources was combined

with thick description and respondent validation as strategies for developing credibility and authenticity (Creswell, 2013; Maxwell, 2013). According to Eisner (1998), thick description is detailed writing of not only information, but also the interpretation of that information. Member checking of this detailed writing was used as a means for the participants to review the interpretation of the researcher. After the coding and written description of the data were completed, each participant was given a draft to read and asked to provide comments and clarifications. Although this does not eliminate the risks of bias and reactivity, reviewing the detailed description gave the participants an opportunity to truly examine the picture that had been created, clear up misunderstandings, and give the work the authentic voice of the participants (Creswell, 2013; Maxwell, 2013). Use of rich data and thick description were also used as means of demonstrating dependability and transferability of the work by making the logic and process easy to follow, and giving readers an opportunity to make comparisons to other populations (Maxwell, 2013).

Because I am a visible member of the campus community with a high level of student contact, there was a risk of student participant reactivity to create a positive image of their behavior with a college official. Differences in power positions may lead to participants altering behavior in a manner intended to defer to an authority figure (Patterson, 1994). The fact that there was no ability to reward or penalize a student for participating in this study was made very clear in all communication.

A further risk was faculty and staff would be inclined to alter any perceptions that were critical of the program out of fear of retribution by the college administration. It

was crucial to express the complete confidentiality of the process to each employee, and be conscious of the fact that reactivity cannot be completely eliminated (Maxwell, 2013). To facilitate this discussion, I began with a reading of the confidentiality statement from the consent form (see Appendix B). I also had a frank conversation with each employee about the fact that the small campus size may make it impossible to completely conceal identity when references to job title were used, so they could at any time request that I change the writing style make identification more difficult. Discussions with faculty of this nature led to a request that I not record the conversations so they would feel more secure sharing their perceptions. Because faculty were the first interviews conducted, I explained to all other participants that I would not be audio-taping the conversations so they could feel free to speak openly, and they would be given an opportunity to review notes and make changes; not only to ensure accuracy, but also to protect their privacy.

Limitations

This study examined students who chose to participate in the SUCCESS Program when given the opportunity during their initial advising appointment. It should be noted, many students who qualified to participate chose not to do so. The individuals who chose not to participate may differ in systematic ways such that their perceptions of the program would differ. There were only 15 students who participated in the SUCCESS Program and were included in this case study. The small number of students also directly affected the number of faculty and tutors involved as some of the planned courses were cancelled.

The choice of qualitative methodology limits the findings of this work to the perceptions of the participants about how and why things worked – not if they worked. This was a conscious decision as “a means for exploring and understanding the meaning individuals” (Creswell, 2009, p. 4) made of the experience of the SUCCESS Program. There is an opportunity for further research to explore the SUCCESS Program results using quantitative measures.

The use of case study approach limited the focus of the work to description (Creswell, 2013). Pragmatism as the interpretive framework for the study also limited the focus. The choice of pragmatism put the emphasis on solutions to problems, whereas using another paradigm would have shifted focus to other aspects of participants experiences (Creswell, 2013).

Chapter Summary

Case study analysis of a project with clearly defined parameters was the appropriate method to meet the goals of this project. The aim of the research was to provide valuable information to GFC that will guide program development. Using a qualitative methodology gave the work the authentic voice of the participants, and using a pragmatic framework provided specific ideas and recommendations the college can use to improve future versions of these efforts.

CHAPTER FOUR: RESULTS

Introduction

This qualitative case study was framed with a pragmatic focus to allow GFC to better understand the SUCCESS Program through the experiences of the participants. The underlying goal was that this understanding would lead to improvements in the program in the future and, ultimately, improve retention and completion rates for the college. The value of problem of practice research is “more...its potential to solve local and specific problems than its capacity to generate generalizable findings” (Belzer and Ryan, 2013, p. 197). To examine the program from all angles, the study was designed with four embedded units of analysis so different groups of stakeholders would have a voice. Construct validity is increased by using multiple perspectives to define an issue (Yin, 2014). These units are students, faculty, staff, and administration. Directly involved were the Director of the General Studies division, four academic advisors, the Registrar, the Director of Financial Aid, the Cottage Bookstore Manager, the Chief Financial Officer, the six tutors involved in the project through workshops and embedded tutoring, and 12 faculty members. The 15 students who chose to participate in the program made up the student group. The academic advisors gathered information about prospective students who chose not to participate as a means of exploring problems with the structure of the program.

Two broad questions guided the study and collection of data:

1. How do participating students, faculty, and staff describe their experiences with the SUCCESS Program?
2. How do participating students, faculty, and staff describe the process of implementing the SUCCESS Program?

Analytical Approach and Themes

Yin (2014) advocates designing data analysis of a case study in a way that best fits the unique circumstances of each project. Because this project was a review of the pilot phase of a retention improvement program which was built on existing research, it was logical to begin with organization of information into a priori categories from the literature. These categories were benefits, challenges, recommendations for improvement, reasons for leaving, and reasons for staying. Selecting these specific categories also captures the pragmatic goals of this study. The last two categories, reasons for leaving and reasons for staying, were very specific to thoughts about students' decisions. When categorizing data for the other three participant groups, the focus was their perception about the reasons students leave or stay.

After the initial sorting of data into broad categories, a process of substantive coding was used. Because the amount of data gathered for the case study is so large, this process allows for exploration of the most important issues in detail (Creswell, 2013; Stake, 1995). The researcher made a determination of where to draw the line defining what was substantive, rather than occasionally mentioned. There was no specific number that defined this distinction, rather a decision was made when it appeared there was a logical division. The results of the substantive coding for each embedded unit of

analysis, the groups of campus stakeholders, was then compared for similarities and differences through cross-unit analysis.

Results

Results of data analysis are displayed for each group of stakeholders; organizational categorization followed by substantive themes. When examining the themes that emerged during organizational categorization, the most frequently occurring became substantive themes. Cross-unit comparison serves to bring together the findings from each group. Finally, quantitative results concerning student grades and retention are displayed as a method of connecting the information back to the original purpose of the program, improved student retention. Data are included on student retention, GPA, and credits earned as part of a complete report.

Students

Organizational Categorization. Organizational categorization of data provided by the student group showed a definite pattern of the perceived benefits, challenges, reasons for leaving, and reasons for staying. There was a less definite line for identifying substantive themes in the areas of recommendations for improvement. Because some areas were discussed in more detail than others were, a specific number could not be used to identify which themes rose to the level of substantive. I, as the researcher, had to make a determination based on a gap in the number of mentions of a topic and the intensity with which things were discussed, where to identify the themes that stood out as

substantive. Table 4.1 displays the initial broad themes found within the data, followed by the number of instances this theme was noted. As can be seen in this table, benefits to the program and recommendations for improvement were discussed more often than the other three categories. Overall, students were generally positive about their experiences with the SUCCESS Program.

Table 4.1. Initial Broad Themes for Student Group

Benefits	Challenges	Recommendations for Improvement	Reasons for Leaving	Reasons for Staying
Community (17)	Initial Communication (9)	Initial Communication of Program (13)	Personal, non-academic issues (8)	Community (11)
Extra Support (15)	Adjustment to Pace (7)	Defined policies for eight-week courses (11)	Not ready for school (2)	Extra Support (5)
Pace of Courses (12)	Mid-semester Issues (7)	Workshop Improvements (9)	Pace of courses (1)	Structured Schedule (4)
Structured Schedule (12)	Technology (2)	Formalize Tutoring Process (5)	Moving into special program (1)	Pace of Program (4)
Confidence (7)	Schedule Challenges (1)	Standardized Technology (2)		Accountability (2)
Academic Gains (5)	Tutoring Process (1)	Schedule Improvements (2)		Confidence (2)
Pace of Program (4)				
Teaching Style (1)				

Substantive Themes. Substantive themes were identified for each of the five broad organizational categories and are described in detail below using quotes and other evidence as representation of the themes.

Benefits. Students were very positive about the program during the focus group and during subsequent conversations with them. Observations and document review

further supported their perceived benefits. Community was the most prevalent theme when exploring benefits with the student group. This theme encompassed both a sense of comradery among their peers, and a sense of belonging at the college and a connection to the faculty and staff. Student quotes to illustrate this theme include “Having a group of supporting classmates going through the block-courses with me helped give me support and encouragement” , “Teachers are great; very understanding, really care about us”, and “Friendly, welcoming community of instructors who really work with you and give you individual attention. That makes you feel important.” These quotes are supported by observing students behaviors in class. When one student was missing from class, the others were able to tell the instructor where she was, and offered to bring her information and help her catch up. Another observation highlighting the formation of a sense of community was the pace at which students formed a group; within three weeks they were close-knit. A poignant example of this community occurred in November of the fall 2016 semester. One of the students, a single mother with four children, was faced with a dilemma when she had no money for car repairs. The others in the group pitched in and paid for the repairs so she was not forced to withdraw. In addition, several of them pitched in and purchased Christmas gifts for her children.

The extra support was also seen as a substantial benefit of the SUCCESS Program as evidenced by quotes such as “I like the extra support on Fridays”, and “The two best things were the tutoring and the fast courses. You need the tutoring to go that fast.” Interestingly, even the students who did not use the Academic Success Center for tutoring mentioned it as a benefit saying “I wish I could have fit it into my schedule.”

Observation of the students showed those who used the center on a regular basis felt very comfortable asking for help and, in turn, helping other students. Extra meetings with advisors were also mentioned “Meeting with my advisor was good, even if I didn’t have any problems.”

Although this group of students might be traditionally defined as academically at-risk based on placement into developmental math, there was general consensus that the accelerated pace of the course was a benefit of the program. “The pace of math really helped it stick and helped me remember” and “It was good for my confidence to finish a class in eight weeks. Now I know what I can do.” Most felt that the high expectations kept them focused and on track. “Having to do one essay per week in writing helped me avoid procrastination” and “I know I would waste more time if I didn’t have this timeline.” Others saw the eight-week courses as a benefit to hold their interest. “Condensed classes are great because you don’t get bored.” Academic records provided further evidence of the benefits of the accelerated courses. Of the four students who were forced to withdraw prior to the end of the term, three had earned credits.

An unintentional consequence of developing the SUCCESS Program was the creation of a very structured block of time in which classes and activities were scheduled. This was done out of necessity for finding faculty and classroom space; however, it served to provide an efficient schedule for students around which to plan outside activities. Students saw this as one of the major benefits of the program. They said things like “I waste less time because of the way my day is scheduled” and “The routine and built-in times for help make it hard to fail. If you actually do these things, you will

be fine in school.” When chatting with me in May, one of the students said “Next year will be hard for me because the efficient time block is not in place. My classes are all over the place. This year the school was great.”

Challenges. Although students were generally positive about the experience, there were clear challenges that surfaced in discussions with this group. The initial communication from advisors about the program requirements was an area about which they were all animated in expressing frustration. They felt students underutilized some of the services due to a lack of understanding. “I didn’t know about the tutors on Friday. My advisor didn’t tell me and now I have to work” and “I wish I would have gotten a schedule or paper with all of the parts listed” are evidence of this theme. A particularly strong comment was “Until this minute, I didn’t know I was *supposed* to go to the ASC. Why didn’t my advisor tell me?” This came up in the focus group in December.

The closest any participant came to anger was in the discussion of the transition between the first and second eight-week blocks of the fall semester. “I had no financial aid to buy my math book after the switch.” “Someone should have thought about how we were going to get stuff for our second classes. I mean, how can we do well without materials?” Another frustration from this transition had to do with timing. Students finished one math course on a Tuesday, and had to wait for phone calls that evening to find out which course to attend the next day. “How crazy is it that I couldn’t even prepare for math the next day?” Other mid-semester challenges were cause for less stress for students, but were still mentioned as concerns. “It was weird our second classes started a week before spring break. Nobody remembered anything.” An example from

academic records that illustrates challenges associated with the lack of defined policies is the fact that a student who intended to withdraw from all courses prior to the published withdrawal date had to accept an F grade in the course because it had ended.

The other challenge that arose from the student group was adjustment to the pace of the coursework. “It took a while to get the flow” and “I was pretty stressed at first” came up when discussing this topic. This challenge was cast in a different light than the other two. The students described this struggle because I asked about challenges, but here they also seemed proud of their ability to overcome this particular challenge because of campus support. Their tone was different and they smiled at each other as they spoke about this topic.

When considering these three challenges and how they relate to the original research questions, it appears that there were more challenges with the process than with the experience of the actual SUCCESS Program. Both the initial communication of requirements and the lack of defined policies for the transition between course blocks were related to college processes, rather than the experiences of the coursework and elements of the program.

Recommendations for Improvement. While discussing recommendations for improvement, students had very clear ideas for addressing the challenges they faced. The most prominent of these was about the process for communicating information about the program to new students. “The expectations should be more clearly defined at registration.” They had very specific recommendations for how to make the advising process clearer and more effective for incoming students. “We should get a paper with

all of the elements. I don't think my advisor told me, but even if he did, I probably would have forgotten some things. A paper could be like a schedule." The recommendations given all address the underutilization of specific elements of the program. The Friday tutoring and workshops should be on our schedule. Maybe you could make us register like a class or something" and "The tutoring helps so much and some of the class didn't understand about it. I think that should be on a contract or document in advising."

There were also specific ideas on way to make the transition between blocks smoother. "Figure out a way to charge books in the middle" and "We need more information about how financial aid is going to work so we can get our books for the second classes." Both of these quotes address their main concern about the eight-week courses. The quotes "The schedule should not change in the middle of the week" and "Plan spring break so it is in between the classes, not during one" both demonstrate ideas for making the transition easier.

The recommendations for improving the workshops were not couched by the students as ways to address the adjustment to the pace of coursework, but as can be seen in the student quotes, they address the challenges described by the students. "Frontload the workshops to give the information sooner", "I would like a workshop on stress management", and "Workshops should be changed to an orientation right before classes, or maybe first few days" all speak to this feeling.

Reasons for Leaving. First-hand accounts of why students left were more difficult to obtain. Two students were willing to talk to me, but most information was gathered through written comments on withdrawal forms. The most common reasons for leaving

provided by students all related to outside personal issues; not academic challenges. One of the students told me “I have no outside financial or emotional support. I have to take care of my obligations.” On withdrawal forms, I saw students check the box for the options of *I am experiencing physical or emotional health related problems*, and *I encountered unexpected changed in finances*. Another student wrote in a comment on the form “I have been dealing with depression for a long time but haven’t dealt with it.”

Reasons for Staying. It was difficult for students to differentiate their reasons for staying from overall benefits of the program. Watching students write comments on the board during the focus group, their confusion was evident. Benefits were the first questions asked and the questions about staying were near the end. I watched them think for a while, then turn and reread what they had written on the board for benefits. During conversations around this question, they restated their perceptions of benefits. A noticeable difference between the perceived benefits and self-described reasons for staying at the college was the pace of the courses. It was a substantive theme in terms of benefits, but was not mentioned during reasons for staying.

Here again, the sense of community was identified as the biggest factor. Community as a theme is supported by quotes such as “Having the same people in the same classes so you can get help from them if you needed or they would remind you of something you forgot to do” and “Having the same people in my class helped me stay committed to the program and I felt like it was all worth it to get a start at life.” Relationships with faculty also were mentioned: “Faculty and staff are great to work

with” and “The teachers bend over backwards to help you and make you feel like you belong.”

The extra support provided by the college through support services is an area I have determined to be a substantive theme, although the number of mentions may not make it appear so. I made this decision based on the passionate way it was expressed during the focus group. “I finally get math because of all the help and how much we did.” This was said in a raised, excited voice. Also, “The homework is a lot, but with the help there is no reason not to finish.” This was said with a tone of almost disbelief at the idea that someone would choose to give up.

Summary of Substantive Themes. The students who participated in the SUCCESS Program had a mostly positive experience. They provided insight into which parts of the program were most beneficial, and those that needed to be addressed in order to provide a better experience for the next group of students. Students recognized the sense of community, the nature and pace of the schedule, and the extra support as helpful to their success. The challenges they identified were countered with suggestions for improvement. The students felt most of the challenges should be addressed by improving the communication to students about program attributes, and formalizing the policies and processes associated with the condensed block courses. Using this group as a unit of analysis in the case study gives us the student, indeed the customer, perspective on the SUCCESS Program.

Faculty

The students' perceptions gives us one view of the program, but it is important to view the experience with the program from the perspective of other campus stakeholders. Faculty as the campus experts on the academic requirements offered valuable insights as well.

Organizational Categorization. As can be seen in Table 4.2, there were clear themes that emerged from categorization of faculty data for both benefits, challenges, and reasons for leaving. Recommendations for improvement and reasons for staying were more evenly distributed. When faculty discuss benefits, their thoughts are divided between benefits to the students, and overall benefits of the process. When discussing challenges and recommendations they are mainly addressing process issues. The last two categories are faculty perception of students' reasons for leaving and staying.

Table 4.2. Initial Broad Themes for Faculty Group

Benefits	Challenges	Recommendations for Improvement	Reasons for Leaving	Reasons for Staying
Community (21)	Scheduling difficulties (14)	Initial communication of program (8)	Personal, non-academic issues (4)	Extra support (4)
Confidence (13)	Initial communication to students (8)	Scheduling improvements (7)	Pace of courses (1)	Accountability (3)
Opportunity to try new things (11)	Mid-semester issues (7)	Formalize tutoring process (7)		
Pace of courses (10)	Other class issues (5)	Ongoing faculty/staff meetings (7)		
Structure of schedule (7)	Internal resistance to change (4)	Link course material (5)		
Rapid engagement (3)	Adjustment to pace (4)	Defined policies for eight-week courses (3)		

Table 4.2 Continued

Accountability (3)	Expensive (2)	Workshop improvements (3)		
Tutor development (3)				
Academic gains (3)				

Substantive Themes. Representative evidence is provided to support the substantive themes for each of the categories.

Benefits. When discussing the benefits of the program, three of the common themes from faculty related directly to students: community, confidence, and the pace of the courses. Interestingly, and unexpectedly, faculty saw the opportunity to try new things as a benefit of the program.

Faculty saw an extraordinary sense of community with this group of students as evidenced in quotes such as “There is an obvious, strong bond between these students”, “I think the bond between students provided intrinsic motivation to participate in class”, and “It is interesting to see how much they know about each other’s lives.” During class observations, I noticed that the students backed each other up when discussing controversial subjects. I also observed a connection between faculty and students. One of the students who is very shy felt comfortable enough to bring in a family heirloom and seek out his instructor to share it. I witnessed students and faculty chatting very comfortably in common areas of campus.

An increased level of confidence unusual among first semester students was another benefit discussed by faculty. Evidence included comments such as “The confidence level of these students is high. To the point that they help other students”, “I

am impressed with how brave they are to share very personal examples in class, even the two who are really shy”, and “Confidence developed quickly in these students. They gave some of the best presentations in class.” One of the faculty members who taught in the spring semester summed up the theme of confidence very well by stating

This program provides so many opportunities for success that it can only build students up. They get to try multiple formats and get a lot of support doing it. We are setting them up for success. They believe they can do it now.

The faculty also saw the benefits to students of the accelerated courses. The pace served as a means of holding their attention: “Acceleration is good for this class because it kept their interest.” They also mentioned accelerated courses as a means of keeping the students focused: “There was less procrastination from students because they knew they were busy.” Finishing more courses was also recognized in comments like “students like to complete core courses quickly and check them off the list” and “completing a core class quickly is a benefit.” Faculty recognized the benefit in terms of academic gains in statements as such “Continue working on implementation of eight-week courses. There is value in bathing in the material” and “Having both condensed and regular courses is good for students. They get experience to help them no matter where they transfer.”

Participation in this project appeared to provide motivation to reimagine class delivery and the level of excitement for this opportunity shows dedication to their vocation. Comments to support this theme include:

- “I’m glad we did this on a small scale so I know what to do better next time.”

- “This give me a chance to use concepts from the biology class into the material in philosophy. Because I know they are all in that class, I could try out linking material to make the examples more relevant. That worked great.”
- “A big plus for me was getting to try out my content in a new format.”
- “This gives faculty an opportunity to rethink course delivery which is always good.”
- “I’ve never taught this class four days per week before. I was able to incorporate field trips and experiences which improved the learning experience.”

In addition to the comments, my observations from the interviews support the benefit of this area. Faculty tone of voice and the amount of time spent discussing this topic support their excitement and appreciation of the opportunity.

Challenges. Scheduling difficulties was by far the biggest challenge identified by the faculty. The issues here surround loss of instruction time, uneven workloads, and planning difficulties. Here again is a place where the dedication to teaching is evident, as the biggest concern is not having enough time with students to effectively meet course outcomes. Evidence to support this challenge comes from statements such as “Schedule of class meeting days was not well planned and I missed a lot of instruction due to holidays”, “Holidays need to be considered when planning the schedule because I miss so much instruction time”, and “The second block started one week before spring break. It was weird for the students and me. It was like wasting a week in an already short class.” An uneven workload for faculty teaching in the program was a problem. Their comments include “It is difficult to teach both a sixteen and eight week section of the same class”, “It is a difficult adjustment to teach in the second block if you didn’t in the first. It makes your workload very uneven”, “I am sure glad I taught in the first block while my energy

was higher. This would be a bugger of a schedule in the second block”, and “Teaching is a big time commitment and a big schedule change if you only teach in second block.”

My observations support this idea in that it was obvious that the faculty who taught in the first block were more positive in general than those who taught in the second block.

Planning challenges were presented as “difficult to staff both a 16-week and eight-week section of the same class because of our small population” and “Building this around math is where it all falls apart. We have too many options for math to make it logical.”

Faculty sentiment echoed that of students on the lack of utilization of services due to ineffective communication prior to the start of the semester. They said things like “Students are not clear on requirements for tutoring or workshops” and “Expectations for tutoring were not clearly explained and that created a lot of waste. Few used it.” They also felt that advising information needed to be more specific about succeeding in college in general. One person said “Initial advising needed to include more information on the pace of work and expectations of college work” and “They should also focus on some affective characteristics like attitude and work ethic.”

Another challenge identified by both students and faculty was the lack of clarity around processes associated with the eight-week courses. This created issues related to processes such as reporting of final grades, and frustration on behalf of students who were unable to obtain textbooks. Process comments included this statement that captures the sentiment very well: “There were no clear dates for things in the eight-week classes. It is good that it was a small number of students because nothing was defined...things like grade deadlines, midterms, drops.” I also saw evidence of this confusion when

reviewing academic records. After the first block of the second semester, one instructor turned in final grades, but the other did not. No one caught the error, because no one was looking for those types of problems. Frustration more directly tied to the student experience was expressed in quotes such as “We changed to second block in the middle of a week which was chaos”, “The students were unable to get books for my class using financial aid. That was a huge oversight”, and “I thought was a little difficult to have students take a final on Tuesday, wait for a phone call, then show up for a new class the next day.”

Recommendations for Improvement. Faculty used the opportunity to provide recommendations for improvement to thoughtfully address the challenges that arose or to maximize what they saw as benefits. In my meetings with them, it was common for them to refer to their notes on challenges and make sure they had mentioned a potential solution. The nature of their jobs and understanding of the assessment process as a means of continuous improvement were evident in this area. They identified areas for improvement and came up with specific processes to do so.

Some of the schedule improvement ideas were very specific; things like “I would hold my class four days per week for an hour and fifteen minutes instead of two days per week for two and a half hours. I think retention of information would be better.” I also saw this specificity come into play during planning meetings to continue this work next year. The faculty used data provided by the institutional researcher to determine which class would be better than math to serve as a central course for the learning communities. Based on that information, new cohort structures were built to move into the 2017-2018

academic year. Other ideas were less specific, but went to address problems with the schedule. When discussing holidays, one said “we need better planning to make sure the instruction time is there” and another said “we can’t just count days to plan a schedule, logic must come in” when discussing the odd split of time due to spring break.

Interestingly, although the uneven faculty workload came up often when discussing challenges, it was not mentioned during discussion of recommendations for improvement.

Recommendations for improving the tutoring process were also specific ideas that faculty were already planning to put in place for next year. One person stating “We need job expectations outlined between the tutors and the faculty prior to the start of the semester if we continue with embedded tutors” was impetus for a work session to outline a written process and faculty/tutor contract for next year. They also commented about other ways to improve this process in ideas like:

- “pre-plan assignments to award points for working with tutors” ,
- “create mandatory study groups so students use the tutors more productively”,
- “mandatory math tutoring is a good idea; I’ll work on that”, and
- “rearrange the tutor schedules so the embedded tutor from a class is available in the ASC when the students are out of class.”

Thoughts on improvements to the initial communication to students were split. Some of the recommendations were to address the problem of underutilized services. “Make sure students are aware of extra supports” and “Students were not clear on the requirements for tutoring and workshops on Friday. This is something to fix. Be

specific!” are both quotes that summarize the sentiment. Other comments included thoughts on how to better prepare students for success in college-level classes. Ideas here included “In initial advising, students need to be made aware of pace and workload. I recommend some literature”, “Better communication at advising about the difference between STEM and non-STEM tracks so they get the right classes”, and “Advising should take a coaching approach and address college readiness outside of just academic preparation. Affective characteristics should be addressed in that initial advising session.”

The recommendation to hold ongoing meetings also demonstrates the desire to make improving the program a continuous process. Sentiments included “Have faculty in each cohort work together to make sure concepts are tying together. Maybe regular instructor meetings” and “It would be great to get together and discuss topics and concepts so we could link the content.” Other ideas were meant to address what was seen as a lack of clear communication to personnel. “We need better communication to all faculty. Don’t assume everyone is in the same meeting. I would schedule group meetings for everyone involved in the blocks. We aren’t all in the same academic division.”

Reasons for Leaving. The themes expressed here represent faculty perception of why students leave the college based on their conversations with them and observations of student behavior. This is a limited amount of data, but the conversations with faculty illustrated their conviction that all students are able to learn the material, when given the opportunity to attend and complete the work. They said: “Life factors, it has nothing to

do with the coursework or the structure of the program” and “Life circumstances, really nothing to do with the teaching or the school” when addressing this question.

Reasons for Staying. Faculty seemed to have the easiest job assessing reasons for staying specifically. Of all of the groups, they are in the best position to compare this group of students with their peers based on their level of student contact and role on campus. They identified accountability to each other and the extra supports built into the program as key reasons for staying. Accountability was described by faculty as “They have genuine concern for each other and they hold each other accountable” and “I see them in the ASC; they don’t want to let each other down.” During class observations, I recognized this level of accountability between students. For example, I watched as students in class talked to the instructor about why a student was absent, and tell her they would take him the work and make sure he had it done before the next class.

Summary of Substantive Themes. Faculty were able to identify benefits and challenges for both themselves and the students they serve. An unanticipated benefit of the program was the excitement of faculty to have the opportunity to try new things. They listed the sense of community, pace of courses, and increased confidence as benefits to students. Over and above the sense of community described by other groups, faculty saw a sense of accountability between students. Similarly, this group identified challenges for both themselves – scheduling issues, and for students – poor communication of program requirements and lack of policies for transition between eight-week block courses.

Staff

The third group of stakeholders has an opportunity to view elements of the program from a different perspective than that of students or faculty. The staff have the opportunity to work directly with students, and have an in-depth knowledge of the mechanics of making the college run. That is to say, they understand the required policies and processes for functions that support students outside of the classroom. Their contributions show some of the same benefits, challenges, recommendations for improvement, reasons for leaving, and reasons for staying; but also elements that would be missed without their insights.

Organizational Categorization. Table 4.3 displays the results of initial coding of data gathered from the staff. This group has very clear thoughts on the benefits, challenges, recommendations for improvement, and reasons for staying. There is less certainty about reasons for leaving. The two groups of staff members who make up this group, tutors and academic advisors, provide an interesting distribution of results. These groups are similar in that they both have a high level of student contact, and limited decision making authority over processes; however, the jobs they perform are very different. These groups are in a position to notice different things. Even though pace of the program was the element that received the most support in the data from this group, no tutor mentioned it. Conversely, the academic advisors did not mention formalizing the tutoring process due to their lack of exposure to this issue. Common to both categories of employees included in this group was the recognition of the benefit of the

structured schedule, extra support, and community; and the challenges created due to the poor initial communication of the program to students.

Table 4.3. Initial Broad Themes for Staff Group

Benefits	Challenges	Recommendations for improvement	Reasons for leaving	Reasons for staying
Pace of program (16)	Scheduling difficulties (17)	Scheduling improvements (18)	Not ready for school (2)	Extra support (6)
Structure of schedule (12)	Initial communication to students (11)	Initial communication of program (13)	Personal, non-academic issues (1)	
Pace of courses (7)	Pace of courses (5)	Formalize tutoring process (11)	Moving into specific program (1)	
Community (7)	Mid-semester issues (5)	Workshop improvements (6)		
Tutor development (6)		Defined policies for eight-week courses		
Extra support (6)		Link course material (3)		
Confidence (4)		Explore which courses should be accelerated (1)		
		Ongoing faculty/staff meetings (1)		

Substantive Themes. The gap in frequency of mention made labeling of substantive themes very evident for all categories except reasons for leaving. There was a definitely a gap in number of mentions which made the most important issues for this group stand out.

Benefits. The staff group clearly saw the pace of the program as the biggest benefit of the program. The conversations with the academic advisors about this theme were around both the benefit as a selling point for prospective students, and as a way to assist students in completing their programs of study. To support the appeal of the

program to students, they said things like “The quicker timeframe is appealing”, “Students like the idea of finishing quickly” and “They save money by getting through quickly.” The conversation around completing a program of study included “finish the AS faster [associate of science degree]”, “will finish prerequisites for program more quickly”, and “many see this as an opportunity to complete either math or general education quickly.” Based on job duties, it seems logical that this was so important to the academic advisors. Advising is the functional area on campus responsible for registering new students, and for filing graduation paperwork at the completion of a student’s program of study.

This group, both tutors and academic advisors, also discussed the structure of the schedule as a major benefit, even though it was not an intentional element of the program. Comments included “schedule matches that of her kids”, “structure of program with set schedule appeals to her”, and “schedule gets them in the ASC to maximize their time.” An email from an advisor also documents the importance of the structure as a selling point by listing this as a reason people were signing up early in the recruiting process.

Challenges. Challenges listed by the staff group are very obviously practical concerns arising from their jobs on campus. The scheduling difficulties addressed here are directly related to helping students register for classes. “M065 [pre-Algebra, lowest level of developmental math] is not an option which is excluding many students”, “no part time option”, “math placement is the biggest hurdle”, and “schedule doesn’t fit job, we need an evening cohort” were all written comments taken from advising notes.

Initial communication to students about program requirements created problems for the tutors who were engaged to provide services to students, which were underutilized due to lack of understanding. The frustration from the tutors was evident in conversations about the process. They said things like “Only six people came to my workshop because they didn’t know about them early enough”, “Students didn’t use ASC because they didn’t know about the extra support times” and “We need to give more direction about Fridays so we see more students use the help.” The advisors also recognized problems that arose from unclear communication. One told me “the advisors are presenting the information differently, that is a problem.” Another advisor wrote in email that information was being missed and wished she would have created a checklist for conversations.

Recommendations for Improvement. The recommendations given by the staff group are very pragmatic and directly related to their jobs on campus. Schedule improvement suggestions relate to ways to make it easier for more students to register for the program. During the focus group, the advisors told me that math as the common class for the program does not work. “Either don’t use math, or add pre-algebra group.” They also said we need to add options for both part-time and evening students. The ideas for improvements to communication would lead to improved use of services, as do the recommendations for improvements to the tutoring process. Communication ideas included written contracts and standardized advising materials. One person said “We need something written to give to students so they understand the requirements and benefits.” A tutor recommended the following: “I think the most important message

beforehand is to make sure students know that this is hard, but you can do it if you follow the program.” I observed students in a workshop react positively to hearing that the program elements are based on research and give them every opportunity to succeed.

Reasons for Leaving. The academic advisors are in a unique position to assess students’ reasons for leaving as the college staff members with the most information about students. They see pre-enrollment information and progress reports from all courses, and they have one-on-one meetings with the students to discuss their plans and goals. In addition, all students who withdraw must meet with an advisor to complete paperwork so they have the ability to compare the cohort students with other students. The comments from the advisors show they are using this information, not just what the students are saying, to make a determination as to what is leading to withdrawals. The advisors are the only group to identify the fact that students are not ready for school as the reason for leaving. Although the tutors were asked questions about why students were leaving, they did not feel like they were in a position to answer.

Reasons for Staying. The staff comments on reasons for staying come mostly from their conversations with students. Both tutors and advisors have a high level of one-on-one interaction with students and get to know them well. Both of these employee groups felt strongly that the extra support was the biggest factor in the reasons students were able to stay in school. One of the advisors said, “If I could see all my students this often, they would all stay.” Another said, “This has shown me that with all the extra support, they don’t really need quite as much as advising as everyone else. They are set

up to finish and they know it.” One of the tutors put it as “They feel special and probably will need less support to stay in the future semesters because of what they got this time around.”

Summary of Substantive Themes. The staff group provided a very different view of the benefits of SUCCESS Program. This is the only group that saw the pace of the program as a major benefit for students. The challenges they identified, along with recommendations for addressing those challenges, are similar to faculty and students. Scheduling and communication to students need to be addressed.

Administration

Organizational Categorization. As the group responsible for facilitation of the process and with less student contact, it is interesting to note the different themes that emerged from the administration group (shown in Table 4.4). Topics that would be missed without including this group of stakeholders become known when examining the information provided through data gathering within this unit of analysis.

Table 4.4. Initial Broad Themes for Administration Group

Benefits	Challenges	Recommendations for improvement	Reasons for leaving	Reasons for staying
Opportunity to try new things (10)	Cumbersome/manual processes (11)	Defined policies for eight-week courses (10)	Non-academic issues (1)	<i>No one in this group felt comfortable assessing this element specifically</i>
Relationships among employees (7)	Scheduling difficulties (9)	Initial communication of program (8)		

Table 4.4 Continued

Pace of courses (4)	Internal resistance to change (7)	Scheduling improvements (7)		
Pace of program (3)	Mid-semester issues (7)	Ongoing faculty/staff meetings (3)		
Extra support (2)	Initial communication to students (4)			
Confidence (2)	Expensive (4)			
Accountability (1)				

Substantive Themes. The benefits, challenges, and recommendations for improvement that are identified in a substantive way by this group clearly show pragmatic considerations for process.

Benefits. It becomes evident when reviewing the perceived benefits of the program through the eyes of the administration that this is the group with the best ability to see the big picture of coordinating a program of this magnitude. Much like the faculty, the administration group recognized the benefit of being able to try new things through this program. The focus of why this was a benefit was, however, different for this group. Whereas the faculty felt invigorated by trying new things in the classroom, the administrators saw it as an opportunity to work out the issues before rolling out the program campus-wide. One person said it as “Offering as a pilot with small numbers really helped us identify processes that need to be built.” Another appreciated the opportunity as a way to reduce unnecessary costs by stating “pilot structure of program was helpful from a financial perspective so we can assess what works before committing considerable resources.” Still another looked at it from a more academic perspective and appreciated that it “gave faculty an opportunity to rethink course delivery while still

meeting learning objectives” and “this helped bust the myth that our students can’t handle 15 credits.”

Only the administration group identified the relationships between employees as a benefit of the program. Appreciative comments included: “This strengthened the relationship between Student Affairs and Academic Affairs”, “Because we worked together we added financial aid safeguards such as stringer courses”, “The communication and willingness to work together was a big strength of the project”, “Communication between and flexibility and willingness of staff to work together and address issues as they arose; this is a benefit of our small school in this type of project.”

Challenges. Just as within the benefits of the program it was easy to identify the administration group as the individuals who understand the coordination of such a program, it is again evident in the challenges. This is the group of campus individuals who are largely behind the scenes with the responsibility to manage the functional areas of campus that make things work. When done well, their actions are largely invisible to the students and faculty; however, when there is a problem, it is obvious to all. The biggest challenge identified by this group involved the amount of manual process that had to be put in place to handle classes outside the normal academic calendar. Issues were pointed out such as “The Banner system is not built to accommodate learning communities or eight-week courses”, “It is a manual process for financial aid to make any adjustments”, “Every additional part of term [in reference to different length courses in the same semester] creates a lot more work. You have to have policies and a calendar

for all of them”, and “Eight-week classes create additional work for no-show reporting, midterm grading, and final grading.”

The administration group also addressed scheduling difficulties. Similar to both the faculty and staff groups, they identified the problems with using math as the course around which to build the program. One person said “The math option created difficulties because there is too much variation in students’ math placement.” Another told me “We had to add another math option in the second block which created several problems including very small class sizes, disruption to student schedules, and faculty workload issues.”

Unexpected problems at the mid-semester switch between blocks created several problems. One problem they identified had to do with veterans’ benefits for students. Document review of meeting minutes showed that “the break between classes creates a financial burden for students using VA benefits as their housing allowance is impacted.” Another issue was the lack of policies to address add/drop and withdrawal for second block courses. “Some things had to be done on the fly...Like allowing a student to drop a second block class because the course had just started, even though campus drop date had passed.”

It was also interesting to note that this group recognized internal resistance to change in other employees, but did not see it in themselves. One person said “It was hard to assess how many students may *actually* have been interested due to the different levels of buy-in from advisors and how that affected presentation of information.” Another person noted that faculty seemed reticent to change their long-held class schedules. My

conversations gave me the impression that this group held as much resistance with respect to changing processes as perhaps faculty had in terms of changing course delivery schedule. I made this interpretation from listening to tone of voice and the subtle way that things were phrased. For example, when discussing creating policies, one person said “*if* we went to this process, we would have to...” with a big emphasis on the *if*. Also, when discussing the benefit of being able to try things on a small scale, there was an attitude of gratitude that some things were difficult; a sense that the college may not go through with full implementation because challenges were uncovered. Observations in meetings also gave clues to body language and facial expressions that indicated skepticism and inflexibility.

Recommendations for Improvement. As would be expected of the group that has the authority to make policy on campus, the suggestions offered for improvement by the administration group demonstrate a recognition of the need to formalize processes from schedule creation to eight-week courses to communication to students. The broad nature of the recommendations also highlights the fact that although they are the group that makes big picture policy, they are not the employees who carry out the tasks. As such, their recommendations are not at the level of specificity seen with the staff group. They address what needs to be done, but not how to do it. These ideas include:

- “Find a way for students to use financial aid for books in second block of semester.”
- “Build Banner coding to remove manual processes for different length classes.”
- “Develop academic calendar that includes the dates for eight-week classes.”

- “We need to develop policies and calendar to handle multiple parts of term. This includes add/drop, withdrawal, midterm reporting, etc.

The administration group made recommendations for improvement to the schedule, similar to those of both staff and faculty. “Math is not the course we should use to build learning communities” and “There are too many variations of math placement in first semester to make it an effective way to structure the learning communities.” They are also in the position to make a recommendation for a better course for planning, suggesting “Group learning communities around WRIT 101 instead of math. That is the common course for first semester students.”

The other major group of recommendations made by the administration group concerned the initial communication of the program to students. They made statements such as “Advising should be clearer up front. Provide written documentation of the program”, “Communication to students should always be positive and encouraging and “Students must be made aware of all financial aid implications of second-block courses to avoid potential problems.”

Reasons for Leaving. Only one person in this group felt comfortable addressing the reasons students leave, and she used comments from faculty as her basis for reply. She simply stated “personal life” when asked her thoughts on why students leave. The lack of direct student contact for this group is a logical explanation for their uncertainty on this topic, and why none felt comfortable speculating on which parts of the SUCCESS Program led to student persistence. One administrator said “I could go pull some

withdrawal forms and read the comments, but then I would just be rehashing information you already have.”

Summary of Substantive Themes. The administrative group provide valuable insights into the benefits, challenges, and ideas for improving the SUCCESS Program that add to the understanding gained from the other three groups. The next step in the process is a direct comparison of the results from each group.

Cross-Unit Analysis

A comparison of the substantive themes from each of the four participant groups highlights the importance of examining this project from multiple perspectives. Yin (2014) advocates using subunits within a single case study as a way to give attention to multiple facets of the case; however, the power of the case study is lost if the information from each subunit is not brought together to explain the whole. There are themes common to multiple groups; but also, those that would be missed without each group participating in the discussion. Table 4.5 summarizes the frequency of the substantive themes by group. A discussion of each follows the table.

Table 4.5. Cross-unit Comparison of Substantive Themes

Organizational Category	Number of groups for which theme emerged repeatedly			
	4 groups	3 groups	2 groups	1 group
Benefits		Structured schedule (students, faculty, staff)	Opportunity to try new things (faculty, administration); Pace of courses (students, faculty); Community (students, faculty); Extra support (students, staff)	Relationships among employees (administration); Pace of program (staff); Confidence (faculty)
Challenges		Mid-semester issues (students, faculty, administration); Scheduling difficulties (faculty, staff, administration); Initial communication to students (students, faculty, staff)		Cumbersome/manual processes (administration); Internal resistance to change (administration); Adjustment to pace of coursework (students)
Recommendations for Improvement	Better initial communication (students, faculty, staff, administration);	Schedule improvements (faculty, staff, administration);	Defined eight-week policies (students, staff) Formalize tutor process (faculty, staff)	Workshop improvements (students); Ongoing faculty/staff meetings (faculty)
Reasons for Leaving		Non-academic issues (students, faculty, administration)		Not ready for college (staff)
Reasons for Staying		Community (students, faculty, staff); Extra support (students, faculty, staff)		Accountability (faculty)

Benefits. There were no benefits identified by all four groups with the frequency to be coded as a substantive theme. Three of the four groups, all except administration, identified the structured nature of the schedule as a benefit. For the students and staff this was prevalent enough that I considered it a substantive theme. Students noted the efficiency of their schedule as a means of allowing them to accomplish more by wasting less time. One woman said that she needed this schedule “to balance my classes, homework, job, and kids.” Another said “this allows me to still have a life in the evenings. I might not stick with it if I couldn’t do stuff.” Tutors also recognized that students had a set schedule for studying which is not always common among new students. “We see them at the same time each day which helps get a system down.” The academic advisors saw the benefit of the structured schedule before classes even started as a selling point when recruiting students. Comments from advising notes included: “fits with her children’s activities” and “timeframe appeals to him.” Interestingly, this was not a main focus of the creators of the program, but rather a consequence of efforts to create learning communities and balance faculty workload.

All four groups mentioned the pace of the courses as a benefit, but for staff and administration was not a substantive theme. Again, the roles of each group make this a logical outcome as the benefit of the coursework changes is most evidence to students and faculty. Students described the pace as helping the material “stick” and keeping them from procrastinating. Faculty appreciated that “it keeps them from getting bored” and “eliminates some of the need for review because there is no time lapse between math classes.”

The perceived benefits of the program are very similar for the students and the faculty. Both groups identified community as the biggest benefit. Students described feelings of “fitting in” and said “we can depend on each other.” The faculty noticed they “fed off each other” in class and “worked together well.” Faculty identified increased confidence at a higher rate than did students, which makes sense based on their ability to compare students in this group with others who are not participating in this program. Examples of their observations include “They felt supported and comfortable; some of the best presentations I have seen” and “All of this early success is showing them they can do it.”

Students identified extra support as a benefit, as did staff. Tutoring, in particular, stuck out as important to both groups. One of the students expressed appreciation for being required to use these services. “I probably wouldn’t have done it. I mean, I never needed it in high school so why start now.” Interestingly, faculty did not specifically mention this as a benefit, but did discuss it in the context of reasons students stay on campus. In that context, one person summed it up nicely saying “I think this is the same as the benefits of the program. It is all the support together, the program as a whole.” Perhaps, when examining benefits, they were thinking in the context of benefits more closely tied to their specific work; however, the support system for students is a benefit for keeping them in school.

Faculty and administration both mention the opportunity to try new things as a substantial benefit of the program. An administrator said “I am so grateful we tried this small scale so we could fix the bugs. “I am glad I could teach in this pilot so I could test

some new things in class” was a quote from one faculty member and a common sentiment among many. I see this as an exciting finding as it demonstrates the dedication to improvement of both of these groups of employees. Given the opportunity and resources, there is true passion on campus for helping students retain and complete their education.

There were benefits which were only identified by one group. Relationships among employees was a commonly mentioned benefit among the participants in the administration group, but not mentioned by other groups. This group is in a unique position, as planners of the program, to see this benefit. One person put it as “I think we are closer as a campus now because we understand each other’s struggles a little more.”

Pace of the program was the most frequently mentioned benefit by the staff group, but was much less important to the other groups. This is a logical finding when considering the academic advisors who worked to promote the program with prospective students are part of the staff group. Their advising notes show that initial meetings with students who elected to register for the program “liked the idea of getting done so quickly” and “finishing the associates for transfer sooner.” The data suggest this feature of the program was beneficial when recruiting students to participate; however, once in the program, students saw greater benefits from other aspects.

Challenges. The biggest challenge to the success of the program varied by group. Communication to students about the expectations of the program was mentioned by each group; however, less so by the administration group. This stands to reason, as the administration is the group with the least frequent interaction with students. It was

important to identify where communication gaps occurred and the problems they created so improvements can be made for the next year. The lack of clear communication to students about the program expectations had an impact on the utilization of services. Students, faculty, and staff all described frustration with this part of the experience. One of the students wrote “Friday class and workshops” on the board under challenges and then circled it. When asked for clarification, she said “I didn’t know about it until after classes started and that messed up my job.” The tutors’ services in workshops and for assisting students in the ASC were not well used which created a decrease in job satisfaction. “I was bored a lot!”

Scheduling challenges was noted as one of the most common themes for all of the employee groups in this study. Staff identified scheduling challenges from the perspective of attracting students. As one advisor said, “We picked the wrong class to build this around. Math has too many options to work as the center.” The faculty and administration identified scheduling challenges from the perspective of finding instructors to teach sections of courses, creating a manageable teaching load, and maximizing instruction time within courses. Students do not mention this as an issue; however, as only students who opted into the program were included, that is an expected outcome. Those students who could not commit to the schedule did not participate in the program.

A theme common to three groups; students, faculty, and administration; was mid-semester issues. One of the students wrote “The second half was UNORGANIZED” and a faculty member called it “chaos.” Both faculty and staff were clearly frustrated by the

oversight in providing a way for students to use financial aid to buy textbooks for the second block courses. The administration group also identified this as an issue, but without the frustration. This group was able to identify that while this was a challenge, identifying it in this pilot program provides an opportunity for improvement.

The cumbersome nature of managing this program is an important challenge identified by the administration group. One person said it as “There is no way we could have rolled this out for the whole campus; we just don’t have enough hours in the day.” No other group of stakeholders is in the position to understand the volume of work created by changing the traditional offering of courses. While identifying this major challenge, this group was appreciative of the opportunity to try things on a small scale in order to better understand where problems would arise, and which process need to be automated in order to scale up this type of initiative campus-wide.

Recommendations for Improvement. Better communication was the common recommendation from each group. This was the only theme from any of the categories that emerged as a substantive theme for all four groups. All noted that students needed more consistent information and written documentation prior to the start of classes. Suggestions ranged from “a written contract” to “a checklist of important information.” Students and staff both felt that services were underutilized due to a lack of understanding which would be addressed with better communication. “Tutoring usage really suffered simply because people either never heard or forgot about the plan for it.”

There were unanticipated circumstances that arose from the mid-semester completion of some courses, and the start of others. The need for defined processes was

mentioned by all four groups, but was only a common theme for students and staff.

During the focus group one student wrote on the board in all capital letters “FIX FINANCIAL AID SO EVERYONE CAN GET BOOKS FOR THEIR CLASSES.” The problem would have the most direct impact on students who experienced problems with textbooks, and academic advisors with the responsibility for handling processes such as course add/drop and withdrawals from the college. Advisors expressed frustration about not knowing how to answer students’ questions about dropping classes in the second block. It was noticed by both faculty and administration groups that benefit of this pilot phase was these issues could be identified and improved before implementation with the full campus.

Scheduling improvements were not noted by students, but were very common among the other groups. This again makes sense based on the composition of the student group as only those who could manage the schedule opted in to the program.

Recommendations are very specific ideas for addressing the problems that were revealed as challenges. These recommendations include being more intentional about creating the academic calendar and better management of faculty workload. “We need to count the days next time to even out instruction time between blocks” and “Next time please make sure that if we have the same number of classes in both blocks” are representative examples of faculty suggestions. From the staff perspective, finding ways to accommodate students who did not fit the mold of this pilot was more important for scheduling. They advocated for a night cohort, and options for people who did not place

into one specific level of math. Administration recognized early on that math has too many variations to be the course upon which the program is built.

The need to formalize the tutoring process was a substantive theme for two groups. Both faculty and tutoring staff felt there needs to be guidelines that are more specific about the role and expectations of the tutor, and an evaluation process involved as a way to help with professional development. Tutors said they felt they were “wasting time” or were “unsure how to help.” Faculty said they learned they need to think through how to use the tutors in class more effectively, prior to the start of class next time. Although this did not occur frequently enough to be listed as a substantive theme for students, that is an artifact of the coding process and not that students did not mention it. The recommendations for improved communications often included an example of the importance of using the tutoring services. Students felt that the expectation to use tutoring needed to be more explicitly explained part of the program. One student summed it up by stating, “The tutoring helps so much and some of the class didn’t understand about it. I think that should be on a contract or document in advising.” The fact that the administrative group did not note tutoring as an area for improvement is logical based on roles and day-to-day duties.

Only students discussed the need to improve the workshops frequently. Logically, students were in the best position to assess the helpfulness of the workshops and make recommendations for changes. Their suggestions revolved around changing the timing and format to get this information to them sooner in the semester. “An orientation day to help us prepare would be better because I needed this stuff earlier.”

The other group with firsthand experience with the workshops was the tutors. The fact that they did not mention a need for changes makes sense based on the success of the sessions. Students were not dissatisfied with the material, so the tutors made the assumption that changes were not necessary.

Reasons for Leaving. Based on participant perceptions, it is life situations that affect students' ability to attend courses that have the biggest effect on retention. It is not the material, lack of understanding, or structure of academic programs that create issues. A faculty member pointed out that this group of students is similar to our whole population in this regard. "We have students with so many outside pulls on their time and attention; it is amazing that most of them are here at all." A student said "I love school more than I thought possible. I just can't go to school and pay my bills." Another put it as "My health is the problem, not your school." The sample is very small, but the academic records from fall semester also support the idea that the course work was not the problem. Of the four students who withdrew, three were passing their courses.

The one group that identified lack of college readiness as a reason for leaving is the academic advisors. This group is in the unique position to have in-depth conversations with students about their goals and compelling reasons for attending college. The advisors discussed a lack of understanding of the true impact of college workload and inability to balance with outside expectations. This is another example of the importance of having multiple perspectives contributing to understanding. The faculty identified a need for advising to take a coaching approach and address affective

characteristics with students as a success strategy, but did not identify a lack of readiness as a reason for not completing.

Reasons for Staying. This category was difficult for the groups to assess separately from benefits of the program. As the pragmatic goal of this study is to assess which features are contributing to retention, it was examined as a distinct area of questions. Community and extra support are the themes common to each group. When asked about why he was staying in the program, one student said, “I feel like I belong here, I don’t always feel like that.” It was clear in the student focus group that the group felt a connection to one another and had an easy rapport. Another student recognized the value of the support services as extraordinary. She said “Most students don’t get all this, it would be crazy to give up the free help.” Faculty also recognized a sense of accountability to each other, over and above just a feeling of community. “They keep each other on track. They will get on each other to finish work before I ever have to do it.”

Relevant Quantitative Data

The overarching goal of this project is to implement processes at GFC that will improve student retention and completion rates. When comparing the fall 2016 to spring 2017 retention of students in the SUCCESS Program with other new students enrolled in M090 during fall 2016 semester, the rate is almost identical. Examination of student records shows that of the participants in the program, 11 of 15 returned for a rate of 73.3% and of the comparison group, 37 of 51 students returned for a rate of 72.5%. The

average GPA of the two group is also very similar with the cohort group averaging 2.24 and the comparison group averaging 2.3. Credits earned is much higher for cohort students, which would be expected based on the program requirement for full-time attendance. It is notable to see the credits earned by those students who withdrew prior to the end of the semester. For fall semester, 3 of 4 students earned credits even though they were not able to complete the full 16 weeks of the term.

The difference in fall 2016 to fall 2017 retention rate of the two groups is more pronounced. The cohort students retained at a rate of 53.3%, 8 of 15 students; whereas, the comparison group was 43.1% with 22 of 51 students. When discussing reasons for staying, one of the academic advisors said “We set this group up well; I think they will need less support than most students do next semester.” Perhaps that statement explains some of the difference in improvement between the fall-to-spring and fall-to-fall retention rates. Average GPA of both groups dropped with the cohort group earning 2.03 and the comparison group earning 2.14. A notable difference for the spring semester is that none of the students who withdrew earned credit prior to exiting. Both students who left did so before the end of the first eight-week block of courses.

Chapter Summary

The results section of this case study are presented using the voice of the participants as a means of authentically portraying the experience with the SUCCESS Program at GFC. Because the groups of stakeholders are in the position to understand different facets of the program, it is valuable to see the similarities and differences in

perception. These results are useful for framing further discussion and improvements to the program. Chapter 5 of this case study will tie the information gathered back to the original guiding research questions and offer practical recommendations for GFC to improve retention improvement initiatives.

CHAPTER FIVE: DISCUSSION

Introduction

This case study is a dissertation written to fulfill the requirements of a doctorate in education. The focus of this program of study is to examine and recommend improvements to practices in the field of education (Belzer & Ryan, 2013). The purpose of this research project fits with that focus, as it is an examination of a program created by a small, two-year college as a means to improve the retention rate of its students. There is value in understanding these problems of practice “as a way to make effective decisions on how to address the problem” (Belzer & Ryan, 2013, p. 195). With this practical aim in mind, the case study was designed using the PTP model (Evans et al., 2010) as the conceptual model. The approach is useful in framing a pragmatic study for a college attempting to solve a problem: that of low student retention and completion rates. While the conceptual model provides a solid mechanism for organizing the study, a complete conceptual framework also needs a strong basis in theory (Ravitch & Riggan, 2017). The theoretical framework for both this work and the project it is examining comes from Terenzini and Reason’s Parsing the First Year of College Model. This model explains that it is the students precollege characteristics combined with their total college experience which has an impact on whether or not they persist to completion (Reason, 2009; Renn & Reason, 2013).

Revisiting the Conceptual Model

The first two steps of the model are to identify the problem and the goals. The theoretical framework helps us focus this effort. Low rates of student retention and completion are a problem at two-year colleges around the country (National Center for Education Statistics, 2015; O'Banion, 2013). Precollege student characteristics such as level of academic preparation, socioeconomic status, and family background have all been shown to have an impact on student persistence (Reason, 2009; Renn and Reason, 2013). Additional risk factors that are prevalent among community college students are attending part-time, caring for children, working more than 40 hours per week, and not entering college immediately after high school (Kuh et al., 2007).

Dropping out of college creates problems for students who are working on education as a means of improving their lives. Belfield and Bailey (2017) report that students who complete an associate's degree earn an average of \$82,180 more in their careers than those who do not complete a credential. Colleges are also negatively impacted by low retention rates in multiple ways. The mission of the community college is to provide access to higher education to all as a means of achieving higher wages and an improved quality of life (O'Banion, 2013); low rates negatively affect achievement of this mission. Financially, this issue negatively impacts colleges. In Montana, as an example, funding for colleges is directly tied to student retention through both the traditional funding model of state payment per student, and through rewarding improved rates through performance based funding (Anderson, 2014).

Steps 3 through 7 of the PTP model guide practitioners to research theory and solutions to the problem. Briefly stated, these steps are:

3. Identify relevant theories,
4. Analyze student characteristics in light of theory,
5. Analyze environment in light of theory,
6. Identify sources of support and challenge considering student and environmental characteristics, and
7. Reexamine goals and modify in light of analysis, if necessary (Evans et al, 2010).

The college experience component of the theoretical model leads us to an examination of best practices in two-year education (Reason, 2009; Renn & Reason, 2013). The NSSE (2000) recommendation for programs to include academic challenge, active and collaborative learning, student interaction with faculty, enriching educational experiences, and supportive campus environments were considered when researching potential interventions. Specifically, topics on programs which had shown success in improving student engagement and retention were explored. Based on the success of specific interventions, the college built the SUCCESS Program to include learning communities, skills workshops, intrusive academic advising, accelerated coursework, mandatory tutoring, and a student success course.

The other element of the college experience component of the theoretical framework is the organizational context. Chickering and Reisser (1993) provided guidance on institutional factors that are important influences on student development.

1. institutional objectives that clearly direct action toward a common focus;

2. institutional size managed in such a way that students are given opportunity for engagement;
3. student-faculty relationships to allow students to feel valued as member of community beyond classroom;
4. relevant curriculum to allow for connections to be made between past experience and new information;
5. quality teaching including active learning strategies, timely feedback, respect, and high expectations;
6. development of communities of students to provide opportunities for collaboration, sense of belonging and social growth; and
7. collaboration between academic and student affairs to build a cohesive, support environment for students (Chickering and Reisser, 1993).

For GFC, the creation of the SUCCESS Program focused on creating processes that use these factors as guiding principles.

Steps 8 through 10 of the PTP Model direct the design, implementation, and evaluation of the initiative. Staff and faculty from multiple functional areas of campus worked together to create the program. The current case study is an evaluation of the project through the experience of these campus stakeholders and the students who enrolled in the program. Evaluation of the project provides a means to connect the emergent themes with the theoretical background used to create the SUCCESS Program

and to link the findings back to the conceptual framework (Ravitch & Riggan, 2017). Interestingly, there were themes that came out in this study that were expected by the creators of the SUCCESS Program based on prior research; but also, some that were unanticipated.

The sense of community, which came out as the strongest benefit of the program for two of the groups, is well supported in the literature (for example, Karp, 2011; Mayhew et al., 2016). Because students at commuter institutions have less opportunity outside of the classroom to form relationships, it is important to intentionally build systems such as learning communities and first-year seminars to provide a space for relational development (Braxton et al., 2014; Kuh et al., 2007). Karp (2011) studied mechanism that promote student success and found broad support for creating social relationships. She defines this as

...activities help students interact with professors and classmates in meaningful ways so that they develop strong relationships with each other. Such activities make students feel that they belong in higher education and provide students with access to information and resources that they can use to be successful in school and after graduation (p. 6).

Student comments reinforce the value of this social relationship, or community. One student wrote he overcame challenges because “same people in same classes so you can get help from them if you needed.” Another wrote “working together.” Speaking specifically about faculty relationships a student phrase it as “they actually seem to care and you can talk to them about stuff in school or whatever.”

There is also evidence to support the idea of accelerated courses as a completion strategy (Gajewski & Mather, 2015; Jaggars et al., 2015; Sheldon & Durdella, 2009).

The experiences at GFC in regard to accelerated courses were positive for both students and faculty. One student said “Make sure you keep the eight-week classes; that is the best part.” Academic records showed that students were able to earn more credits using block courses than would have been possible in a traditional semester. Four students withdrew from classes prior to the end of the term, but had earned credits based on this acceleration model. If they are able to return to college in the future, they will have credits earned, making completion closer.

Extra support from tutoring (Bremer et al., 2013; Coladarci et al., 2013; Drago et al., 2016; Ticknor et al., 2014) and from advising (Steele & McDonald, 2008; Swecker et al., 2013) have support in the literature and were expected benefits of the program. The extra support provided as part of the SUCCESS Program through tutoring was mentioned several times as a benefit, but was not well utilized. Tutoring center records show that only five of the students used the services consistently throughout the year.

Conversations with students during the focus group around this topic explain why some of the students did not use the tutoring services stating “I didn’t realize it was there for me until it was too late to change my work schedule.” Advising was only mentioned once as a benefit by students, but the advising staff felt that extra meetings were beneficial for understanding students. One of the advisors said: “Every two weeks was probably overkill, but we should meet with students at least three times per semester.” I was able to observe the close relationship between students and advisors. All of the advisors recognize this group of students and are able to address them by name and chat when encountering them on campus.

Cross-campus collaboration was identified by participants as a benefit of the program, but was not anticipated prior to implementation. This is a positive result of a joint project as a means of addressing the common problem of siloing on college campuses (Thelin, 2011). There is literature to support the importance of student and academic affairs working together for the common good of the institution.

“Collaborations can begin by implementing and tweaking programs that work at other comparable institutions, as well as by modifying existing campus programs” (Cho and Sriram, 2016, p. 58). Writing specifically about community colleges, Gulley and Mullendore (2014) found that mutual respect is increased when student and academic affairs work together on projects tied to mission fulfillment. This is the case for GFC. One employee said “I think we understand the issues better now because of the collaboration.” Another said “It is nice to understand the complex processes that go into making things happen.”

Another unanticipated benefit of the program was the excitement from faculty and administration about the opportunity to try new things. “At midcareer, many faculty members experience flagging enthusiasm for their work” (Monaghan, 2017, p. A12). Having a sense of “organizational momentum” was found to have a positive impact on faculty morale (Rice & Austin, 1988, p. 55) in a study of university faculty. For community college faculty, the ability to creatively find ways to make a difference in students’ lives was motivational (Brown, 2005). This was motivational for GFC faculty as shown by their appreciation. Representative quotes “I loved trying a new class

format” and “Having the opportunity to try to move the needle on retention; that feels good” support this feeling.

Lack of academic preparation is often cited as the number one reason for low retention and completion rates of community college students (for example, Reason, 2009). However, in this case it was not clear that was a contributing factor. Comments from students, faculty, and staff all support the number one reason student left was personal problems outside of school. The literature clearly supports the concept that additional challenges which are often faced students at two-year school, pose risk factors for completion (Bui, 2002; Engle, 2007; Goldrick-Rab et al., 2017; Mayhew et al., 2016; Mehta et al., 2001; Renn & Reason, 2013; Stephens et al., 2014).

The final step in the PTP model is a redesign of the intervention based on evaluation. The final chapter of this work is intended to give GFC information and recommendations to frame that process.

Discussion

Now in the final stage of this paper, it is important to discuss the results and make recommendations for practice (Belzer & Ryan, 2013). The guiding research questions of the study create a logical format for discussion, which then leads to specific recommendations.

Research Question 1

How do participating students, faculty, and staff describe their experiences with the SUCCESS Program?

Overall, the experience was mostly positive for all groups studied. Students in particular expressed more benefits than challenges. Community building among students, between students and faculty, and among campus employees was the most heavily discussed benefit. Karp (2011) describes this as one of the four important mechanisms for improving student success. A representative example of the powerful connection between students comes from the written comments during the focus group. When asked about benefits, a student wrote “awesome classmates” on the board. That was followed by all seven of the other students adding things like “ditto” or an arrow or a star to indicate agreement. They also wrote about the faculty saying things like “They bend over backwards” and “I didn’t expect college professors to be so nice.” Community building between employees was not an intended outcome of the project, but was identified as a benefit. Staff and administration appreciated the opportunity to work together.

A major positive part of the experience for students was the structured nature of their schedules. Although not planned as a specific element of the program, it was highlighted as a major benefit by the students, faculty, and staff. Students appreciated the ability to balance work, personal obligations, and school. One wrote, “schedule helps my time management” and another said “lots of opportunities for study time before I go to work.” The tutors also commented on it, with one saying “It was smart to build the classes like that so students had a natural time to come in and study.”

Students and faculty both saw the accelerated course blocks as a benefit as well. The ability to finish courses in eight weeks helped students earn credits, maintain focus,

and move through developmental coursework more quickly. A student said that it “kept her focused” and another said “I know I have to write a paper a week so I don’t procrastinate.” Faculty also expressed support for the pace of classes as a benefit to students saying “There is value in bathing in the material” and “A core class in eight weeks is good so they don’t lose interest.” A challenge related to the condensed course experience was uneven workload for some faculty. Particularly for those teaching in the second block of classes, but not the first, the weight of that burden was apparent. A faculty member who was teaching in the first block said “I’m really glad I had the first half of the semester, I think I would have been burned out if I had to do this big load in the second part.” When interviewing faculty teaching in the second-block, it was clear they were less positive about the experience in general.

The challenges that were listed led to recommendations for improvement, rather than an attitude that the program was not worthwhile. Even students who were not able to continue did not attribute challenges with the program to their decision to leave. “I can’t imagine a better environment for someone who is coming back to school after a while” was the comment during an interview with a student who had withdrawn. Each group was able to recognize the challenges created due to ineffective communication to students about the program. Although some of the intended supports were underutilized due to a lack of understanding, there was a general sense of gratitude for the extra services provided to students. The only negative element associated with the tutoring, workshops, and additional advising appointments was lack of use due to misunderstanding. Students were frustrated that they were unable to use all of the

services and staff were frustrated they were not able to help more students. One of the tutors said “I was bored a lot” and another said “I almost felt guilty getting paid on Fridays.”

To summarize the experience for the participating student group, there was a general sense of appreciation and approval. The students were appreciated the chance to participate and benefit from the extra support and services. They also approved of the idea to put students together in groups so they can help each other, and the ability to finish courses in eight-week blocks. The negative elements of the experience come back to the initial communication of the program, and the issues that resulted from that lack of clarity. They recognized that some services were not well used because of the lack of understanding, and expressed hope that future cohorts would receive more information up front.

Faculty were also mostly positive about the experience. The chance to try new things in the classroom was a major benefit for them professionally. There was also a feeling from them that students benefitted from the experience in terms of fitting into schools, academic gains, and confidence building. Frustrations with the experience came from uneven teaching loads based on having both accelerated and traditional courses.

Members of the staff group were academic advisors and tutors. Both groups described recognizing benefits for students from the extra support they received. The academic advisors realized personal satisfaction from the increased contact with students. On the other hand, the tutors felt their services were wasted while they were scheduled to

work and students did not use the center as expected. Additionally, they felt underutilized in the classroom while serving as embedded tutors.

The administration group discussed the process of implementing the program much more than the experience. The overall area of the experience discussed here was the positive outcome of building relationships between functional departments of the college.

Research Question 2

How do participating students, faculty, and staff describe the process of implementing the SUCCESS Program?

The implementation process of the SUCCESS Program was a beneficial step in that it identified important challenges that the college must address if we want to take this type of program to scale. Many of the comments related to the challenges of process also directly led to recommendations for improvement. The schedule must be planned more carefully in order for future programs to succeed. Areas of concern were loss of instruction time and uneven faculty workload. In addition, using math as the course upon which to build the cohort was ineffective. A lack of defined policies for eight-week courses also created challenges for students and campus personnel; however, the problems shed light on areas needing to be addressed in policy.

The opportunity to try new things in support of students was identified as a positive outcome of the implementation of the program. Most faculty were invigorated by the chance to change the delivery of material, and the opportunity to work with others to link course materials. Administration as a group were grateful for the opportunity to

test new processes on a small scale before trying to manage them for the whole campus. Another positive elements of the experience of implementing the program was the collaboration between departments. In normal operation of campus duties, Student Services and Academic Affairs do not often have the chance to collaborate on large projects. Appreciation was shown through comments such as “I am glad financial aid was in the room because I had no idea how complicated that could be” and “We rely on advising to get students in class so we couldn’t do it without them.”

Specific process issues created the most frustration for students. They were disappointed at the unclear communication system for explaining the elements of the program to them, and felt this lack of clarity caused them to miss out on some of the benefits. They were closer to angry about the fact that policies had not been put in place for the transition between first and second block courses. Financial aid challenges specifically related to book charging was their biggest frustration.

The scheduling process was the biggest challenge for the faculty. It was difficult to create a workable schedule to accommodate multiple versions of the same course at our small campus. They also recognized that future versions of the program must be built around a course with less possible options for new students. As a benefit, they tried to incorporate tutors into the classroom, and used this as a means of developing a better process for doing so.

The academic advisors saw the value of the implementation process as a means of identifying communication gaps. Although poor initial explanation of the program was the biggest challenge mentioned by multiple groups, the advisors were the group

responsible for delivering the information. They made good suggestions on how better to do that in the upcoming year. The tutors had a very limited role in the implementation process. They did discuss the need for a more formal plan for embedded tutors in classrooms to make it worthwhile.

Administration as a group had the largest role in the implementation process. They repeatedly described the benefit of trying the program on a small scale to identify potential problems. The major challenges for process relate to the cumbersome nature of the manual processes involved in running the program. Lack of policies related to the eight-week courses was also a process problem identified by the administration group.

Implications for Practice

The information gathered in this case study has practical value for both GFC and other two-year colleges exploring ways to implement retention improvement ideas. Hatch and Bohlig (2016) describe the importance of research that aims to explain the elements of interventions that have an impact, and the specific ways in which these interventions help improve outcomes. This qualitative work intends to do just that by describing the major themes that arose as benefits and challenges; and also practical considerations for improvement. There are insights gained from this research that will guide development of future programs. When referring back to the original goal of the SUCCESS Program as a retention improvement strategy, it seems on the face that the project was successful as the fall-to-fall retention rate of cohort students was 10% higher than that of a comparison group, and 6% higher than the most recent published rate of

first-time, full-time GFC students. There was a lot of extra work involved for this gain with a very small sample of students. However, valuable information has been gained that can help refine efforts in the future. As a pragmatically focused study, recommendations supported by both data and literature are included below.

Recommendation 1: Continuation of Learning Community Structure

Community was the most prevalent theme when exploring benefits of the program. One student expressed the importance of community by saying “Having a group of supporting classmates all going through the block courses with me helped give me support and encouragement.” In addition to the learning community, it is important to combine courses in an efficient way. The students noted the benefit of maximizing their time and being able to fit competing demands on their time around the course schedule. “I know I would waste more time if I didn’t have this schedule” and “The way the classes were during the day made it so I could do my studying at school and then still get my kids picked up.” These two benefits combine together in a logical way for schedule creation. Blocks of course can be created and saved for cohorts of entering students as a means of forming community while intentionally scheduling the classes in a way that allows for efficient use of time. Building a sense of community among students is identified throughout the literature as a best practice (for example, Karp, 2011).

Scheduling blocks of courses for cohorts of students will also provide a means for faculty to work together. Although it did not rise to the level of substantive theme, faculty discussed the idea of linking the material from their courses as a way to contextualize the material for students. For example, the philosophy instructor said he

would know his students were also in biology so he used the concepts from that class to introduce topics in his course. The writing and psychology instructors also discussed working together to teach writing skills using the topics from the psychology course. Writing about avoiding instructor burnout, Rabidoux and Rottman (2017) support the idea of co-teaching in higher education as a means of improving student learning while reenergizing instructors.

In order for GFC to continue the learning community structure, the college will need to structure the cohorts around a course other than math. This leads to the next recommendation as a means of carrying out this idea.

Recommendation 2: Improve Scheduling Process

Early in this pilot phase of the SUCCESS Program, it was easy to see that using placement into development math as the central course for the cohort was ineffective. There are multiple levels of developmental math offered, and this created problems in many ways for this program. First, participation was very low in part due to math placement. Second, the need for distinct math courses led to the further splintering of the program once it began. Using data on the most common first semester courses will be a more efficient way to create learning communities. Notes from planning meetings indicate that GFC will use writing as the core class around which blocks are built in the future as a search of registration records show this to be the most common first-semester course.

A theme that came up in the examination of the program was internal resistance to change. This was seen during meetings where the class schedule was discussed. There

are faculty who are hesitant to change the days and times of course sections if they have been teaching them at that time for several years. There are also administrators who are resistant to change established practices. This is an area that GFC will need to address if structured, block schedules are to be implemented. Kezar's (2005) model for facilitating collaboration is helpful for this managing this change. The three step model advocates:

1. building commitment by convincing members of the need,
2. showing support for the process at all levels, and
3. sustaining the process by formalizing networks and structures (Kezar, 2005).

As will be seen in recommendation 3, condensed courses create scheduling considerations as well.

Recommendation 3: Continuation of Eight-week Courses

This recommendation comes from both comments of participants and from data on student success. Students felt strongly that the accelerated courses were a major benefit of the program. One student expressed dismay upon hearing that the college would not be offering eight-week courses next year. He said "I hope you bring that back, it was the best part." Faculty members also expressed support for multiple reasons. "You can keep their attention better." "There is value in marinating in the material." "The pace keeps students from procrastinating." The literature also provides support for accelerated courses (Gajewski & Mather, 2015; Jaggars et al., 2015; Sheldon & Durdella, 2009; Tinto, 2012).

The benefit of earning credits, even when life circumstances force students to completely withdraw from classes is another benefit of the shortened courses. For fall semester, 3 of the 4 students who were forced to withdraw did earn credit from the first half of the term. This will ease the transition back to college based on both academic standing and satisfactory progress standards for financial aid. Satisfactory academic progress for financial aid is in part defined as completing at least 67% of the courses attempted (Great Falls College Catalog, 2016). Particularly for students in developmental coursework, the number of extra semesters required to finish is an obstacle to completion (Bahr, 2010). As was identified in this study through the examination of “reasons for leaving,” conflicting obligations outside of school are a common problem. Reducing the time it takes to complete by reducing the number of semesters of developmental coursework improves the odds of completing a program.

If the accelerated courses are continued, there are clear recommendations for improvement in terms of better defining the schedule and policies. It is evident that paying closer attention to the academic calendar in the creation of class schedule would improve the program. Instruction time was lost due to holidays at a disproportionate rate between blocks and created frustration. Faculty comments include “Holidays have taken away time from an already condensed course” and “Plan not to cut up my short class by throwing spring break in.” Also, balancing faculty teaching between blocks will need to be addressed if eight-week courses continue.

Policies also need to be defined for practical functions. One of the biggest frustrations from students was the inability to use financial aid to charge books for

courses that began in the second block. This was presented in comments from students: “I can’t believe no one thought of how to get our math book”, faculty: “Students were at a disadvantage because they couldn’t charge books”, and administration: “Those students really complained about the book situation at mid-semester.” A lack of defined dates for the add/drop period as well as completely withdrawing from the college also presented challenges. One of the students who intended to completely withdraw within the published dates on the academic calendar earned an F grade because the first-block courses had ended. The administration mentioned the need for these policies in interview comments and in meetings discussing the project.

Recommendation 4: Improve Communication of Program Requirements

Each group of stakeholders expressed problems with the initial communication to students as a challenge of the program, and each group listed practical suggestions for improving this process. Students would like to see a more detailed, written schedule of expectations before the start of the semester. Participants from each group expressed a frustration with lack of use of some elements of the program based on lack of understanding. One student wrote “Advising process needs to include clear definitions of the Friday services” and another said “I wish everyone had known to use the tutoring because it really helped me.” Tutoring use and attendance at workshops was low because students did not understand the expectation to participate in these activities until it was too late to fit into their schedules. The literature shows these interventions are effective in improving retention rates (Drago et al., 2016; Mireles et al., 2011; Steveler, 2001; Ticknor et al., 2014); however, none of our participants felt strongly that they were a

major factor in this program because they were not well utilized. Interestingly, observations throughout the year showed the four students who regularly used the tutoring center formed the strongest bond of the group of students.

Participants in the study provided ideas for GFC to use to improve this communication. Students and faculty recommend giving students written documentation. One student said: “They should give us a written contract or something with all of the services summarized” and another said “Why not add the Friday stuff to our class schedule so we can see it.”

Related to improved communication of the program is the suggestion from students to change the workshops into an extended orientation process. During the focus group, students expressed learning from the workshops, but felt they would be better served to have the information prior to the start of the semester. “Workshops should be frontloaded” and “Instead of Friday workshops we should have an orientation prior to the start to explain the requirements and school” are comments to support this idea. In order for GFC to make this a reality, the campus would need to agree on a policy for requiring new student orientation.

Recommendation 5: Continue Collaborative Nature of Project Development

All campus employee groups commented on benefits of creating this program with input from different functional areas so potential issues could be addressed. Even those employees who discussed having difficulty with the cumbersome additional work expressed appreciation for the collaboration and having a chance to be part of the process. They were also happy that the project was done on a small scale in order to

identify potential problems before creating them campus-wide and multiplying the problem. Kezar (2005) developed a three-stage model for institutional collaboration which includes building commitment to work together, commitment from senior leadership to continue partnerships, and sustaining partnership through development of structures and institutional processes. As a means for continuing the momentum in academic affairs and student services, GFC should implement a process to continue cross-campus partnerships. Both faculty and administration saw the opportunity to try new things as a related benefit of the SUCCESS Program. The college should capitalize on this excitement in the continuation of partnerships leading new projects.

Limitations

Although the ultimate goal of the SUCCESS Program is to improve student retention rates, this study did not explore whether or not retention was significantly improved for this group of students while controlling for other characteristics. Rather, this is a qualitative reporting of perceptions of participants about the experience and process of implementing such a program. The value of the case study is to provide detail about how things work, not if they work (Yin, 2014). Because student participation in this program was voluntary, there may be factors outside of program interventions that led students to agree to participate which had an impact on results. This must be considered as an important limitation of the work.

A further limitation of this study is the size, type, and location of the college. GFC is a small, two-year colleges in a rural setting. Some of the findings may not be applicable to larger or more urban institutions.

Because I am a participant-observer (Yin, 2014), it must be considered that some of the participants may not have fully disclosed relevant information. Even after explanations that I did not develop the SUCCESS Program, the fact that I was studying the program led some community members to describe it as “my program.” This perception was repeatedly addressed, both formally and informally, in meetings and other forms of communication throughout the year; however, there is a possibility that some stakeholders were not as open to sharing information as they would have been with an outside researcher.

The role as participant-observer also leads to a degree of researcher bias. The continued success of the college and increased retention rates are important to me as an employee. This led me to create the study using a pragmatic interpretative framework and focus on those findings that lead to practical strategies to be incorporated in these efforts at the college. It must be acknowledged as a limitation that using a different interpretative framework could lead to other findings and observations (Creswell, 2013).

Areas for Further Study

A quantitative examination of the effectiveness of the SUCCESS Program, controlling for other student characteristics, would be an interesting continuation of the study of this project. There was no attempt to control for any student characteristic, other

than placement into Introductory Algebra; however, the literature is clear that other pre-college characteristics have an impact on success (for example, Renn and Reason, 2013).

It would also be interesting to assess whether or not the impact of the project continues to have an effect on student success, after the program period ends. An interesting finding was that these students appeared to have greater gains in self-confidence than other students, as observed by faculty members. Belief in their own academic ability has a positive impact on student success (Chemers et al., 2001; Krumrei-Mancuso et al., 2013; Zajacova et al., 2005). Does this attribute have long-lasting positive impact on the students in this study?

A longitudinal study that continues to explore how the college is able to use this information to guide future projects would also add to the literature in a practical way. Research work that is focused on problems of practice has real value in addressing pragmatic concerns and providing recommendations for immediate application (Belzer & Ryan, 2013). GFC would benefit from continuing the intentional study of initiatives with the goal of improvement.

Chapter Summary

Continued refining of programs designed to assist students is an ongoing process for community colleges. Using data gathered in this study, there are practice changes that can be implemented quickly to improve the program. Any version of a retention improvement program will be made better by addressing the most commonly cited challenge with the SUCCESS Program. The communication of program requirements to

students in a clear, direct manner is an obvious first step. Additionally, this pilot phase has identified scheduling issues that must be considered when moving forward.

Some of the other recommendations will be more difficult to implement. The movement of courses to eight-week blocks was shown to be a benefit of this program; however, there are policies and procedures to be written and software changes to be put in place prior to implementation.

Although the ultimate goal of the creation of the SUCCESS Program was to improve retention and completion rates for GFC students, this study has shown us that there are other important benefits that result from this type of project. One faculty member explained it by saying

No matter what happens with retention, we did a good thing. We set these students up for success, no matter where they go from here. They have had academic experiences in a variety of formats: face-to-face and online, eight-week and 16-week. We showed them they can do it, and they will be better for it.

The connection between student and academic affairs working for a common goal is another benefit of this program that remains irrespective of retention rates. In an industry famous for working in siloes, this type of collaboration should be encouraged to ensure reviewing projects from all perspectives and building internal relationships.

As a final summary thought on the SUCCESS Program, I believe that the overall experience was positive for the campus community. Students, faculty, staff, and administration described more benefits than challenges when discussing the program. I must include myself in that community. As an employee of the college, I am excited to see processes being explored to improve the retention and completion rates for our

students. As a researcher, I am grateful I was allowed to use this program as my dissertation project as a way of furthering my understanding of completion initiatives and developing a deeper understanding of my own campus. For the continued success of the college, I hope this momentum continues.

REFERENCES CITED

- Anderson, G. (2014). *Performance based funding: Revised model for 2-year colleges in ay 16-17* [Powerpoint Slides]. Retrieved from https://www.google.com/url?q=https://www.google.com/url?q%3Dhttp://www.gfcmsu.edu/about/accreditation/evidence/2yr%252520PBF%252520AY16_AY17%252520Revised.pptx%26sa%3DU%26ved%3D0CAQQFjAAahUKEwIU0J-x1sfIAhXGMogKHT1jCYQ%26client%3Dinternal-uds-cse%26usg%3DAFQjCNE7Ma8cBkXN1PTR_d6WxckhYmSUyw&sa=D&ust=1445098150265000&usg=AFQjCNGAm7edtH_pOKGIOB7tpAXIQQ8jyg
- Arco-Tirado, J.L., Fernandez-Martin, F.D., & Fernandez-Balboa, J. (2011). The impact of a peer-tutoring program on quality standards in higher education. *The International Journal of Higher Education and Educational Planning*, 62(6), 773-788. doi: 10.1007/s10734-011-9419-x
- Astin, A.W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Astin, A.W. (1993). *What matters in college? Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Bahr, P.R. (2008a). Cooling out in the community college: What is the effect of academic advising on students' changes of success? *Research in Higher Education*, 49(8), 704-732. doi: 10.1007/s11162-008-9100-0
- Bahr, P.R. (2008b). Does mathematics remediation work?: A comparative analysis of academic attainment among community college students. *Research in Higher Education* 49(5), 420-450. doi: 10.1007/s11162-008-9089-4
- Bahr, P.R. (2010). Making sense of disparities in mathematics remediation: What is the role of student retention? *Journal of College Student Retention*, 12(1), 25-49. doi: 10.2190/CS.12.1.c
- Bean, J.P., & Eaton, S.B. (2000). A psychological model of college student retention in J.M. Braxton (Ed.), *Reworking the student departure puzzle* (48-61). Nashville, TN: Vanderbilt University Press.
- Bender, D.S. (2001). Effects of study skills program on the academic behaviors of college students. *Journal of College Reading and Learning*, 31(2), 209-216. Doi: 10.1080/10790195.2001.10850116
- Belfield, C., & Bailey, T. (2017). *The labor market returns to sub-baccalaureate college: A review*. New York, NY: CAPSEE.

- Belzer, A., & Ryan, S. (2013). Defining the problem of practice dissertation: Where's the practice, what's the problem? *Planning and Changing*, 44(3/4), 195-207.
- Berger, J.B. (2002). Understanding the organizational nature of student persistence: Empirically-based recommendations for practice. *Journal of College Student Retention*, 3(1), 3-21.
- Braxton, J.M. (2000). *Reworking the student departure puzzle*. Nashville, TN: Vanderbilt University Press.
- Braxton, J.M., Doyle, W.R., Hartley III, H.V., Hirschy, A.S., Jones, W.A., & McLendon, M.K. (2014). *Rethinking college student retention*. San Francisco, CA: Jossey-Bass.
- Braxton, J.M., Hirschy, A.S., & McClendon, S.A. (2004). Understanding and reducing college student departure. *ASHE-ERIC Higher Education Report*, 30(3).
- Bremer, C. D., Center, B. A., Opsal, C. L., Medhanie, A., Jang, Y. J., & Geise, A. C. (2013). Outcome trajectories of developmental students in community colleges. *Community College Review*, 41(2), 154-175. doi:10.1177/0091552113484963
- Bridgeland, J., Milano, J., & Rosenblum, E. (2011). *Across the great divide: Perspectives of CEOs and college presidents on America's higher education and skills gap*. Washington, D.C.: Civic Enterprises and Corporate Voices for Working Families.
- Brock, T. (2010). Young adults and higher education: barriers and breakthroughs to success. *Future of Children*, 20(1), 109-132.
- Brown, B. (2005). Strategies for improving faculty morale in times of tight budgets. *Academic Leader*, 21(11), 5-8.
- Brownell, J.E., & Swaner, L.E. (2009). Outcomes of high-impact educational practices: A literature review. *Diversity and Democracy* 12(2).
- Bui, K. V. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing high education, and first-year experience. *College Student Journal*, 36(1), 3.
- Busato, V.V., Prins, F.J., Elshout, J.J., & Hamaker, C. (2000). Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education. *Personality and Individual Differences*, 29(6), 1057-1068.

- Carnevale, A.P., Smith, N., & Strohl, J. (2013). *Recovery: Job growth and education requirements through 2020*. Washington, D.C.: Georgetown University Center on Education and the Workforce.
- Center for Community College Student Engagement. (2014). *A matter of degrees practices to pathways: High-impact practices for community college student success*. Retrieved from https://www.ccsse.org/docs/Matter_of_Degrees_3.pdf
- Center for Community College Student Engagement. (2017). *Making ends meet: The role of community colleges in student financial health*. Retrieved from http://www.ccsse.org/docs/Making_Ends_Meet.pdf.
- Chemers, M.M., Hu, L., & Garcia, B.F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55-64. doi: 10.1037/0022-0663.93.1.55
- Chickering, A.W., & Gamson, Z.F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39(7), 3-7.
- Chickering, A.W., & Reisser, L. (1993). *Education and identity*, 2nd ed. San Francisco, CA: Jossey-Bass.
- Cho, A., & Sriram, R. (2016). Student affairs collaborating with academic affairs: Perceptions of individual competency and institutional culture. *College Student Affairs Journal*, 34(1), 56-69. doi: 10.1353/csaj.2016.0003
- Cho, S., Hudley, C., Lee, S., Barry, L., & Kelly, M. (2008). Roles of gender, race, and SES in the college choice process among first-generation and nonfirst-generation students. *Journal of Diversity in Higher Education*, 2(1), 95-107.
- Clark, L. (2012). When nontraditional is traditional: A faculty dialogue with graduating community college students about persistence. *Community College Journal of Research and Practice*, 36(7), 511-519. doi: 10.1080/10668926.2012.664090
- Coladarci, T., Willett, M. B., & Allen, D. (2013). Tutor program participation: effects on GPA and retention to the second year. *The Learning Assistance Review*, 18(2), 79+.
- Conrad, M.A. (2006). Aptitude is not enough: How personality and behavior predict academic performance. *Journal of Research in Personality*, 40(3), 339-346.
- Creswell, J.W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*, 3rd ed. Los Angeles, CA: Sage.

- Creswell, J.W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*, 3rd ed. Los Angeles, CA: Sage.
- Creswell, J., & Miller, D. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124–30.
- Crisp, G. & Taggart, A. (2013). Community college student success programs: A synthesis, critique, and research agenda. *Community College Journal of Research and Practice*, 37(2), 114-130.
- Dollinger, S.J., Matyja, A.M., & Huber, J.L. (2008). Which factors best account for academic success: Those which college students can control or those they cannot? *Journal of Research in Personality*, 42(4), 872-885.
- Drago, A., Rheinheimer, D.C., & Detweiler, T.N. (2016). Effects of locus of control, academic self-efficacy, and tutoring on academic performance. *Journal of College Student Retention: Research, Theory & Practice*, 0(0), 1-19.
- Duff, A., Boyle, E., Dunleavy, K. & Ferguson, J. (2004). The relationship between personality, approach to learning and academic performance. *Personality and Individual Differences*, 36(8), 1907-1920.
- Engle, J. (2007). Postsecondary access and success for first-generation college students. *American Academic*, 3(1), 25-48.
- Eisner, E.W. (1998). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. Upper Saddle River, NJ: Prentice Hall.
- Evans, N.J., Forney, D.S., Guido, F.M., Patton, L.D., & Renn, K.A. (2010). *Student development in college: Theory, research, and practice*; 2nd Ed. San Francisco, CA: Jossey-Bass.
- Fontaine, K. (2014). Effects of a retention intervention program for associate degree nursing students. *Nursing Education Perspectives*, 35(2), 94-99.
- Forbus, P., Newbold, J.J., & Mehta, S.S. (2011). A study of non-traditional and traditional students in terms of their time management behaviors, stress factors, and coping strategies. *Academic of Educational Leadership Journal*, 15(S1), 109-125.
- Fowler, P.R., & Boyland, H.R. (2010). Increasing student success and retention: A multidimensional approach. *Journal of Developmental Education*, 34(2), 2-10.

- Gajewski, A., & Mather, M. (2015). Remediation strategies for learners at risk of failure: A course based retention model. *College Quarterly* 18(1).
- Gladieaux, L., & Perna, L. (2005). Borrowers who drop out: A neglected aspect of the college student loan trend. *National Center Report*, 05(2). Retrieved from <http://files.eric.ed.gov/fulltext/ED508094.pdf>.
- Goldrich-Rab, S., Richardson, J., & Hernandez, A. (2017). Hungry and homeless in college: Results from a national study of basic needs insecurity in higher education. *Wisconsin Hope Lab and Association of Community College Trustees*. Retrieved from <http://wihopelab.com/publications/hungry-and-homeless-in-college-report.pdf>.
- Great Falls College Catalog (2016). *Satisfactory Academic Progress Requirements*. Retrieved from <http://catalog.gfcmsu.edu/student-services/financial-aid/satisfactory-academic-progress/>.
- Great Falls College MSU (2015). *Great Falls College Montana State University: Report to the community 2014-2015*. Retrieved from <http://www.gfcmsu.edu/about/documents/annualreport/index.html>.
- Great Falls College MSU (2016). *CPBAC Minutes March 9, 2016*. Retrieved from http://www.gfcmsu.edu/about/governance/cpbac/PDF/CPBAC_Minutes_3_9_16.pdf.
- Great Falls College MSU (2017). *Higher education act: Federal disclosure/reporting requirements* [Data file]. Retrieved from <http://www.gfcmsu.edu/ir/documents/StudentInformationPage1718.pdf>.
- Gulley, N.Y., & Mullendore, R.H. (2014). Student affairs and academic affairs collaborations in the community college setting. *Community College Journal of Research and Practice*, 38(7), 661-673.
- Hagen, P.L., & Jordan, P. (2008). Theoretical foundations of academic advising in Gordon, V.N., Habley, W.R., & Grites, T.L., (Ed.), *Academic Advising: A Comprehensive Handbook*, 2nd Ed. (157-177). San Francisco, CA: Jossey-Bass.
- Hatch, D.K. (2012). Unpacking the black box of student engagement: The need for programmatic investigation of high impact practices. *Community College Journal of Research and Practice*, 36(11), 903-915.
- Hatch, D.K., & Bohlig, E.M. (2016). An empirical typology of the latent programmatic structure of community college student success programs. *Research in Higher Education*, 57(1), 72-98.

- Hoops, L.D., Yu, S.L., Backscheider Burridge, A., & Wolters, C.A. (2015). Impact of a student success course on undergraduate academic outcomes. *Journal of College Reading and Learning*, 45(2), 123-146.
- Hu, S., & Kuh, G.D. (2002). Being (dis)engaged in educationally purposeful activities: The influences of student and institutional characteristics. *Research in Higher Education*, 43(5), 555-575.
- Jaggars, S.S., Hodara, M., Cho, S., & Xu, D. (2015). Three accelerated developmental education programs: Features, student outcomes, and implications. *Community College Review*, 43(1), 3-26.
- Johnson, J., & Rochkind, J. (2009). *With their whole lives ahead of them: Myths and realities about why so many students fail to finish college*. New York, NY: Public Agenda.
- Johnson, R.B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches*, 5th ed. Los Angeles, CA: Sage.
- Karp, M.M. (2011). Toward a new understanding of non-academic student support: Four mechanisms encouraging positive student outcome in the community college. *CCRC Working Paper No. 28 Assessment of Evidence Series*. New York, NY: Columbia University.
- Kaya, H., Kaya, N., Pallos, A.O., & Küçük, L. (2012). Assessing time-management skills in terms of age, gender, and anxiety levels: A study on nursing and midwifery students in Turkey. *Nurse Education in Practice*, 12, 284-288.
- Kezar, A. (2005). Redesigning for collaboration within higher education institutions: An exploration into the developmental process. *Research in Higher Education*, 46(7), 831-860.
- Kinzie, J. (2015). *Assessing student engagement to improve teaching and learning: University of Kentucky presentation to faculty* [PowerPoint slides]. Retrieved from <http://www.uky.edu/ie/sites/www.uky.edu.ie/files/uploads/UK%20Kinzie%20NSE%202015.pdf>
- Krumrei-Mancuso, E.J., Newton, F.B., Kim, E., & Wilcox, D. (2013). Psychosocial factors predicting first-year college student success. *Journal of College Student Development*, 54(3), 247-266.
- Kuh, G.D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50(6), 683-706.

- Kuh, G.D., Cruce, T.M., Shoup, R., Kinzie, J., & Gonyea, R.M. (2008). Unmasking the effect of student engagement on first-year college grades and persistence. *The Journal of Higher Education*, 79(5), 540-559.
- Kuh, G.D., Kinzie, J., Buckley, J.A., Bridges, B.K., & Hayek, J.C. (2007). *Piecing together the student success puzzle: Research, propositions, and recommendations*. San Francisco, CA: Jossey-Bass.
- Kuh, G.D., Kinzie, J., Schuh, J.H., & Whitt, E.J. (2005). *Student success in college: Creating conditions that matter*. San Francisco, CA: Jossey-Bass.
- Laden, B.V., Milem, J.F., & Crowson, R.L. (2000). New institutional theory and student departure. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (235-256). Nashville, TN: Vanderbilt University Press.
- Laskey, M.L., & Hetzel, C.J. (2011). Investigating factors related to retention of at-risk college students. *The Learning Assistance Review*, 16(1), 31-43.
- Leedy, P.D., & Ormrod, J.E. (2013). *Practical research: Planning and design*, 10th ed. Boston, MA: Pearson.
- Light, A., & Strayer, W. (2004). Who receives the college wage premium? Assessing the labor market returns to degrees and college transfer patterns. *Journal of Human Resources*, 39(3), 746-773.
- Lumina Foundation. (2016). *A stronger nation: Postsecondary education helps us rise*. Indianapolis, IN: DeWayne Matthews. Retrieved January 21, 2017 from https://www.luminafoundation.org/files/publications/stronger_nation/2016/A_Stronger_Nation-2016-Full.pdf.
- MacCann, C., Fogarty, G.J., & Roberts, R.D. (2012). Strategies for success in education: Time management is more important for part-time than full-time community college students. *Learning and Individual Differences*, 22(5), 618-623.
- Marrs, H., & Sigler, E.A. (2012). Male academic performance in college: The possible role of study strategies. *Psychology of Men & Masculinity*, 13(2), 227-241.
- Maxwell, J.A. (2013). *Qualitative research design: An interactive approach*, 3rd ed. Los Angeles, CA: Sage.
- Mayhew, M.J., Rockenbach, A.N., Bowman, N.A., Seifert, T.A., Wolniak, G.C. (2016). *How college affects students: Volume 3, 21st century evidence that higher education works*. San Francisco, CA: Jossey-Bass.

- Mehta, S.S., Newbold, J.J., & O'Rourke, M.A. (2011). Why do first-generation students fail? *College Student Journal* 45(1), 20+.
- Mireles, S.V., Offer, J., Ward, D.D., & Dochen, C.W. (2011). Incorporating study strategies in developmental mathematics/college algebra. *Journal of Developmental Education*, 34(3), 12-14, 16, 18-19, 40-41.
- Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, 16(1), 41-51.
- Monaghan, P. (2017). Ways to get professors to escape career ruts. *Chronicle of Higher Education*, 63(36), A12.
- Montana University System (2015). *CCA context metric #1: Enrollment*. Retrieved January 22, 2017 from [https://mus.edu/CCM/CCA%20Context%20Metric%201%20-%20Enrollment%20\(A%20undup\)%202015.pdf](https://mus.edu/CCM/CCA%20Context%20Metric%201%20-%20Enrollment%20(A%20undup)%202015.pdf).
- Montana University System (2016). *Performance funding*. Retrieved August 14, 2017 from <https://mus.edu/data/performancefunding/MUS-PerformanceFundingCriteria5-19-16.pdf>.
- Morgan, D.L. (1997). *Focus Groups as Qualitative Research*. Thousand Oaks, CA: Sage Publications, Inc.
- National Center for Education Statistics (2015). *Institutional retention and graduation rates for undergraduate students* [Data file]. Retrieved from http://nces.ed.gov/programs/coe/indicator_cva.asp
- National Survey of Student Engagement Center for Postsecondary Research and Planning. (2000). *The NSSE 2000 Report: National benchmarks of effective educational practice*. Retrieved April 7, 2016 from <http://nsse.indiana.edu/pdf/NSSE%202000%20National%20Report.pdf>
- Nix, J. V., & Michalak, M.B. (2012). START! The Successful Transitions and Retention Track program: A comprehensive approach to supporting GED holders entering college. *Journal of Adult Education*, 41(2), 65-67.
- O'Banion, T. (2013). *Access, success, and completion: A primer for community college faculty, administrators, staff, and trustees*. Chandler, AZ: League for Innovation in the Community College.

- O'Connor, M.C., & Paunonen, S. V. (2007). Big Five personality predictors of post-secondary academic performance. *Personality and Individual Differences*, 43(5), 971-990.
- Pascarella, E.T., & Terenzini, P.T. (2005). *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.
- Patterson, B.L. (1994). A framework to identify reactivity in qualitative research. *Western Journal of Nursing Research*, 16(3), 301-316.
- Popiolek, G., Fine, R., & Eilman, V. (2013). Learning communities, academic performance, attrition, and retention: A four-year study. *Community College Journal of Research and Practice*, 37(11), 828-838.
- Price, D.V., & Tovar E. (2014). Student engagement and institutional graduation rates: Identifying high-impact educational practices for community colleges. *Community College Journal of Research and Practice*, 38(9), 766-782.
- Pruett, P. S., & Absher, B. (2015). Factors influencing retention of developmental education students in community colleges. *Delta Kappa Gamma Bulletin*, 81(4), 32-40.
- Rabidoux, S., & Rottman, A. (2017). Escaping burnout through collaboration: Co-teaching in a right-to-work state. *Liberal Education*, 103(1), 58-60.
- Ravitch, S.M., & Riggan, M. (2017). *Reason and rigor: How conceptual frameworks guide research*, 2nd ed. Los Angeles, CA: Sage.
- Reason, R. D. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development*, 50(6), 659-682.
- Renn, K. A., & Reason, R. D. (2013). *College students in the United States: Characteristics, experiences, and outcomes*. San Francisco, CA: Jossey-Bass.
- Rice, R.E., & Austin, A.E. (1988). High faculty morale: What exemplary colleges do right. *Change: The Magazine of Higher Learning*, 20(2), 50-58.
- Robbins, S.B., Oh, I.S., Le, H., & Button, C. (2009). Intervention effects on college performance and retention as mediated by motivational, emotional, and social control factors: Integrated meta-analytic path analyses. *Journal of Applied Psychology*, 94(5), 1163-1184.

- Rutschow, E.Z., Cullinan, D., & Welbeck, R. (2012). *Keeping students on course: An impact study of a student success course at Guilford Technical Community College*. New York, NY: MDRC.
- Schwebel, D.C., Walburn, N.C., Klyce, K., & Jerrolds, K.L. (2012). Efficacy of advising outreach on student retention, academic progress and achievement, and frequency of advising contacts: A longitudinal randomized trial. *NACADA Journal*, 32(2), 36-43.
- Scrivener, S., & Weiss, M.J. (2013). *More graduates: Two-year results from an evaluation of accelerated study in associate programs (ASAP) for developmental education students*. New York, NY: MDRC.
- Seifert, T.A., Bowman, N.A., Wolniak, G.C., Rockenbach, A.N., & Mayhew, M.J. (2017). Ten challenges and recommendations for advancing research on the effects of college on students. *AERA Open*, 3(2), 1-12.
- Sheldon, C.Q., & Durdella, N.R. (2009). Success rates for students taking compressed and regular length developmental courses in the community college. *Community College Journal of Research and Practice*, 34(1-2), 39-54.
- Stage, F.K., & Hossler, D. (2000). Where is the student? Linking student behaviors, college choice, and college persistence. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 170-195). Nashville, TN: Vanderbilt University Press.
- Stake, R.E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Steele, G.E., & McDonald, M.L. (2008). Moving through college in Gordon, V.N., Habley, W.R., & Grites, T.L., (Ed.), *Academic Advising: A Comprehensive Handbook*, 2nd Ed. (157-177). San Francisco, CA: Jossey-Bass.
- Stephens, N.M., Hamedani, M.G., & Destin, M. (2014). Closing the social-class achievement gap: A difference-education intervention improves first-generation students' academic performance and all students' college transition. *Psychological Science*, 25(4), 943-953.
- Strayhorn, T. (2015). Reframing academic advising for student success: From advisor to cultural navigator. *NACADA Journal*, 35(1), 56-63.
- Streveler, R.A. (2001). Academic excellence workshops: Boosting success in technical courses in Miller, J.E., Groccia, J.E., & Miller, M.S. (Ed.), *Student-Assisted Teaching* (98-102). Bolton, MA: Anker Publishing Company, Inc.

- Swecher, H.K., Fifolt, M., & Searby, L. (2013). Academic advising and first-generation college students: A quantitative study on student retention. *NACADA Journal*, 33(1), 46-53.
- Thelin, J. R. (2011). *A history of American higher education* (2nd Ed.). Baltimore, MD: Johns Hopkins University Press.
- Ticknor, C.S., Shaw, K.A., & Howard, T. (2014). Assessing the impact of tutorial services. *Journal of College Reading and Learning*, 45(1), 52-66.
- Tinto, V. (2012). *Completing college: Rethinking institutional action*. Chicago, IL: The University of Chicago Press.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*, 2nd ed. Chicago, IL: University of Chicago Press.
- Tinto, V. (2000). Linking learning and leaving: Exploring the role of the college classroom in student departure. In J.M. Braxton (Ed.), *Reworking the student departure puzzle*, (pp. 81-94). Nashville, TN: Vanderbilt University Press.
- Tufford, L., & Newman, P. (2010). Bracketing in qualitative research. *Qualitative Social Work*, 11(1), 80-96.
- Visher, M.G., Weiss, M.J., Weissman, E., Rudd, T., Wathington, H.D. (2012). *The effects of learning communities for students in developmental education: A synthesis of findings from six community colleges*. New York, NY: MDRC.
- Weiss, M.J., Mayer, A., Cullinan, D., Ratledge, A., Sommo, C., & Diamond, J. (2015a). A random assignment evaluation of learning communities at Kingsborough Community College – Seven years later. *Journal of Research on Educational Effectiveness*, 8(2), 189-217.
- Weiss, M.J., Visher, M.G., Weissman, E., & Wathington, H. (2015b). The impact of learning communities for students in developmental education: A synthesis of findings from randomized trials at six community colleges. *Educational Evaluation and Policy Analysis*, 37(4), 520-541.
- Wolf, L., Stidham, A.W., Ross, R. (2015). Predictors of stress and coping strategies of US accelerated vs. generic baccalaureate nursing students: An embedded mixed methods study. *Nurse Education Today*, 35, 201-205.

- Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A tangled web of terms: the overlap and unique contribution of involvement, engagement, and integration to understanding college student success. *Journal of College Student Development*, 50(4), 407-428.
- Yin, R.K. (2014). *Case study research: Design and methods*, 5th ed. Los Angeles, CA: Sage.
- Zajacova, A., Lynch, S.M., Espenshade, T.J. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education*, 46(6), 677-706.
- Zeidenberg, M., Jenkins, D., & Calcagno, J.C. (2007). *Do student success courses actually help community college students succeed?* (CCRC Brief No. 36). New York, NY: Columbia University Teachers College, Community College Research Center.

APPENDICES

APPENDIX A

TABLE OF SPECIFICATIONS

Research Questions	Guiding Questions/Mean of Gathering Data	Justification
RQ1. How do participating students, faculty, and staff describe their experiences with the SUCCESS Program?	Q1. What is your role in the SUCCESS Program? Q2. What parts of this program have been helpful? Q3. How have these things helped? Q8. Are there any parts of the program you feel were ineffective or unnecessary? What makes you think that? Q9. Are there things you would recommend changing? Q10. Is there anything else you would like to share that will help me better understand the benefits and challenges of the SUCCESS Program? Academic records Group observations Email correspondence Meeting notes	Focus groups and individual interviews were conducted using these six guiding questions. Group observations and document review will supplement and support information gained in survey and interview responses. It will also provide a means of triangulating findings.
RQ2. How do participating students, faculty, and staff describe the process of implementing the SUCCESS Program?	Q4. What were the challenges of implementing the SUCCESS program? Q5. How did you overcome these challenges? Q6. What worked well? Q7. Are there things that did not work out according to plan?	Focus groups and individual interviews were conducted using these six guiding questions.

	Q9. Are there things you would recommend changing? Q10. Is there anything else you would like to share that will help me better understand the benefits and challenges of implementing this type of program in the future? Email correspondence of implementation team members Marketing materials and talking points for students Meeting notes	Document review will supplement and support information gained in survey and interview responses. It will also provide a means of triangulating findings.
--	---	--

APPENDIX B

CONSENT FORM

**SUBJECT CONSENT FORM FOR PARTICIPATION IN HUMAN RESEARCH AT MONTANA
STATE UNIVERSITY**

**Sandra Bauman, researcher; Great Falls College; 771-2268;
sandra.bauman@gfcmsu.edu**

Project: Assessing the Effectiveness of the SUCCESS Program at Great Falls College

You are being asked to participate in a research study of the pilot phase of the SUCCESS Program, a retention improvement program implemented for the 2016-2017 academic year.

The goal of this project is to examine all aspects of this program in order to determine which practices were most effective, and which areas need to be improved. This important information will lead to improvements in projects and initiatives designed to increase the graduation and retention rates of all students at GFC.

You were selected to participate based on your role in the SUCCESS Program as a student, faculty, staff member, or administrator directly working on this project.

Procedures: If you agree to participate you will be asked to share information about your experiences with the SUCCESS Program in an interview or focus group, and through written documentation.

Participation is voluntary and you can choose to not answer any questions you do not want to answer and/or you can stop at any time. Your decision to participate, or not, will have no impact on your status in any of your courses, or any other campus activity including employment.

Risks: There are no foreseen risks to participants in this study beyond the minimal risk people encounter in everyday life.

Confidentiality: Your personally identifying information will be kept confidential in the report created from this research. All documents and interview records will be kept in a locked cabinet to insure only I have access to your information.

Contact: For questions or concerns, please contact Sandy Bauman at (406) 771-2268 or sandra.bauman@gfcmsu.edu. If you have additional questions about the rights of human subjects you can contact the Chair of the Institutional Review Board, Mark Quinn, (406) 994-4707 [mquinn@montana.edu].

AUTHORIZATION: I have read the above and understand the discomforts, inconvenience and risk of this study. I, _____ (*name of subject*), agree to participate in this research. I understand that I may later refuse to participate and that I may withdraw from the study at any time. I have received a copy of this consent form for my own records.

Signed: _____

Investigator: _____

Date: _____

APPENDIX C

GUIDING INTERVIEW QUESTIONS

PLEASE READ THIS INFORMATION BEFORE ANSWERING QUESTIONS

The goal of this project is to examine all aspects of the SUCCESS Program in order to determine which practices were most effective and which areas need to be improved. This important information will lead to improvements in projects and initiatives designed to increase the graduation and retention rates of all students at GFC.

These questions are being provided to you prior to our interview to allow you time to consider your answers. This list will serve only as a guide for our discussion.

Participation is voluntary and you can choose to not answer any questions you do not want to answer and/or you can stop at any time.

QUESTIONS

1. What is your role in the SUCCESS Program (student, instructor, tutor, etc.)?
2. What parts of this program have been helpful?
3. How have these things helped?
4. What were the challenges of implementing the program?
5. How did you overcome these challenges?
6. What worked well?
7. Are there things that did not work out according to plan?
8. Are there any parts of the program you feel were ineffective or unnecessary? What makes you think that?
9. Are there things you would recommend changing?
10. Is there anything else you would like to share that will help me better understand the benefits and challenges of the SUCCESS Program?