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The Pontem Path: A Case Study of a Catholic Bridge Program Focusing on College Readiness

Sean Green
University of San Diego

THE PONTEM PATH: A CASE STUDY OF A CATHOLIC BRIDGE PROGRAM FOCUSING ON COLLEGE READINESS

by

Sean Green

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Dissertation Committee

Co-Chair, Marcus Lam, PhD
Co-Chair, Ian Martin, EdD
Wendell Callahan, PhD
Antonio Jimenez Luque, PhD

University of San Diego

University of San Diego
School of Leadership and Education Sciences

CANDIDATE'S NAME: Sean Green

TITLE OF DISSERTATION: THE PONTEM PATH: A CASE STUDY OF A CATHOLIC BRIDGE PROGRAM FOCUSING ON COLLEGE READINESS

APPROVAL:

_____, Co-Chair
Marcus Lam, PhD

_____, Co-Chair
Ian Martin, EdD

_____, Member
Wendell Callahan, PhD

_____, Member
Antonio Jimenez Luque, PhD

DATE:

ABSTRACT

The Department of Education's 2018 report on the "Condition of Education" indicated nearly 60% of all children under the age of 18 had parents without a bachelor's degree. When the statistics were broken down by race, the numbers were far higher. For Black children, that number was 74%; for Hispanic children, that number was 79%; for Pacific islander, it was 78%; and for American Indian/Alaska native, it was 80%. This gap in education has had a tremendous economic impact on families, reverberating through generations. According to Georgetown's 2015 study on the economics of college majors, a college graduate makes $1 million more than a high school graduate (Carnevale et al., 2015). In addition, the study indicated a difference of $3.4 million in income between the highest and lowest paying majors. One way to bridge this gap is through improving college readiness of these students.

Existing bridge programs like TRiO, Upward Bound, and summer bridge have shown success in improving college readiness. Upward Bound and Upward Bound math and science programs reported 86% of their participants from the 2013–2014 high school cohort immediately enrolled in a postsecondary education program.

Current research has found programs focusing on college readiness have indeed helped. Many of these studies on college readiness programs have focused on student academic preparation, parental involvement, and school supports (e.g., college counseling, course selection). There has been comparatively less research focused on extracurricular programs aimed at fostering individual student traits, such as self-efficacy.

This study focused on a college readiness program conducted at an area parochial school in San Diego County. The case study addressed the program's role in fostering self-efficacy

among student participants and examined organizational level factors leading to successful implementation.

This research was important because it provided further insight into the role self-efficacy can play in a college bridge program and identified organizational factors that are barriers to or help with implementation.

Keywords: college readiness, first–generation students, Catholic institutions, private school, program implementation, self-efficacy, community building, social capital

DEDICATION

I would like to dedicate this work to my beautiful wife, Elisabeth Fields Green. Her compassion, belief in me, and support has helped to fuel me to finish this work. If I could add her as a coauthor, I would. My bride, a day does not go by where I don't thank the Lord for delivering you to me. I have and continue to work toward being the man you are proud of and deserve.

I would also like to dedicate this work to my family. First, to my parents Teri Denise Green and Elmer Fred Green, Jr. Without them, none of this would be possible. I am thankful for their unwavering support and modeling of persistence and stead. My sister, Nicole, I got you girl. Never forget it. You inspire me in ways you may never fully understand.

To my children, Payton Mackenzie Green and Harper Kail Green, you two inspire me more than you know. Your thirst for knowledge and love for life reminds me of why I have chosen to endure this challenge. This is for you and future generations.

And finally, my community. This dissertation was completed 6 months after the United States Congress designated Juneteenth a federal holiday. The significance of this is not lost on me. I am a mere 5 generations from slavery. For everyone who looks like me, thinks like, and feels like me, this is for us. All of this is for us.

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My board. A long time ago, a young energetic me formed a nonprofit shaped around the aquatic development of young individuals. I was fortunate enough to surround myself with successful and supportive parents who helped guide me through some of the most difficult professional experiences of my life. So, to the Neptune Aquatics Board of Tom, Sally, Denise, Kathleen, and Jeff.

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CHAPTER ONE: INTRODUCTION

Background

According to the Department of Education's report on the "Condition of Education" for 2018 (McFarland et al. 2018), 60% of all students under the age of 18 in the United States had parents who may have attended college but did not complete a bachelor's degree or higher. In addition, 29% of all students under the age of 18 had parents who had never attended college but had received a high school diploma. Lastly, 10% of students in the United States had parents who had not completed high school (McFarland et al., 2018). The stark reality of these statistics is jarring; students whose parents have attained no more than a high school diploma are least likely to aspire to a bachelor's degree (Horn & Nunez, 2000) and least likely to be college qualified (Berkner & Chavez, 1997). The impetus of this education cycle directly impacts underserved and low-income communities across the United States in numerous ways.

Lack of college readiness among high school graduates is also troubling considering changing workforce needs: More and more jobs in the U.S. economy require education beyond high school (Royster et al., 2015). Research on college readiness is relevant because it is an important contributor to the education and achievement gap between students whose parents went to college and those who did not. Education is important because it has a lasting impact on society and helps to shape the future for youth. Long-term financial opportunity is one area of impact; higher levels of formal education are associated with increased earnings (Day & Newburger, 2002) and act as a hedge against unemployment. During the most recent recession in 2008 and subsequent recovery, for example, adults with bachelor's degrees saw most of the new job creation and adults with associate degrees recovered to near precession numbers, leaving adults with a high school diploma or less struggling to find jobs with a loss of 5.6 million jobs

since December 2007 (Carnevale et al., 2012). Additionally, according to Georgetown's 2015 study on the economics of college majors, a college graduate makes $1 million more than a high school graduate (Carnevale et al., 2015). In addition, the study indicated a difference of $3.4 million in income between the highest and lowest paying majors.

Outside the focus on income, college has long been identified as the primary means for upward mobility and opportunity to grow cultural capital for students of all backgrounds. The term *cultural capital* refers to nonfinancial, educational or intellectual social assets, which might promote upward social mobility beyond economic means (Barker, 2004). Extrinsically, social mobility can provide individuals with material rewards, as people with higher degrees tend to have higher incomes (e.g., Andersson et al., 2014; Shaw, 2013), and better overall quality of life (Holland & Yousofi, 2014). This opportunity to improve one's status benefits not just the individual, but the community at large.

In addition to the financial reward of college readiness, and subsequently, a college degree, social mobility is also seen as a motivating factor. Although the reward of (upward) social mobility can be seen as more of an extrinsic motivator, it is still an important academic factor helping to retain students as a source of encouragement from family and friends. In addition, the drive to enter higher education is rooted not solely in rewards of social (upward) mobility but in opportunities provided by this mobility in helping one's family or community (Holland & Yousofi, 2014; Taylor & Krahn, 2013).

Two major tests are administered to high school students each year for college admissions and to determine college readiness. They are the Scholastic Aptitude Test (SAT) and the American College Test (ACT). Only 25% of the class of 2011 who took an ACT exam

demonstrated college readiness, as measured by scores at or above the benchmark scores presented in Table 1 in all four subjects (ACT, 2011).

Table 1

ACT College Readiness Benchmarks

ACT test score	College courses	Benchmark
English	English composition I	18
Mathematics	College algebra	22
Reading	American history, other history, psychology, sociology, political science, economics	22
Science	Biology	23
STEM	Calculus, chemistry, biology, physics, engineering	26
ELA	English composition I, American history, other history, psychology, sociology, political science, economics	20

College Readiness Programs

Current college readiness programs show a wide range in diversity of their goals. These goals include assisting first–generation college students, low-income students, diverse students, etc. They also have goals ranging from focusing on college readiness to ensuring these students persevere through college. In addition, community building and academic support also play a major role. Hudley et al. (2009) examined college freshmen perceptions of support in high school and found support from high school teachers and counselors was strongly related to social and academic adjustment in college for first–generation and non–first–generation students (Vega, 2016).

Historically, TRiO programs have been the model for college readiness for public school students. TRiO is a phrase referring to the original number of federal programs created to help increase access to higher education institutions for first–generation and low-income students.

The nation's TRiO programs were established by the federal government in 1965 to ensure equal educational opportunity for all Americans, regardless of race, ethnic background, or economic circumstances. Congress mandated two thirds of TRiO participants must be low-income students—specifically, first–generation college students—from families with incomes under $24,000 and in which neither parent attended college (Balz & Esten, 1998). TRiO includes eight programs targeted to serve and assist low-income individuals, first–generation college students, and individuals with disabilities to progress through the academic pipeline from middle school to postbaccalaureate programs.

In the last 10–15 years, private schools have started to diversify their student body in a range of ways, including socioeconomically. Scholarships, grants, and work study opportunities have begun to allow access to these private institutions for more low-income and ethnically diverse students. Unfortunately, students who have attended private schools have not necessarily had access to or awareness of TRiO programs. Specifically, Catholic schools are a unique private school option, as they can base their schooling on Catholic principles and encourage service to a higher number of low-income and diverse students. Therefore, a program woven into the fabric of a Catholic school has the potential to impact even more students with the choice to select a different educational path.

The goal of this dissertation was to examine a college readiness program housed in a private Catholic University in Southern California drawing from local parochial schools. This dissertation used case study methodology to address factors contributing to successful program implementation.

In 2018, the University of San Diego (USD) received a 5-year grant with the goal of implementing and running a Catholic bridge program focused on college readiness. This

program would support counseling needs of first–generation college students from three specific schools in the Diocese of San Diego. The Roman Catholic Diocese of San Diego oversees churches, missions, priests, deacons, and schools in San Diego's Catholic community. Overall, the Diocese covers 43 elementary schools and six high schools. The grant would provide an annual scholarship to support students' tuition needs at 1 of 4 local catholic high schools: Academy of Our Lady of Peace, Cathedral Catholic High School, Mater Dei High School, and St. Augustine High School. The Catholic bridge program formed due to this grant became known as the Pontem Path, as the word *pontem* is Latin for bridge.

This research first takes a closer look at the context of the grant providing the opportunity for this Catholic bridge program. Next, it outlines the research questions. Next, it provides further information for research background and literature. Then, the research design and methods are detailed. Finally, the management plan and timeline is introduced to provide a roadmap for research completion.

Grant Details and Program Structure

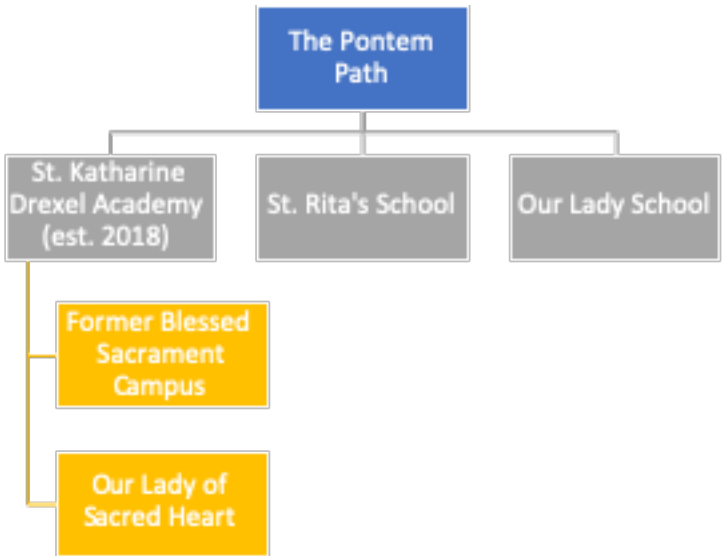
In 2018, USD received a generous grant intended to address the college readiness gap and help local first–generation, underrepresented college students achieve their goals of attending college. The Pontem Path program and team were formed through this grant. The Pontem Path program follows a somewhat traditional model for helping students become college ready successfully, but has added a few strategic additions addressed later in this section.

The Pontem Path team consists of a fellow and program director who oversee 2 to 4 graduate assistants from the school counseling program at USD. In the interest of full disclosure, and to provide further details about positionality, I am the founding and current fellow and program director for the Pontem Path.

Per the grant guidelines, the Pontem Path serves three area Catholic schools in the Diocese of San Diego (see Figure 1). The schools were selected due to their orientation to the city's center. In addition to the geography of the selection, the three schools fell in the lower income quartile for the Diocese of San Diego. Our Lady School, the oldest diocesan school, is in central San Diego. St. Rita's School is in southeast San Diego. St. Katharine Drexel Academy is in the college area, on the former campus of Blessed Sacrament School. All three schools serve low-income students from various areas of the San Diego region. St. Katharine Drexel Academy is unique, as it is a brand-new school resulting from the merger of two schools, Our Lady of the Sacred Heart (OLSH) and Blessed Sacrament, which is where the St. Katharine campus is now located.

Figure 1

The Pontem Path



The Pontem Path focuses on recruiting and counseling first–generation, low-income students with the purpose of helping prepare them for college (see Figure 2). The grant itself

provides scholarships worth upward of 25% of the student's Catholic high school tuition. Students are required to attend weekly workshops at USD. These workshops focus on nine key areas identified by university professors to help prepare students for entrance to USD or other Catholic universities. The nine areas of focus include: (a) goal setting, (b) organization and task management, (c) career decision making, (d) self-determination, (e) self-efficacy and autonomy, (f) Torero Promise and USD, (g) college counseling, (h) finances and FAFSA (financial understanding), and (i) SAT and ACT test prep.

Figure 2

Pontem Path Roadmap

Although most of the section names properly articulate the area of focus, a few do not. Specifically, the Torero Promise references USD's guaranteed admissions program for students meeting certain criteria and attending Catholic high schools. Part of the grant's mission is to help students meet these criteria to attend USD. Lastly, the finances section is clear, but the FAFSA abbreviation may not be clear for those unfamiliar with the college application process. FAFSA stands for Free Application for Federal Student Aid. The FAFSA is an online application all students seeking government aid must fill out.

The Pontem Path team developed curriculum aligned with the nine points of focus and strategically mapped out workshops to accompany the curriculum. Each area of focus, or unit, was mapped out to cover 1 month of the school year. So, in essence, the nine units spanned the

academic school year perfectly. Summer months are spent focusing on community building events and reading assigned books.

Members of the Pontem Path team spend the fall semester at member parochial schools to evaluate K–8 students and provide counseling services to the school. In addition to recruitment and evaluations of students, the purpose of team members being on the campuses has been to provide schools with much needed counseling services. The underlying philosophy behind this contribution ensures that school leaders know the team supports the overall mission of the institution. The impact of counseling services has been critical to not only the program's goals, but the overall goals and welfare of the school community. This partnership has enabled students and faculty members to also become comfortable with Pontem Path team members as they continue to work with these students.

In the beginning, the program also sparked the interest of many onlookers because it was implemented and established rather quickly. The efficiency and effectiveness with which this program has been implemented served as part of the purpose of this case study.

Research Questions

The guiding questions for this dissertation were:

1. How does a bridge program, impact first–generation college students in private Catholic high schools?
2. What roles do organizational factors play in implementing a college readiness program in a Catholic K–8 school in an underserved community?
3. What roles do staff/teacher or administrators play in implementing a college readiness program in a Catholic K–8 school in an underserved community?

4. How is self-efficacy developed in a bridge program for first–generation college students attending private Catholic high schools?

Finding answers to these questions were important because they helped provide insight about a critical challenge facing the country's success. More and more jobs require college degrees, especially as technology evolves rapidly. The United States could fall behind competing countries due to the lack of higher education. In addition, in a country of such wonderful diversity, not addressing a clear gap in education would admit a lack of compassion for members of the community who help contribute to what makes the United States great.

CHAPTER TWO: LITERATURE REVIEW

Review of Literature

College Readiness

Existing literature on college readiness has been robust but has appeared limited in public school applications. The lack of literature on college readiness in private schools is important because a large portion of the population who have chosen to send their students to private campuses has been omitted. The distinction between private and public schools is incredibly difficult to summarize in short. Given the higher probability of private schools to request fees from parents, the social background of students in private and public schools has varied, especially regarding occupational, educational, and financial characteristics of parents (Dronkers & Robert, 2008). In addition to these socioeconomic differences, private schools have differed from public schools in their history, administration, school climate, etc. Regardless of these differences, private schools have made a concerted effort to diversify their enrollment in recent year; thus, further research was needed on college readiness in these schools.

This gap in college readiness literature can be for numerous reasons, including access to institutions, specific program availability, and identified need. This section focuses first on existing literature from public school sites and students. This section also examines similar, yet still different, programs offered on Catholic school campuses.

Current theory on college readiness in the literature has strong roots in Sedlacek's (1993) work from the early 1990s. Sedlacek theorized there were eight essential noncognitive components of college readiness: positive self-concept about academics; realistic self-appraisal; understanding/dealing with racism; long-term goal setting; having an available support person; demonstrated experience and success with leadership; community service; and knowledge

acquired in/about a field (Abel & Oliver, 2018). Many of these components could be found in modern training school counselors received in their post graduate work. More recently though, the American School Counselor Association (ASCA) remade and defined college and career readiness standards for every student.

The ASCA is the standard for school counseling advocacy, education, and guidance. The ASCA Mindsets & Behaviors for Student Success: K–12 College and Career Readiness Standards for Every Student have displayed a deeper understanding and visual representation of current college readiness theory (see Appendix A). The model has also placed a heavy emphasis on the potential impact of counselors. Bryan et al.'s (2011) research showed the number of school counselors and student contact with counselors predicted student college application rates (Capizzi et al., 2017). In the Exploring College Readiness section of this literature review, the current ratio of school counselor to student was shown to be problematic, thereby reemphasizing the gap shown in the literature about what is needed and provided.

Additional theory for college readiness has been broken down in exhaustive detail about what the counselor can do to help assist students. The most important action high school officials can take is create a culture focused on fostering and promoting intellectual development among all students (Conley, 2007). Counselors can also be brokers for extracurricular college preparatory support, referring students to programs like GEAR UP where they can get more intense assistance. With national counselor-to-student ratios nearing 450:1, it is imperative for school and district policymakers to consider other ways to support students to get back on track (Royster et al., 2015).

In addition to ASCA's current model, recent college readiness theory literature has strongly supported identifying early indicators for students at risk. Good student-level indicators

allow practitioners to identify which students need support, based on clear criteria, and ensure students needing support are not overlooked (Allensworth et al., 2018).

The first indicator is resiliency. Significant research has shown resilience as an important variable in a developmental theory of change. Youth are more likely to meet their developmental needs when they experience home, school, and community environments providing them with developmental supports and opportunities (also referred to as external assets or protective factors), caring relationships, high expectations, and opportunities for meaningful participation and contribution (Benard & Slade, 2009).

First–Generation College Students

From the college readiness perspective, first–generation college students have an even harder time in their preparation. A considerable body of research has indicated students whose parents have not attended college often face significant challenges in accessing postsecondary education, succeeding academically once they enroll, and completing a degree (e.g., Choy, 2001; Ishitani, 2006; Pascarella et al., 2004; Stephens et al., 2012; Woosley & Shepler, 2011).

Self-efficacy, social challenges, or lack of social capital have been identified in addition to academic challenges. Coleman (1988) defined *social capital* as people's ability to work together voluntarily. Many writers, such as Fukuyama (1995a, 1995b) and Dasgupta (1999), ascribed this ability to cooperate to trust (Paldam, 2000).

Some first–generation students can have different personality traits (i.e., differences in self-esteem and social acceptance), more often living at home and working part-time while attending college (Horn & Nevill, 2006; Warburton et al., 2001). The research also showed strong social and academic support networks have been necessary for successful transition from

high school to college, especially for first–generation students (Adelman, 2006; Martinez & Klopott, 2005; Noeth & Wimberly, 2002).

Role of the School Counselor

School counseling emerged as a specialty area of the counseling profession, and has continued to evolve because of social, educational, political, and economic trends (Paisley & Borders, 1995). School guidance counselors play a major role in developing student aspirations, encouraging rigorous course enrollment, and brokering extracurricular support services to support students on the path toward college readiness (College Board, 2010). The role and functions of school counselors have evolved over the last century to include a focus on student assessment, classroom developmental guidance, consultation, mental health prevention and intervention, multiculturalism, and social justice (Gysbers & Henderson, 2012). Hines et al. (2011) asserted school counselors can identify barriers to college and career readiness skills in the context of their schools, and advocate strongly for change (Perusse et al., 2015).

School counselors' relationships with families can also play a pivotal role in their effectiveness with students. Partnerships with families and students about postsecondary education are best started early in a student's high school career (e.g., ninth grade); this may demystify the college planning and financial planning processes and encourage parental involvement with postsecondary planning (Fitzpatrick & Costantini, 2011).

The literature has also pointed to challenges experienced by school counselors. School counselors balance large caseloads, low social status, student crises (Baggerly & Osborn, 2006), role ambiguity, role conflict, and lack of a unified, professional identity (Amatea & Clark, 2005). These factors have contributed to occupational stress (Young & Lambie, 2007), which correlates

negatively with career satisfaction and commitment, and correlates positively with burnout and attrition (Baggerly & Osborn, 2006; Rayle, 2006; Wilkerson & Bellini, 2006).

Working in a well-organized and supportive office implementing comprehensive programs has been beneficial for the counselor and student. Research has suggested when school counselors work in a comprehensive school counseling program and perform supervised duties for which they have been trained, they have had a greater impact on student outcomes, have been more satisfied at work, experienced less stress, reported greater wellness, and remained in their jobs longer (Clemens et al., 2009; Salina et al., 2013).

Since 1953, the ASCA has been very influential in the direction and shape of school counseling through discussion, debate, and publication of role statements, position papers, and ethical standards (Paisley & Borders, 1995). Literature on expectations of the school counselor have focused primarily on best practices as put forth by the ASCA. ASCA (2013) has called on all school counselors to help students "acquire knowledge and skills to be college and career ready upon graduation" (p. 1). Although the school counselor has undoubtedly played a critical role in students' preparation for college akin to coaches preparing an athlete for competition, school counselors have dealt with unimaginable ratios. According to the California Budget and Policy Center, the student-to-guidance counselor ratio was 785:1 in the 2014–2015 school year, putting the state last in the nation per ratio (Kaplan, 2015). Simply put, this is an untenable ratio. To address these inequities, evidence has suggested more counselors and advisors are needed to help guide students through the college application and financial aid processes (U.S. Executive Office of the President, 2014). Due to counselor-to-student ratios and the other administrative and reporting demands of their positions, school counselors have limited time for individual student support (Millett et al., 2018).

As a result, a dual tract has emerged for students with higher income and those with lower income. The rise of private counseling has added to the layer of potential advantages for students with means over those without. Nonprofits and other organizational structures have been formed to assist with the widening education gap due to limited counselor exposure for public school students.

Ambiguity of school counselor impact has been a relevant critique in the literature. Studies have indicated a positive association between number of school counselors and 4-year college enrollment (Hurwitz & Howell, 2014) and college applications (Bryan et al., 2011). However, other studies have reported a weaker association between the two. One study using data from the NCE's High School Longitudinal Study of 2009 cited only 2.84% of students identified their school counselor as the person in their life with the most influence on their thinking about postsecondary education (Cholewa et al., 2015).

Critique of the Counselor Theory

Applying a more critical lens to current college readiness theory has shown strong reliance on counselors. Although the need for counselors has been articulated clearly in the literature, the lack of investment in counselors from state education systems has shown a glaring gap between application of resources and the literature. Good counselors can play a critical role in advocating for students. Without advocacy from more knowledgeable mentors, students have enrolled in lower level courses or failed. Additionally, many teachers have held the belief college was not for every student; and therefore, some students did not need to be college ready (Palmer et al., 2010; Roderick et al., 2009). This belief manifested in teaching and counseling behaviors, allowing some students to escape challenges and ultimately fail (College Board, 2011). As with

most professions, this also highlighted the importance of having high-quality counselors motivated to make a difference. Academic damage can be done when that component is lacking.

Program Implementation

Implementation research is the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and subsequently improve the quality and effectiveness of health services. It includes the study of influences on healthcare professionals and organizational behavior (Eccles & Mittman, 2006). Program implementation is a relevant and important application in a school setting due to the many policies and programs constantly established at school sites. Lack of effective and efficient methods for beginning these programs can contribute to a lack in overall effectiveness and waste of limited school resources.

Core implementation components have been identified based on commonalities among successful implementation programs (Fixsen et al., 2005). These components include staff selection, Zoom preservice and in-service training, ongoing coaching and consultation, staff evaluation, decision support data systems, facilitative administrative support, and systems interventions (Fixen et al., 2009).

Implementation Factors in Education

Since the beginnings of the field in implementation science in education, difficulties inherent in implementation have:

> Discouraged detailed study of the process of implementation. The problems of implementation are overwhelmingly complex, and scholars have frequently been deterred by methodological considerations. . . . A comprehensive analysis of implementation requires that attention be given to multiple actions over an extended period" (Van Meter

& Van Horn, 1975, pp. 450–451; see a similar discussion nearly 3 decades later by Greenhalgh et al., 2004).

With this said, the literature has pointed to implementation models developed over the past 25 years.

Chen (1990) provided a conceptual model for factors influencing implementation. These factors have included characteristics of (a) the implementation system (i.e., process and structure of the implementation and training system), (b) the implementer (e.g., teacher and school staff), and (c) the setting in which the program has been implemented (e.g., school climate, principal support, and district support; Domitrovich & Greenberg, 2000).

Factors impacting implementation of school-based programs have come from a range of diverse studies conducted in schools. Regardless of the individual school program, every school or organization should strive for a planned implementation protocol. Effective practices without support of implementation principles in practice are not likely to produce intended outcomes in education, especially in turnaround schools and classrooms (Durlak & DuPre, 2008; Naleppa & Cagle, 2010).

Specifically, the difference in effectiveness in schools can be as vast as approximately 65%. With the support of skilled teams focusing on implementation, districts can expect 80% successful use of effective practices in about 3 years (Chamberlain et al., 2011; Fixsen et al., 2001); without support of skilled teams focusing on implementation, districts might achieve 14% successful use of effective practices after 17 years (Balas & Boren, 2000; Green, 2008). Skilled teams focusing on implementation efforts contribute significantly to sustained use of effective practices over generations of practitioners (Tommeraas & Ogden, 2016) and can support an

expanding number of effective practices as implementation infrastructure matures (Karlin & Cross, 2013).

In “Four Domains for Rapid School Improvement: A Systems Framework,” Jackson et al. (2018) described the key features of each domain as turnaround leadership, talent development, instructional transformation, and culture shift. When exploring mindfulness and yoga programs in schools, four broad themes with related subthemes were identified as barriers and facilitators for program implementation: program delivery factors, implementer communication with teachers, promoting program buy-in, and instructor qualities (Dariotis et al., 2017).

Implementation Drivers

Implementation drivers are processes leveraged to improve competence and create a more hospitable organizational and systems environment for an evidence-based program or practice (Fixsen et al., 2005). These drivers play a critical yet usually overlooked role in program implementation.

In a recent study exploring implementation of a school-based mindfulness and yoga program, four broad themes were identified as barriers and facilitators of program implementation: program delivery factors, implementer communication with teachers, promoting program buy-in, and instructor qualities (Dariotis et al., 2017). As addressed in the following section about factors in education, some of these themes have been consistent drivers in the literature.

It is interesting to note a focus on school “readiness” in the limited literature on implementation drivers. Not all schools have the resources or climate necessary to support effective program implementation. Researchers should evaluate a school’s “readiness” for

program implementation—including potential to involve teachers—by conducting a school-based readiness assessment (Dariotis et al., 2017).

Self-Efficacy

Self-efficacy has been defined as people's beliefs about their capability to succeed and attain a given level of performance (Bandura, 1977). Although all students face some challenges in their ability to attain and grow their own self-efficacy, first–generation college students lack resources at home similar to their peers. First–generation college students' parents typically cannot help them with college tasks directly (Brooks-Terry, 1988; Zalaquett, 1999). Additionally, these students are likely to have unrealistic expectations about college (Brooks-Terry, 1988) and lack knowledge about the university system (York-Anderson & Bowman, 1991). This gap in knowledge significantly impacts these students' abilities to attain or grow their self-efficacy in high school.

Folger et al. (2004) indicated traditional support services offered by universities did not meet transitional needs of first–generation college students and specific services should be developed to meet the unique needs of this population. It is even more important for first–generation college students to have a strong sense of self-efficacy when navigating college campuses.

Developing self-efficacy should be a primary focus in any educational institution but especially with underserved student populations coming from low-income backgrounds. The lack of self-efficacy in these populations can be especially detrimental for their academic pursuits. Chemers et al. (2001) reported academic self-efficacy was related directly to academic performance of 1st-year college students when they encountered the most difficult issues related to transition. Specifically with first–generation college students, self-efficacy can be lacking due

to previous challenges these students have endured to get to college, such as psychological challenges—including their belief that people who have backgrounds like theirs deserve to attend college and can thrive there (Oyserman & Destin, 2010; Steele, 2010; Stephens et al., 2012). Although the understanding of self-efficacy and its impact in education has been well researched in the literature, there is room for contribution about the impact of self-efficacy on first–generation college students specifically. It is important to gain a better understanding of the drivers toward better self-efficacy and what factors may contribute to better development of such a critical skill.

Drivers of Self-Efficacy

Bandura's (1986) four sources of self-efficacy include vicarious experiences, emotional arousal, verbal persuasion, and performance accomplishments. These sources also act as drivers and a roadmap for developing self-efficacy. Current literature has focused on performance accomplishments to address the definition of self-efficacy, but as Bandura pointed out, that is simply one of the sources or drivers for developing self-efficacy.

Bandura (1999) maintained a person might observe outcomes altering their behavior through vicarious learning experiences, similar to directly experienced consequences. If a person can observe behavior leading to success, the observer is more likely to engage in said behavior. Emotional arousal can serve to decrease self-efficacy through physiological arousal; for example, fear can generate a physiological arousal inhibiting behavior and have a negative impact on performance. Through verbal persuasion, individuals can be convinced they possess capabilities to master a task. Once they have been persuaded to believe this, they may demonstrate a greater degree of motivation and effort to complete a task, increasing their likelihood of success. Finally,

performance accomplishments represent the situation occurring when individuals succeed in a task and in turn increases their self-efficacy (Bandura et al., 2001).

Educational institutions, teachers, and counselors should have a primary focus on development of these drivers and opportunities for first–generation college students. The opportunity is too great to build a foundation to help these students with their college readiness. It is important to note college readiness programs provide an opportunity and space for students to enhance their self-efficacy skills.

In addition to self-efficacy, it is appropriate to determine the role social capital can play in building community and growing college readiness.

Social Capital

Social capital, or the value of a relationship with another person providing support and assistance in each social situation (Stanton-Salazar, 2001), is a useful framework for examining experiences of working–class, first–generation college students (Moschetti & Hudley, 2015). Social capital on its own can be the difference in whether a student is able to persevere through challenging times in college, or not.

Social capital has been defined as many different possible tools in an educational setting. Lin (1999) wrote social capital can be defined as resources embedded in a social structure which are accessed and/or mobilized in purposive actions. Lin further described the notion of social capital contains three ingredients: (a) resources embedded in a social structure, (b) accessibility to success social resources by individuals, and (c) use or mobilization of such social resources by individuals in purposive actions. Thus conceived, social capital contains three elements intersecting structure and action: the structural (embeddedness), opportunity (accessibility), and action oriented (use) aspects (Lin, 1999).

Social capital is the fabric weaving its way through students' experiences. It is also the fabric often lacking in experiences of all who have attended a higher education institution. Those most affected by this lack of fabric tend to share similarities preventing them from any experience with higher education. Students with the most difficulty accessing college are often the first generation to attend college, children from immigrant families, and from low-socioeconomic-status homes (ACT, 2004; Choy, 2001; Haycock et al., 2001; Martinez & Klopott, 2005; Noeth & Wimberly, 2002; Warburton et al., 2001).

Bourdieu's (1986) theory of cultural capital has played a pivotal role in understanding why college readiness is so important and yet so difficult to achieve. Bourdieu generalized cultural capital could be akin to economic capital, as a return on investment will ultimately occur (e.g., investing money or investing in education and realizing a benefit). Defining social capital as the aggregate of resources existing in individuals' networks, Bourdieu saw the construct as an explanatory mechanism for reproduction of class inequality and viewed social relationships providing access to institutionalized resources as advantageous for those in power but as an exclusionary process for those without (Philp, 2019). The student is not the only one to make this investment, as the community also makes this investment; thus, social capital can be the result of cultural capital.

Coleman (1988) defined social capital as "a variety of entities with two elements in common: They all consist of some aspect of social structures, and they facilitate certain action of actors . . . within the structure" (p. S98). Coleman (1988) placed emphasis on strong familial relationships to explain successful student outcomes, and Bourdieu used the same ideas to explain the reproduction of inequality across social classes. Coleman emphasized the role of parents and the idea of intergenerational closure, or how well parents know the parents of their

children's friends, suggesting families play a critical role in adopting key social norms to advance a child's chance of success (Philp, 2019).

Granovetter (1983) explored value in weak ties and opportunity for growth in those ties. Although strong deep ties were valuable, for instance, they did not allow for more fluid navigation and time for network growth. In addition, strong ties tended to be due to a blending of multiple groups rather than an expansion of groups, thereby limiting the network range. Weak ties allowed for wider network growth, subsequently creating an opportunity to connect with multiple people from multiple backgrounds.

Due to the multiple definitions of social capital, the framework has been applied in various ways in educational settings. Philp (2019) found two studies (Chesters & Smith, 2015; Garrett et al., 2010) operationalized youth social capital as participation in extracurricular activities, and other studies included extracurricular activities as a moderating variable impacting other social capital variables (e.g., intergenerational closure) on academic outcomes (Morris, 2016).

Other researchers have found a tremendous impact from social capital on education and crime. Putnam (2001) found the relationship between educational performance and social capital was much stronger—two orders of magnitude stronger—than spending on schools, teacher–pupil ratios, or any other obvious aspects thought more often to increase educational performance (Putnam, 2001).

Community Building

Both Bourdieu's (1986) and Coleman's (1988) theories on social capital have provided support for strength of community. Granovetter's contribution spoke more about the strength in weak ties and the value in an expansive network. Both social capital and strength in weak ties

speak to the overall importance of a community impact. Specifically, this community aspect can be what makes or breaks an educational experience for students.

A considerable body of research has indicated students whose parents have not attended college have often faced significant challenges in accessing postsecondary education, succeeding academically once enrolled, and completing a degree (e.g., Choy, 2001; Ishitani, 2006; Pascarella et al., 2004; Stephens et al., 2012; Woosley & Shepler, 2011). But the importance of community is an often-overlooked part of this equation. The lack of community supporting parents through the college readiness process also needs to be addressed. For purposes of this study, the frameworks exploring community included social capital and the strength in weak ties. Both areas were addressed further during the interview phase of the study.

Conclusion

Although college readiness is the foundation of the grant and the program, program implementation and self-efficacy frameworks guided the research. Program implementation was used to address the organizational variables attributed to the program and its impact on potential success of the program. The self-efficacy framework was used to address individual level variables of the program.

Although existing literature has shown areas in education and program management replete with knowledge and studies, there has been a clear gap between the burgeoning study of program implementation and its applicable uses in education. Borrowing already proven successes in project management helps to lend a roadmap of possible uses in education. The lack of research marrying the two highlighted the need for further exploration of their necessary relationship in education, and specifically, college readiness.

Together, research helped to answer the posed research questions. Potential implications include finding a more effective way to implement college readiness programs, thereby weaving in a stronger foundation to develop self-efficacy for first–generation college students.

CHAPTER THREE: METHODOLOGY

Method

Positionality

Postmodern and feminist thinkers advanced the concept of positionality, acknowledging the complex and relational roles of race, class, gender, and other socially constructed identifiers in being (Kincheloe & McLaren, 2011; Maher & Tetreault, 1993, 1998). The key premises of positionality are individuals constructing an understanding of the world and perceiving themselves to occupy a particular location in the reality they construct (Kincheloe & Steinberg, 1998).

I am a Black man from a middle-class family who grew up in an underserved community. From an early age, education was a staple in my life. Through the blessings my family bestowed upon me, I learned very early education was the one true way for change. My father was a naval intelligence officer before transitioning to civilian life as a logistics engineer, and my mother is a nurse. My grandfather on my mother's side was essentially an engineer who worked on space shuttles. My grandmother on my mother's side was a chemist who worked at UCLA's medical school until she decided to stop working to have children. The educational privilege from which I come is not lost on me, but it does inform and possibly skew my outlook on the educational opportunities my community has been afforded. My privilege has allowed me to view education through a critical lens, sometimes too critical. To address this bias, I reviewed schools I worked with in the context of their communities and available resources. This allowed me to take an objective approach to the research.

Professionally, I am the fellow and program director for the Pontem Path, the focus of this research project. My supervisors and fellow principal investigators (PIs) on the project are

university professors with extensive experience and education working with and in schools. My experience, combined with theirs, has created a unique environment that would be difficult to replicate at another school. A goal of this research project was to create steps to be replicated at a school without the same resources. Regardless of the emerging steps, barriers include the potential lack of experience and education of directors in a similar program.

Although the program's essential role has been to offer educational opportunities for first–generation college students from diverse backgrounds, it has also served to benefit the member schools where the program recruits. Specifically, the three member schools can advertise their partnership with the Pontem Path and University of San Diego (USD) as a marketing tool to attract potential applicants. This relationship could have informed how school stakeholders participated in relevant follow-up interviews for this project. It could also have influenced those who may apply for admission to these schools. To mitigate this possibility, I offered the opportunity for school stakeholders to interview with an individual other than me. In addition, all interviews allowed for member checking to ensure for accuracy. Coding was used for analyzing qualitative data from the interviews.

Lastly, I acknowledge how my own personal bias has the potential to impact my research. Although I am not a first–generation college student, I do consider myself a member of the same community as the students I serve, due to being a minority raised in a similar socioeconomic community. Because of this, I tend to hold strong feelings about the lack of educational opportunities for this and similar communities. I was transparent throughout the research through member checking and detailed discussion with all study participants.

Participants

Participants were drawn from theoretical sampling. Specifically, study participants fell into one of two categories. The first category of participant included the Pontem Path students. These students have applied, been reviewed, and were admitted to the Pontem Path cohort. These students would be either in ninth or 10th grade in high school and would attend one of the private Catholic high schools in the city. As detailed earlier in Chapter 1, students were required to be first–generation college students and graduates of one of the three member schools with which the Pontem Path works to qualify for the scholarship program.

The second category were stakeholders at the Pontem Path's member schools. Specifically, I included principals, eighth–grade teachers, and the director of diocesan schools as stakeholders in this study. The reason for including this select group was they have been direct participants and witnesses to the introduction and implementation of the Pontem Path at their school sites. The principals had to approve the inclusion of the program on campus. They also had to provide direction as to how the program's team could have access to rooms, teachers, and potential students. The eighth–grade teachers served as the communication conduit to potential students. This provided critical infrastructure to the program as it was in its beginning stages. Their input was vital for a clearer understanding as to how and why they were able to be supportive.

Sampling Strategy

Convenience sampling was used for the study. Although convenience sampling was the approach, I also purposely selected participants from the principal and teacher portion. Some of the leadership participants have changed since implementation of the program, but all student participants have been present since the beginning. Notably, some leadership changes have taken

place in subsequent years of the program's implementation; thus, not all leadership individuals were available for interviewing.

Research Design

I used a mixed methods approach for the research design of this research project. Mixed methods research is an intellectual and practical synthesis based on qualitative and quantitative research; it is the third methodological or research paradigm (along with qualitative and quantitative research). It recognizes the importance of traditional quantitative and qualitative research but also offers a powerful third paradigm choice, often providing the most informative, complete, balanced, and useful research results (Johnson et al., 2007).

This project involved collecting data in three phases. Phase 1 consisted of a pre- and posttest of the students' self-efficacy. Phase 2 consisted of a school analysis and organizational structure review. Phase 3 consisted of interviews with students designed to better understand the overall program and students' self-efficacy and academic environment.

Data Collection Phase 1 – Baseline Measure of Self-Efficacy

For Phase 1 of the study, I administered the academic self-efficacy and efficacy for self-regulated learning survey to students in the Pontem Path. The survey was administered in two separate stages. The first stage of the survey was administered to brand-new students of the Pontem Path, classified as the 2024s due to their prospective graduation years. This first stage was used to establish a baseline for self-efficacy among new students. In the second stage, the same survey was administered to 2024s as a posttest 5 months after the original test. Aside from the time in between assessments, this posttest also took place after the "self-efficacy" unit in the Pontem Path curriculum.

The survey was administered online via email due to the COVID-19 global pandemic quarantine measures in place. I converted the survey to a google form and distributed it to the students. Data on the 2024s were collected prior to October 2020. The second set of data were collected prior to March 2021. To get a true baseline of self-efficacy for the new students, the survey instrument was distributed prior to the beginning of the self-efficacy unit.

The survey was distributed in two separate stages, pretest and posttest, via email to the 13 student participants. The first email containing the link for the pretest was sent on the November 3, 2020. The email requested a deadline to complete by November 6, 2020. Students who did not complete the survey by November 6, 2020, were reminded at their weekly workshop on November 5, and were reminded at their individual check-ins with their program counselors. Survey responses were collected between November 3, 2020, and November 10, 2020; 13 responses were obtained for a 100% response rate.

The timing of the survey distribution was scheduled around the self-efficacy and autonomy unit the Pontem Path conducted in January 2021. The unit spanned 4 weeks and focused on teaching and helping students understand self-efficacy and how it could be beneficial to their personal and academic growth.

The posttest stage of the survey distribution occurred in February and March of 2021. The request to fill out the survey was sent on February 18, 2021, with a request to complete surveys by March 5, 2021. A reminder email was sent on March 4, 2021, and another reminder email was sent to individual students who had not yet responded on March 9, 2021. Survey responses for the second stage were collected between February 18, 2021, and March 11, 2021, with 13 responses for a 100% response rate.

Self-Efficacy Scale

To measure self-efficacy, I used the academic self-efficacy and efficacy for self-regulated learning survey mentioned earlier, seeking to understand capacity for self-efficacy and self-regulated learning in students. Research has shown students' self-efficacy perceptions have been related to two aspects of a reciprocal feedback loop: self-monitoring (Diener & Dweck, 1978; Kuhl, 1985; Pearl et al., 1983) and students' academic motivation and achievement (Schunk, 1984); the Pontem Path fosters development of both skills. For purposes of this study, I was interested in the impact the change of self-efficacy may have had on students' academic achievements, specifically their grade point averages (GPAs).

Each cohort of the Pontem Path presents the unique opportunity to further examine where these students may be about their self-efficacy growth. Focusing on the 2024s was essential, as they had not yet spent a year in the program.

Data Collection and Analysis Phase 2 – School Analysis and Organizational Structure

Data was collected and analyzed in Phase 2 of the study about the high schools the student members attended. The collected data included a list of courses offered at the school, student-to-teacher ratio information, and ways in which students have had opportunities to access counseling services. For the courses offered and student-to-teacher ratio, I examined the school profile or curriculum guide where provided. All schools create school profiles specifically to provide prospective students, families, colleges, etc., with relevant information about the school, including college matriculation data, test scores, class size, school size, and demographics. Curriculum guides offer more thorough insight about every course offered at the school. In addition to listing the courses offered, curriculum guides also tend to provide course descriptions and roadmaps for when students can take the courses; for example, a school profile may show

Advanced Placement (AP) U.S. History as a course, but a curriculum guide will show AP U.S. History with a full description of the course and timeline for when a student may be able to take it. As such, a curriculum guide can provide a more detailed view of the courses provided.

As mentioned earlier, I focused on course availability, student-to-teacher ratio, and access to counseling services. The reason for addressing these specific components was their relation to the school's ability to prepare students for college and to determine how the program was effectively implemented.

Course availability and curriculum varied at each of the different high schools the students attended. Although all the schools were considered college preparatory, each institution still differed in academic philosophy, facilities, programing, and opportunities. Specifically, the number of AP courses, foreign language opportunities, support for learning disabilities, and technological support varied.

Higher student-to-teacher ratio, which is indicative of having larger classes, has been associated with poorer academic outcomes for students and decreased job satisfaction for teachers (Finn et al., 2003). Each of the schools with Pontem Path students featured smaller class sizes; however, all of them still differed in student-to-teacher ratio. A further examination of the data also helped provide more context for the overall case study.

School counselors serve a variety of roles on school campuses. Specifically, counselors are particularly valuable due to their social emotional support, course selection, college application assistance, and their role in assisting students with their educational aspirations. Educational aspirations are developed early in a student's academic career and are generally theorized to affect academic achievement by enhancing the possibility of participating in and/or pursuing educational opportunities (Arbona, 2000). Students with high academic aspirations are

more likely to take advantage of educational opportunities leading to academic success. Likewise, students with low academic aspirations are less likely to take advantage of these opportunities, thus limiting their future educational opportunities (Arbona, 2000). In this way, students' educational aspirations can influence what they learn in school, how they prepare for their postsecondary lives, and their ultimate academic and career attainment (Walberg, 1989). This case study focused on access to counseling services to address how student access has varied more closely and how their access may have impacted their experience.

Data Collection Phase 3 – Qualitative Phase

Phase 3 of this study included interviews via phone, Zoom, or in person by a member of the Pontem Path team. The purpose of having someone other than me facilitating the interviews was to eliminate any bias and influence on the answers. Due to my positionality and my role in the program, it was important to avoid any potential conflicts of interest. Although the goal was to conduct all interviews via phone or zoom, a member of the Pontem Path team was available to interview participants in person during this uncertain time because of quarantine measures due to the COVID-19 global pandemic, should language or access to phones or computers have been a challenge for participants.

If the interviews were conducted in person, they were conducted on the site of one of the three members schools associated with the Pontem Path, with attention paid to appropriate social distancing and mask requirement measures. The three schools included St. Rita's Catholic School, St. Katharine Drexel Academy, and Our Lady's School. All three schools were kindergarten through eighth grade parochial schools in the diocese of San Diego. The Pontem Path has established services available locally to all three school sites. In addition to students located currently at the school sites, current Pontem Path student cohort members attended one

of the previously mentioned member schools. If the University of San Diego was closer to the participant, the School of Leadership and Education Sciences was used as an alternative site, if necessary.

Interview Protocol

The third and final stage of this mixed methods study focused on individual interviews. Interviews attempted to seek feedback from several key stakeholders of the Pontem Path. These included but were not limited to students, parents, administrators, and teachers. Data from the previous phases helped to influence who was selected for follow-up interviews. More specifically, the students I sought to interview were those who appeared to be on the extreme ends of the self-efficacy scale. In addition, I sought to interview a few administrators from the parochial schools who could better speak to the Pontem Path's implementation. The reason for this was to see what factors played a role in successful implementation of the program. These answers helped to support any findings from the school analysis portion of the research.

The study used individual interviews as a means for tertiary data collection. A semistructured interview approach was used to ensure all participants answered the same primary questions and left space for extended conversations and theme emergence. All interviews were either conducted in person or on the phone. If a participant preferred a language other than English, researchers used either a translator or Google translate for translation.

In addition, the interview portion of the research design consisted of an interpersonal interviewing format where interviewers asked open-ended preset questions with the hopes of finding opportunities to probe further for more in-depth analysis and opportunity for naturalistic inquiry (see Appendices B, C, D). These interviews focused on the value of college readiness and the impact of developing self-efficacy on that process. The interviews sought to learn more

about the role the Pontem Path played, if any, in helping to lay the foundation for growth of self-efficacy. Finally, interviews sought to learn more about what aspects of community building and subsequent community helped to increase student motivation and persistence toward their academic goals.

The individual interviews were expected to last 1 hour to an hour and a half. Each interview was given additional time so participants had the opportunity to ask questions or engage in a more informal portion of the conversation.

Data Analysis

Once the interviews were completed, participants were assigned pseudonyms to protect their identity through the analysis phase. Data were analyzed and coded to assess for emergent themes. Interview data were recorded, transcribed, and member checked with participants for accuracy. In addition to sharing the transcriptions with the participants, they were also shared with the research team for assistance with extensive analysis and coding of the data.

Once emergent themes were identified, the research team organized the themes for the results portion of the research. If questions arose requiring additional clarification, the research team reached out to participants to verify through member checking. MaxQDA software was used to assist in the coding and management of the interviews.

Research Sites

Research for this study included interviews via phone, Zoom, or in person by a member of the Pontem Path team, but not necessarily myself. The purpose of having someone other than the me facilitating the interviews was to eliminate any bias and influence on the answers. Due to my positionality and my role in the program, it was important to avoid any potential conflicts of interest. Although the goal was to conduct all the interviews via phone, researchers were

available to interview in person, should language or access to phones or computers be a challenge for the interviewees.

Logic Model

Logic models are normally used to map program components and processes connecting them. Specific aspects of logic models require stakeholders to identify key components, assumptions, external (contextual) factors, inputs, output, and outcomes to guide and evaluate implementation (Stegemann & Jaciw, 2018).

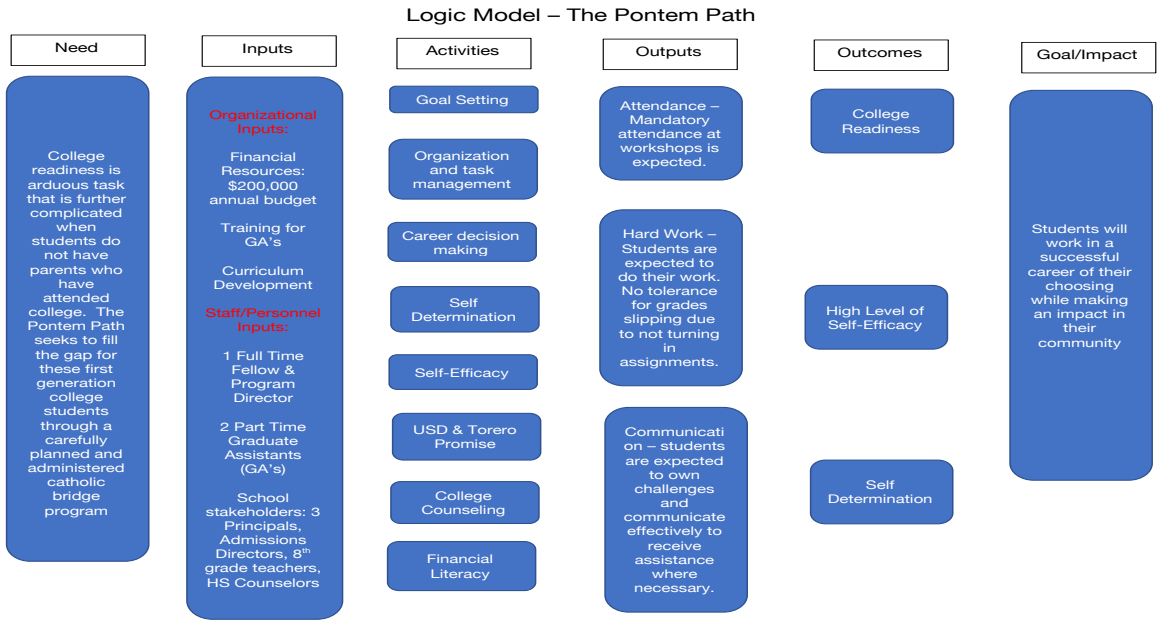
The logic model has been used extensively for large-scale program evaluation (Alter & Murty, 1997; Hernandez, 2000; McLaughlin & Jordan, 1999; Newton et al., 2013). It provides a graphic and visual means to depict program components and relationships among resources, program outputs and actions, and both short-term and long-term desired outcomes of the program. Logic models also identify assumptions and theory in underlying actions. Importantly, the logic model is steeped in theory of action and change. The model makes intended connections between actions and outcomes clear, including program impacts (Stegemann & Jaciw, 2018).

The structure of logic models may vary depending on program application and discipline of the intended placement. For the Pontem Path, the logic model was developed using six area components consisting of (a) need (why the program was developed), (b) inputs (resources available to the program), (c) activities (structure of the curriculum designed to assist students in addressing the need), (d) outputs (requirements of students), (e) outcomes (students' expected gains through program completion), and (f) goal/impact (goal and hopeful impact of the program).

The Pontem Path project structure involves eight units of focus for the Catholic bridge program, categorized as activities in this model. It is important to note the activities and units are also scheduled for implementation at the perceived most impactful time of the academic year for students, based on needs of the traditional academic semester. For instance, goal setting is the first activity of focus because it allows students to explore and determine goals they want to set for themselves for the academic year. Because of this, the goal-setting activity is covered the first month of school in September. Figure 3 provides a more detailed and graphic representation of the logic model for the Pontem Path.

Figure 3

Logic Model



Goal Setting

The first activity focused on goal setting. Examples of goal setting include focusing on academic and physical goals for the school year. These may include establishing a grade-point-average (GPA) goal of a 3.0 for the first semester. This same goal can be adjusted mid-year to factor in success or adjustments necessary to help the students achieve their goal.

First–generation students typically do not have the same support sources as second–generation students throughout their education (Billson & Terry, 1982; Terenzini et al., 1996; York-Anderson & Bowman, 1991). Therefore, first–generation students may need to rely more heavily on motivational factors to achieve academically. Motivational factors, such as acceptance to a dream school or qualifying for academic scholarships, may help students to better visualize what they are working toward. Variables assessing self-regulated learning may be predictors of success for first–generation students (Naumann et al., 2003). One of these variables benefitting self-regulated learning is goal setting. Goal setting can help lead to self-regulated learning by establishing the relationship between students' individual goals and the work required to reach them. A generic example of this is the desire to complete homework on a Friday night. Students who have not established goals for themselves may decide to spend time with their friends instead of completing their homework. Students who have established individual goals, and have received necessary support from friends, families, and counselors, can better self-regulate to make the optimal decision to simply complete their work prior to pursuing more enjoyable activities.

The Pontem Path followed Dr. Ian Martin's goal-setting curriculum from USD entitled Tru Goals. Through this activity, the Pontem Path provided students with necessary tools to develop, track, and hold themselves accountable to goals they set for themselves.

Organization and Task Management

As a group, first–generation college students have a more difficult time than their peers transitioning to college (Pascarella et al., 2004). They often lack important study and time management skills and experience more difficulty navigating administrative aspects of academic life due to lack of college experiences in their families (Richardson & Skinner, 1992).

First–generation students have parents who have not attained 4-year college degrees; they also tend to come from working-class backgrounds and have families with far fewer financial resources than continuing–generation students, who are often from middle and upper-class backgrounds (Horn & Nunez, 2000; Hossler et al., 1999). As a result, when first–generation students attend college, they often work one or more jobs to pay for their tuition and living expenses (Phinney & Haas, 2003; Warburton et al., 2001). As a result, they have less time to devote themselves fully to academic pursuits, to participate in extracurricular activities, and to spend their summers doing unpaid internships that lead to future job opportunities (Delaney, 2010; Pascarella et al., 2004). Because of this, the ability to manage time, tasks, and organization is critical to the success of first–generation college students.

The organization and task management activity and unit are meant to address the skills related to time management specifically. Task management and time management differ; task management is the ability to manage and complete tasks related to an activity or project, and time management is what helps a student understand what time they have available to use in the completion of those tasks. The importance of all these skills is understanding the time allotted in the day and learning to manage it effectively.

The ability to organize effectively allows students to maximize their time and thus their opportunity for academic success. In the entire model, organization and task management play a

critical role early in the program cohort because it allows the students and counselors to establish expectations of how all cohort members are expected to manage their time.

Career Decision Making

A common thread among much of the existing research showed both internal and external factors have shaped career choice based on life experiences at a given point in time (Forbus et al., 2011; Galles & Lenz, 2013; Super, 1990). Determining levels of career certainty for pre-1st–year college students may be of particular interest to counselors and administrators as it can ultimately effect whether someone will solidify a college major leading to a specific occupation (Astin, 1993; Gordon & Steele, 2003; Ringer & Dodd, 1999).

Researchers have proposed that exposure to role models in students' fields of interest can be highly beneficial to increase career decision self-efficacy (Alika, 2012; Betz, 2004; Conklin et al., 2013; Dockery & McKelvey, 2013). School and college career counselors can use such data to aid with planning career-related interventions to expose students to professionals in a variety of fields who may come from similar cultural backgrounds, thereby mitigating career decision self-efficacy (Pulliam et al., 2017).

The Pontem Path focuses on career decision making as an activity to ensure students explore their educational opportunities with intention. The program ensures students start to think about courses to take and are mindful in high school of career decision-making discussions as early as the summer before the student's 1st year of high school. In addition to this discussion, the Pontem Path program is focused on including guest speakers whenever possible. Although it is always important for students to do well, the earlier they can understand the importance of early courses in future course selection, the earlier they can establish course goals, leading to the career they believe they may want to study in college.

Self-Determination

Self-determination theory examines how intrinsic motivation can influence academic achievement positively, but it also addresses factors decreasing intrinsic motivation. Behaviors differ in the degree in which they have been internalized and integrated (Trevino & DeFreitas, 2014).

The self-determination activity of the Pontem Path is focused on development and maturation of student intrinsic motivation. Students' intrinsic motivations are associated with attending classes regularly, remaining in school, and higher academic performance (Dohn, 1991; Rumenberger et al., 1990). As a critical activity of the Pontem Path, students learn the importance of their educational journey. They also specifically learn new ways of motivation and strategies for staying determined.

This section of the Pontem Path curriculum also provides the opportunity to welcome many guest speakers from various backgrounds. Learning their stories of self-determination helps to inspire students who may come from similar beginnings.

Self-Efficacy

One of the most critical activities of the Pontem Path is the unit on self-efficacy. Self-efficacy is defined as beliefs about one's ability to successfully execute a behavior required to produce a certain outcome (Bandura, 1997). In fact, people may avoid or exert less effort in situations in which they possess a lower level of self-efficacy (Bandura, 1986). For students, development of self-efficacy is a critical component of their future success. The focus on this activity was foundational to the Pontem Path and this research project.

As also mentioned in the section on self-determination, self-efficacy presents a unique opportunity to host guest speakers from a variety of backgrounds, thereby modeling this

fundamental ability. The opportunity to combine the lessons of self-efficacy with possible role models is a main ingredient to potential success of the program.

USD and the Torero Promise

One focus of the Pontem Path is ensuring students can attend USD or other Catholic universities. Because of this, one program activity involves educating students about USD and introducing them to the Torero Promise. The Torero Promise is an admission guarantee available to qualifying students who graduate from a local Catholic high school. Requirements at the time of the study included (a) a 3.7 cumulative GPA by the end of junior year; (b) no disciplinary record during high school; (c) successful completion of at least three academic classes at the honors, AP, or international baccalaureate (IB) level by the end of junior year; and (d) submission of the common application prior to the regular deadline. Members of Pontem Path cohorts focus on accomplishing all four of these requirements to ensure they are admitted to USD by the end of their high school career.

College Counseling

Many first–generation college students have reported lower levels of self-confidence in their academic preparation for college than students whose parents attended college (Unverferth et al., 2012). Many of the variables impacting one's confidence in their academic preparation for college are reviewed and studied in the Pontem Path curriculum. One such critical section covers college counseling.

College counseling is an integral part of the college matriculation puzzle, as educators help ensure first–generation college students have an opportunity to attend college. Research has shown if counselors begin actively supporting students and their families in middle school in preparing for college, as opposed to simply disseminating information, students' chances of

enrolling in a 4-year college will increase (Hossler et al., 1999; Hutchinson & Reagan, 1989; McDonough, 1997, 1999; Plank & Jordan, 2001; Powell, 1996; Rowe, 1989).

This section of the Pontem Path focuses on the college application process, course selection, and how to choose a college. Although the Pontem Path curriculum includes guest speakers with all its activities, the section on college counseling attempts to use this resource type the most. This focus on counselors from different backgrounds and settings is meant to provide further context to the college process.

Financial Understanding

Economist Lusardi defined *financial literacy* as the understanding of financial concepts; examples include compound interest, identification of nominal and real interest-rate differences, and risk diversification (Lusardi & Mitchell, 2008). Financial capability is the application of financial knowledge to behavioral outcomes; examples include how people manage their resources, make decisions, and demonstrate financial knowledge (Mottola, 2014).

Greenfield (2015) found many low-income students and students of color have a higher rates of misperceptions about college costs and affordability, in large part due to the increasing complexity of available financial aid options. The Pontem Path curriculum seeks to bridge this gap in the final unit.

Last but certainly not least, financial literacy is the final section of the Pontem Path school year. Financial understanding focuses on the financial aspects of college. The plus, minuses, and realities of college finances are consequential to post-college success of most students. Guest speakers for this unit include, among others, financial aid directors and other experts in scholarships and loans.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

This chapter includes findings from this research project. The first section reviews Phase 1 and the academic self-efficacy and efficacy for self-regulated learning survey administered to the students, providing descriptive statistics. The second section of the chapter reviews Phase 2 of the research project, which analyzed the high schools of Pontem Path students. The final section reviews the qualitative phase of the research project, including the analysis of school administrators', teachers', and students' interviews for emergent themes.

Phase 1 – Self-Efficacy

The first phase of this research project focused on distribution, collection, and analysis of data from the academic self-efficacy and efficacy for self-regulated learning survey. The Institutional Review Board approved the research project via the Cayuse online system on October 7, 2020. The final sample of 13 students was drawn from a population of 24 cohort members from the Pontem Path program. This produced a response rate of approximately 54%.

Descriptive Statistics

This section is divided into three sections for analysis. The three sections consist of the pretest, posttest, and comparison.

Pretest

Analysis of the pretest of the self-efficacy survey distributed to the students is broken down by question in Table 2. Questions 1–11 used a standard Likert scale with a scale of 1–5, with 1 = *no confidence at all*, 2 = *very little confidence*, 3 = *some confidence*, 4 = *much confidence*, and 5 = *complete confidence*. Questions 12–19 used a slightly different scale measuring from 1–7, with 1 = *very untrue* to 7 = *very true*.

Table 2

Pretest Descriptive Statistics for the Academic Self-Efficacy and Efficacy for Self-Regulated Learning Survey

Question	Mean	Median	Mode	Min	Max	Standard deviation
Question 1	4.31	5	5	3	5	0.85
Question 2	3.15	3	3	1	5	1.07
Question 3	3.92	4	4	2	5	0.95
Question 4	4.15	4	5	2	5	0.99
Question 5	2.46	2	1	1	5	1.33
Question 6	3.92	4	5	2	5	1.12
Question 7	4.08	4	5	3	5	0.86
Question 8	3.69	4	4	2	5	0.85
Question 9	3.69	4	5	1	5	1.25
Question 10	3.38	4	4	2	5	0.96
Question 11	4.00	4	3	3	5	1.00
Question 12	5.31	5	4	3	7	1.44
Question 13	6.23	7	7	4	7	1.01
Question 14	4.62	5	6	1	7	1.98
Question 15	4.92	4	4	3	7	1.32
Question 16	5.77	6	7	4	7	1.17
Question 17	5.54	5	5	4	7	1.05
Question 18	4.62	4	4	2	7	1.56
Question 19	6.38	7	7	4	7	0.96

Table 2 shows the descriptive statistics of Questions 1–19 of the academic self-efficacy and efficacy for self-regulated learning survey, with the breakdown by answer. As reflected in

the table, the highest confidence based on mean for Questions 1–11 was for Question 1, with 53.84% of students showing "complete confidence" and a strong understanding of completing homework and submitting by deadline ($M = 4.31$). One hundred percent of students expressed some confidence or higher in their ability to finish homework assignments by deadlines. Question 5 showed the lowest confidence in using the library for information and assignments, with 30.77% of students expressing "no confidence at all," and 53.85% of students expressing very little confidence or less about using the library to get information for class assignments.

In Questions 12–19, students showed they believed in their ability to succeed at their school, with 61.54% of students saying the statement was "very true" for their answer to Question 19. One hundred percent of students choose the midpoint answer of 4 or higher about their belief to succeed at school. The lowest confidence was shown in how they felt about how interesting their schoolwork was in Question 18: 23.08% of students found the statement "I find my academic work interesting and absorbing" closer to untrue than true.

Table 2 also provides a thorough breakdown for Questions 1–19 of the academic self-efficacy and efficacy for self-regulated learning survey by showing the mean, median, mode, min, max, and standard deviation. For Questions 1–11, the average mean was 3.7, median was 3.81, mode was 4, and standard deviation was 1.02. Question 1 provided highest mean—4.31 or "much confidence" and above—asking students their confidence in finishing homework by the deadline. The lowest mean was 2.46, "very little confidence" and above, for Question 5, which asked students their confidence in using the library to get information for class assignments. For Questions 12–19 the average mean was 5.42, median was 5.37, mode was 5.5, and standard deviation was 1.31. The highest mean was 6.38, just below the "very true" for Question 19, which asked students their confidence in their capability to succeed at school. The lowest mean

was 4.62, just above the middle of the true scale, for Questions 14 and 18. Question 14 asked how true the statement “I know how to study to perform well on tests” was, and Question 18 asked how true the statement “I find my academic work interesting and absorbing” was.

Posttest

Descriptive statistics for the posttest are reflected in Table 3. Analysis of the posttest of the self-efficacy survey distributed to students is broken down by question in Table 3. Questions 1–11 used a standard Likert scale with a scale of 1–5, 1 = *no confidence at all*, 2 = *very little confidence*, 3 = *some confidence*, 4 = *much confidence*, and 5 = *complete confidence*. Questions 12–19 used a slightly different scale measuring from 1–7, 1 = *very untrue* to 7 = *very true*.

Table 3

Posttest Descriptive Statistics for Academic Self-Efficacy and Efficacy for Self-Regulated Learning Survey

Question	Mean	Median	Mode	Min	Max	Standard Deviation
Question 1	4.08	4	5	3	5	0.95
Question 2	3.00	3	3	1	5	1.15
Question 3	3.54	3	3	2	5	0.88
Question 4	3.92	4	4	1	5	1.26
Question 5	2.85	3	3	1	5	1.21
Question 6	3.62	3	3	1	5	1.19
Question 7	4.00	4	5	2	5	1.00
Question 8	3.54	4	4	2	5	0.97
Question 9	3.62	4	3	1	5	1.26
Question 10	3.62	4	3	2	5	1.04
Question 11	3.46	3	3	2	5	0.78
Question 12	4.85	5	6	2	7	1.63
Question 13	5.69	6	6	2	7	1.38
Question 14	4.92	5	4	1	7	1.61
Question 15	5.00	5	4	2	7	1.41
Question 16	5.38	6	4	3	7	1.45
Question 17	5.77	6	6	4	7	1.09
Question 18	4.15	4	3	1	7	1.82
Question 19	6.08	6	7	4	7	1.04

Table 3 shows Questions 1–11 of the academic self-efficacy and efficacy for self-regulated learning survey with the breakdown by answer. As reflected in the table, the highest

confidence remained for Question 1, showing a strong understanding of completing homework and submitting by deadline. The lowest was Question 5, confidence for using the library for information and assignments. Table 3 also shows descriptive statistics for Questions 12–19, with the breakdown by answer. As reflected in the table, the highest confidence was for Question 19, showing students thought they were very capable of succeeding at their school. The lowest confidence for the pretest was whether students thought they knew how to study to perform well on their tests.

For Questions 1–11 of the academic self-efficacy and efficacy for self-regulated learning survey, the average mean was 3.56, median was 3.54, mode was also 3.54, and standard deviation was 1.06. For Questions 12–19, the average mean was 5.23, median was 5.37, mode was 5, and standard deviation was 1.42.

Comparison

Table 4 reflects the difference between results from the survey posttest and pretest. As reflected in the table, the biggest positive difference in mean was reflected on Questions 11 and 13. Question 11 specifically asked how confident students were participating in class discussions. Question 13 asked students to state how true the statement was that they knew how to take notes. Not surprisingly, the biggest negative change was shown in answers to Question 5, which asked the students to state how confident they were using the library to get information for class assignments.

Table 4

Difference Between Pretest and Posttest for the Academic Self-Efficacy and Efficacy for Self-Regulated Learning Survey

Question	Pretest	Posttest	Difference	*t* Value	*p* Value
Question 1	4.31	4.08	0.23	-1.389	0.19
Question 2	3.15	3.00	0.15	-1.389	0.19
Question 3	3.92	3.54	0.38	-2.739	0.018
Question 4	4.15	3.92	0.23	-0.898	0.387
Question 5	2.46	2.85	-0.38	1.328	0.209
Question 6	3.92	3.62	0.31	-0.693	0.502
Question 7	4.08	4.00	0.08	-0.365	0.721
Question 8	3.69	3.54	0.15	-0.519	0.613
Question 9	3.69	3.62	0.08	-0.433	0.673
Question 10	3.38	3.62	-0.23	1.389	0.19
Question 11	4.00	3.46	0.54	-2.214	0.047
Question 12	5.31	4.85	0.46	-1.148	0.273
Question 13	6.23	5.69	0.54	-1.620	0.131
Question 14	4.62	4.92	-0.31	0.772	0.455
Question 15	4.92	5.00	-0.08	0.249	0.808
Question 16	5.77	5.38	0.38	-2.739	0.18
Question 17	5.54	5.77	-0.23	1.000	0.337
Question 18	4.62	4.15	0.46	-1.251	0.235
Question 19	6.38	6.08	0.31	-1.760	0.104

Table 4 continues to show the difference between the pretest and posttest for the academic self-efficacy and efficacy for self-regulated learning survey. Interestingly, the largest

increase in answers was reflected in Question 5, which asked the students about their ability to use the library to get information for class assignments. Questions 11 and 13 showed the largest decrease in answers. Question 11 asked about the students' confidence to participate in class discussions, and Question 13 reflected on the students' ability to take class notes. The timing of these results are prescient, as the COVID-19 global pandemic did create challenges that could have predicted this outcome.

Additionally, Table 4 reflects paired *t* tests run on each individual question. The paired *t* tests were included to test for statistical significance for each question. These results showed statistical significance ($p < .05$) for Questions 3 and 11. Question 3 asked students to rate their level of confidence to "concentrate on school subjects" from 1 to 5. Question 11 asked students to rate their level of confidence to "participate in class discussions" from 1 to 5. The statistical significance of Question 3 aligned with research showing the challenges of online learning.

Data from the self-efficacy survey showed an interesting assessment of students' interpretations of their strengths and opportunities. Although mentioned consistently throughout this project, it remains important to emphasize the impact of the COVID-19 global pandemic and its subsequent effects on students during this survey process. The pretest was conducted in November 2020, only 7 months into the pandemic. At this point in time, the United States was in the middle of shutdowns, with many people finding themselves in worse situations than they had been in the year prior. Some of these students saw immeasurable financial and social loss and in their own families. The posttest was conducted in March 2021, a full year into the pandemic and still another 3 months away from availability of vaccines. The feeling of despair had undoubtedly sunk in during this 5-month gap, and may have ultimately had a profound impact on the survey results and data.

As the data show in the following section, the students participating in this study attended well-equipped schools with rigorous coursework and many resources. To me, one of the main takeaways from the self-efficacy data was how damaging this time during the pandemic must have been to students who did not attend schools with the same resources and opportunities as these student participants. For instance, the fact student self-efficacy dipped on 14 of the 19 questions per the survey data was interesting and honestly expected. Most schools were still shutdown with students attending only virtual classes.

Summary

The time between the pre- and post-test spanned approximately 5 months from November 2020 to March 2021. It is important to note how challenging those 5 months were for not only the students, but society. Over 1 billion students—more than 98% of the world's student population—were affected by school closures because of the COVID-19 global pandemic (UNESCO, 2020). The COVID-19 global pandemic was arguably at its peak during this timeframe, resulting in incomprehensible stress for these students caused by health, financial, and scholastic challenges. Many of these students suffered directly from financial implications of the pandemic, in addition to personally dealing with some of the health challenges. Also, schools were left to navigate a scenario without drill exercises similar to fire or earthquake drills. Without direct and immediate teacher help in online learning, students lacked the ability (a) to construct meaning by assuming agency in learning, (b) to initiate and sustain meaningful multimodal communications, and (c) to develop conceptual understanding through active engagement with digital resources (Hartnett, 2016). Due to these challenges, schools were inconsistent at best with scheduling and opportunities for students to navigate a traditional high school setting on campus full-time.

In addition to the challenges students experienced, teachers, staff, and administration were dealing with their own disruptions due to this forced adjustment. In the interest of probity, this situation causing everyone to adjust in ways they could not have previously imagined was overlooked and not given enough attention as a variable.

Despite this challenge, students still endured. For example, Questions 11 and 13 were the two questions with the largest gains by mean between pretest and posttest. Question 11 asked students to rate their level of confidence to "participate in class discussions" from 1 to 5. Interestingly, technology use as a part of learning has been mentioned in studies about first–generation students. Integrating technology into the classroom and providing opportunities for research via the internet, submission of assignments online, and communication between teacher and student has been suggested as ways of helping students develop skills needed in postsecondary education (Reid & Moore, 2008). Moving to an online model during the pandemic could show students were enabled to become more comfortable participating in class discussions. The COVID-19 global pandemic, almost if by accident, thrust this hypothesis into action. Question 13 asked students to rate their level of confidence with the statement, "I know how to take notes," from 1 to 7. Interestingly, this exact skill is practiced throughout the Pontem Path, but not specifically in the self-efficacy unit. This improvement has begged the question as to whether the knowledge or experience has allowed students to feel more comfortable with this skill.

When looking at the following section reflecting on schools these students have attended, it is important to remember these were some of the best schools the city has had to offer. Despite this, many of these students still suffered during this unprecedented time. Future data on the overall impact of students from this time in history will be undoubtedly compelling.

Phase 2 – School Analysis

The second phase of this research project included examining all five private Catholic high schools attended by student participants in the Pontem Path program. Each school was analyzed to determine coursework offered, student-to-teacher ratio, and available counseling services. The school analysis took place between November 2020 and April 2021. Data collection consisted of reviewing the individual schools' websites to see if the school profiles were readily available. Typically, most profiles were available in the counseling section of the website. In the event the school profile was not available, I used the curriculum guide or other academic archives to piece together the answers to the questions.

In addition to the school analysis, interviews were conducted with school administrators and teachers from the K–8 private Catholic schools students participating in the Pontem Path program had attended prior to the high schools. The interviews sought to get a better understanding of the organizational structure in place that may or may not have impacted the implementation of the Pontem Path program.

Interviews with administrators and teachers from the K–8 schools took place between December 16, 2020, and January 6, 2021. All interviews were conducted via Zoom due to restrictions of the COVID-19 global pandemic and were recorded and analyzed using MAXQDA software for coding. It should be noted data on private schools are generally difficult to find. Typically, private schools do not have the same reporting requirements as public institutions. For this research project, I relied on schools' self-reported data via websites, curriculum guides, information sheets, etc.

The following section first examines how each of the areas were addressed, including coursework offered, student-to-teacher ratio, and counseling services. Following that section,

individual high schools of Pontem Path students is addressed further. All student members of the Pontem Path attend local Catholic college preparatory high schools. All five high schools provide an abundance of resources made available to students and families.

This section of the research project focused on listing relevant resources and opportunities available at the specific schools pertaining to answering Research Question 1: How does a bridge program impact first–generation college student in private Catholic high schools? Specific details for the following sections are detailed under each school (e.g., honors and AP courses offered, class size).

Coursework Offered

Honors and advanced placement (AP) courses were offered at 4 of the 5 high schools attended by students in the Pontem Path program. The fifth high school was a newly formed Catholic high school open for just 1 year; thus, they had yet to offer an AP or honors course to students currently attending the school.

In addition to honors and AP courses, one of the high schools also offered international baccalaureate (IB) and dual enrollment courses.

Student-to-Teacher Ratio

As private Catholic high schools, each one has taken great pride in their individual class sizes, relative to public school alternatives. For class sizes, although there has not been consistent empirical evidence linking class size and student achievement, some studies have shown small class sizes are important for certain types of students, such as low-achieving students, elementary school students, and students from low socioeconomic backgrounds (Dolan & Schmidt, 1987; Robinson & Wittebols, 1986; Summers & Wolfe, 1977). For this study, I considered student-to-teacher ratios when data were available. Regarding the bigger case study of the Pontem Path

program, I believed it was an important variable for assessing this bounded system. The overall average ratio among schools where the data were present was 15:1.

Counseling Services

This section addressed the number of available counselors and the services or opportunities they provided. Data for this section were collected from the high schools' websites. Some of the high school counseling offices focused mostly on college matriculation, and others outwardly advertised available mental health counseling resources.

General Overview

Table 5 shows a brief overview of school analysis findings. The average student-to-teacher ratio for the available data was 12:1, the average student–counselor ratio for the available data was 156:1, the average number of honors, AP, and dual enrollment (H/AP/Dual enrollment) courses offered was 28, and the average number of units required to graduate was 272. Schools A, B, C, and D used 5 units to denote a semester course. School E used 1 unit to denote a full year course. For ease of review, I have adjusted the units for School E (in parentheses) for comparison. The following sections examine each individual high school and data for the aforementioned resources more closely.

Table 5

School Analysis Summary

Schools	Student–teacher ratio	Student–counselor ratio	H/AP/dual enrollment courses offered	Units required to graduate
School A	NA	100:1	55	280
School B	14:1	NA	35	240
School C	NA	182:1	23	260
School D	13:1	188:1	26	280
School E	9:1	NA	0	30 (300)

School A

College Matriculation

The last graduating class at School A included 407 students. Of those 407 students, 84% matriculated to a 4-year institution. Another helpful statistic from the school profile included test scores compared to the national average. School A proudly stated its students scored approximately 20% higher on the ACT compared to the national average, and approximately 12% higher on the SAT.

Coursework Offered

The curriculum for School A was extensive and representative of the school's required rigor. Students were required to take 280 units to graduate, with a typical semester-long course worth 5 units. In addition to the expansive unit load, students were required to take academic courses for a large majority of the curriculum.

Speaking specifically to rigor, School A offered 18 honors course, 25 AP courses, and 12 dual enrollment courses. For honors courses, common courses like honors English, honors math, and honors sciences were available, as well as honors orchestra, honors jazz band, and honors

symphonic band. Aside from the common AP courses offered, unique courses at School A included AP Chinese, AP computer science principles, AP music theory, and AP studio art.

Dual enrollment courses were offered in conjunction with a local community college, and they contained common dual enrollment courses including history, math, psychology, sociology, and Spanish. Specific math courses appeared relatively advanced for high school, offering linear algebra and differential equations. In addition, School A also offered a pre-engineering program. From this profile, it was clear School A has billed itself as a technology-focused school catering to academic opportunities its students sought.

Student-to-Teacher Ratio

Student-to-teacher ratio was not readily available on School A's website or in the school profile.

Counseling Services

Available counseling resources appeared extensive. Per the school profile, School A boasted eight counselors, including a dean of counseling. In addition to the eight counselors, the school separated counselors by responsibilities focusing on either school responsibilities or college responsibilities.

Although total enrollment was not available on the school website or in the school profile, the graduating class for 2020 was 407 students. As four college counselors were listed on the school profile, the college counselor to senior ratio would be 100:1.

School B

The School B curriculum guide was available on their website via the counseling section. Although it did not contain data read as easily as a profile, the guide provided a lot of relevant information for this research project. In addition to the curriculum guide, School B had multiple

sources of data spread throughout their website. Plenty of data were available from the curriculum guide, the general website, and their "at a glance" pamphlet, although additional time was required to search multiple places on the site.

Available curriculum data did include offered coursework and a more detailed review of the academic philosophy and opportunities; however, the "at a glance" pamphlet provided data on student-to-teacher ratio and more in-depth information about the student population.

A clear theme throughout the multiple sources showed a focus on academic success. Interesting data included a statistic on the percentage of graduates offered scholarships (84.4%), the percentage of graduates who planned to major in a STEM field (40%), and percentage of graduates as first–generation college students (20%).

Coursework Offered

Curriculum offered at School B was rigorous, as they offered 14 honors courses and 21 AP courses. The curriculum for School B was extensive and representative of the school's required rigor. Students were required to take 240 units to graduate from the school, with a typical semester-long course worth 5 units. In addition to the expansive unit load, students were required to take academic courses for a large majority of the curriculum, leaving only 25 units for elective work.

In addition to the rigor of offered coursework, the graduation requirements at School B exceeded the University of California (UC) and California State University (CSU) systems' A–G requirements for admission eligibility. Specifically, School B required an extra year of social science. To allow for multiple opportunities to take coursework, a zero block and G block were offered outside of the traditional school day. This allowed students the opportunity to either take

more classes or participate in select internships. In addition to the coursework offered, the school's website noted 100% of its graduates matriculated to higher education.

Student-to-Teacher Ratio

Student to faculty ratio was 14:1, as reflected on the school's website. After closer examination, the average class size was reported as 22.74. Although it has not been uncommon for those statistics to be different and reflected accordingly, it could be unintentionally misleading to perspective parents and students.

Counseling Services

Per School B's website, the school offered four available counselors for the student body. Each counselor was responsible for all four grade levels at the school, but their direct case load included students divided by last name. In addition to this, the counselors' primary duties seemed focused on college and career aspirations. In reviewing available data online, in addition to the curriculum guide, it was clear the counselors' focus was on academic counseling. In addition to the available counselors, the counseling hierarchy did include an assistant principal for curriculum and innovation.

School C

School C made their profile available on their website for download. The profile was found under the counseling section of the site and contained detailed information spanning two pages. The information available in the profile did not contain the desired data. In addition to the school profile, I reviewed the curriculum guide and website for this project.

In reviewing all the artifacts, it was clear the school gave attention given to aspects other than academics. As School A placed a considerable amount of time focusing on postgraduate data and scholarships received, School C appeared to place an equal amount of focus on holistic

development of students attending the school. Specifically, integral student outcomes were in the first sections in the curriculum guide. Combined with the website's limited statistics on postgraduation outcome, this led me to believe the focus has been on individual student overall growth.

Academic statistics were found more readily available in the school profile. An immediately noticeable statistic showed 95% of the last class took the SAT or ACT. The average SAT score was an 1174, and the average ACT composite score was 26 for the latest graduating class. Per the data provided in the school profile, School C's graduates exceeded the national average for SAT scores by 115 points (1174 to 1059) and 5.3 points in the ACT (26 to 20.7).

Coursework Offered

School C's focus on rigorous coursework was clear in its offering of 19 AP courses and 4 honors courses. Of the 4 schools involved in this research project open for more than 1 year, School C appeared to offer the least amount of AP and honors courses. However, it did not appear to indicate School C's rigor was less than the other schools; rather, it appeared School C placed an emphasis on general education courses to ensure they were above standard courses offered at other schools. Thus, the overall rigor of coursework at School C was strong.

Graduation requirements for School C required students to complete 260 credits with a minimum of a 2.0 GPA. In addition to the academic requirement, students must have also completed 100 hours of Christian service. Of the 260 credits, 4 years of English, 4 years of math, 2 years of a world language, 3 years of social science, 2 years of lab science, 1 semester of speech, 2 years of PE, 4 years of religion, and 1 year of visual and performing arts were required.

Student-to-Teacher Ratio

Data for student-to-teacher ratio were not readily available in any of the archives examined for this research project; however, I found data reporting an average class size of 25 students. The school profile also listed the student body as 700 students.

Counseling Services

School C offered four counselors for their student body. Counselors' responsibilities appeared to be divided by grade level and last name, but there was a counselor devoted solely to freshmen on campus. One of the counselors also served as the director of counseling services. Based on the estimated student enrollment of 730 students, it appeared the counselor-to-student ratio was approximately 182 students per counselor.

School D

A curriculum guide was readily available on School D's website under the academics portion. In addition to the curriculum guide, relevant statistics readily available on its website under admissions included the number of summer internships offered (140 in 2019), the number of scholarships and tuition assistance awarded in 2020–2021 (6.4 million), and percentage of students with a passing AP score (89%). In addition to these statistics, a section on integral student outcomes was also highly prominent in the curriculum guide. As with School C, School D showed a strong focus on preparing students to be well-rounded individuals and providing them with a strong academic foundation. A school profile was not found after a thorough search of School D's website; however, data for the following sections were extracted from the curriculum guide.

Coursework Offered

School D's curriculum guide showed 280 semester units were required for graduation. Each semester equaled 5 units and was broken down into 4 years of theology, 4 years of English, 3 years of math, 3 years of social science, 2 years of science, 2 years of a world language, 1 year of physical education, 1 year of visual and performing arts, 1 year of speech, and 7 years of other elective courses. In addition to the unit requirement, students were also required to complete 100 Christian service hours and a senior capstone project.

AP courses offered at School D included 16 course options and 10 honors courses. In addition to the AP/honors courses offered, students at School D could pursue the science academy. Per the curriculum guide, the academy of science is "a unique and unparalleled collaborative educational experience in which high achieving students are challenged to expand their intellect, and to develop skills in scientific inquiry, critical thinking, problem solving and work-based learning."

Student-to-Teacher Ratio

A specific student-to-teacher ratio was not found through investigation of School D's archival data. When examining the Western Catholic Educational Association report from 2018, data included a student enrollment of 753 students and faculty count of 55. With those two available data points from 2018, the student-to-faculty ratio was 13:1.

Counseling Services

Four counselors were available to students at School D. The counseling site on School D's website appeared to show an emphasis on time management and starting well for 1st-year students. Aside from a few graphics, it was difficult to determine the overall focus or specialty of

the counseling office. Although the current student enrollment was not found on the website, the student-to-counselor ratio was 188:1 using the 2018 statistic of 753 students.

School E

School E was a new high school and thus did not yet have a school profile or curriculum guide available on its website. Available data analyzed for this section included the graduation requirements section of the website, student and family handbook, and 4-year course plan.

The school officially opened in August 2020 in the middle of the COVD-19 global pandemic. Prior to the pandemic, School E strived to open its doors with 100 freshmen, but due to the restrictions and limitations the pandemic caused, the school ultimately opened its doors to approximately 55 1st-year students.

The school was unique in its model of Catholic education. Unlike the other college preparatory schools analyzed and attended by students in the Pontem Path program, School E included a work study component. Students attended class 4 days per week, and then worked the 5th day at a participating business. The workday helped to minimize families' expenses incurred from their students' private Catholic education. In addition to being a private Catholic high school, School E was part of a nationwide network of schools following a similar model.

Coursework Offered

Semester units at School E were defined as 1-credit courses. Per the graduation requirements provided, 30 credits were required for graduation. The 30-credit requirement were broken down into 4 credits for theology, 4 credits for English, 3 credits for social studies, 4 credits for math, 2 credits for world language, 4 credits for science, 2 credits for physical education, 1 credit for visual and performing arts, 2 credits for electives, and 4 credits for corporate work study.

At the time of this study, there were no honors or AP courses offered, as 1st-year students were the only students on campus. Per the 4-year course plan, one AP course is in development for the 10th-grade year and 11 total plans would be available to students over the next 4 years. In addition, School E ensured each student will meet or exceed the University of California (UC) system's A–G requirements, thereby laying the foundation for each graduate to apply to a UC school.

Student-to-Teacher Ratio

Even though no official student-to-teacher ratio was listed on the website, six teachers were profiled at School E. With approximately 55 students in attendance, I inferred the student–to–teacher ratio was approximately 9:1.

Counseling Services

At the time of this research project, School E did not employ any full-time counselors. A part-time counselor was available to assist with social emotional challenges, but there was little to indication of a clear academic focus on counseling. Based on the previous information on college aspirations and preparations for graduates, it was safe to assume a stronger emphasis on academics will emerge in the counseling office soon.

Summary

Phase 2 included analysis of the schools attended by the Pontem Path student members. For class sizes, although there was inconsistent empirical evidence on the link between class size and student achievement, some studies have shown small class size is important for certain types of students, such as low-achieving students, elementary school students, and students from low socioeconomic backgrounds (Dolan & Schmidt, 1987; ERS, 1986; Summers & Wolfe, 1977). Pontem Path students were not shy in expressing how class sizes helped increase their

confidence and ability to speak up in class settings. It should be noted consistently this research project was conducted during the COVID-19 global pandemic; thus, the classroom settings were inconsistent at best. Students spoke to this and expressed a clear difference of opinion and confidence when they were in class compared to when they were remote. All high schools attended by Pontem Path students showed a clear emphasis on small class sizes, counselor availability, and rigorous coursework.

Phase 3 – Qualitative Phase

The third and final stage of data collection included interviewing select students from the Pontem Path program, school administrators from the K–8 schools of the student participants, and teachers from the same schools.

Three students were selected for interviews. Students selected for interviews included the student with the highest confidence in their self-efficacy ability, the student with the lowest confidence in their self-efficacy ability, and a student who fell right in the middle.

All interviews were conducted using Zoom software due to the COVID-19 global pandemic. All interviews were recorded with participant approval using the voice memo software native to Apple computers. Interviews were reviewed and coded via theme using MaxQDA software. Transcripts were ordered and produced via Rev.com. Interviews ranged in length from 30 to 45 minutes depending on follow-up questions and organic conversation about the topics.

Interviews were conducted over the course of 3 months and totaled 12 altogether. This meant all administrator interviews were conducted around the same time, teacher interviews were conducted at the same time, and student interviews were as well. The reason for this approach was to encourage more in-depth analysis and thought about the interviews. This

hopefully created the opportunity for interviews to be richer in detail and evolve as they were conducted.

The interview procedure consisted of an interpersonal interviewing format where, as the interviewer, I asked semistructured questions to allow for free-flowing responses for a more naturalistic inquiry. Coding procedures included assigning pseudonyms to the participants for the analysis portion of the project. I was careful to code simultaneously as I reviewed the interviews. This was done to ensure I effectively matched my interpretation of the interview or observer's notes in the moment for emphasis. At this point in the process, I used open coding to remain open as to where the interviewee might have wanted to take me. Once the interviews were completed and I had read the transcripts a couple times, I used an analytical coding approach. Then I looked for naturally emerging themes among each individual interview group to determine relevant themes among them. For a more thorough analysis, I also decided to look for themes that transcended among different populations.

Administrator Themes

Five administrators were interviewed for this research project. All five participants were current or former administrators at one of the three K–8 schools students were recruited from to apply and participate in the Pontem Path. Three main themes emerged during all five interviews: organizational factors, program implementation, and bridge program.

Organizational Factors

For the theme of organizational factors, administrators pointed to a few aspects of their role and how they could have been factors for the program. From their perspective about communication in their role, a school administrator shared this anecdote:

> I would say clear communication is always helpful for the success between the program, myself and the teachers, and then the family. Just having that clear communication loop has been helpful for the dissemination and distribution of information. I think, and part of that would be us working as a team to determine eligible students that can be always a little bit trickier, but again, with that communication, it becomes a lot more successful.

Along the same lines of organizational factors with an emphasis on communication, another school administrator reflected on their time in their role working with the Pontem Path:

> I think from the hindsight of how the school was supporting it, obviously allowing the program to be discussed during class, that was part of it. But I do feel that giving more communication to parents on our end from the school side would have been probably more helpful because I know just from that one class that I worked with initially, there was a lot of hesitancy over applying for it.

Other findings related to organizational factors included administrators pointing to their professional relationship with me as the primary investigator and program director.

Program Implementation

The theme of program implementation took many different forms during interviews with administrators. Specifically, one administrator pointed to the impact of the program director's and team's constant presence on their K–8 school campus:

> That 1st year, I think what really helped a lot is having people from the Pontem Path, including yourself, talk to the students, explain what the program was, how it was going to support them, how it was going to be there the 4 years that they're in high school and beyond. Having that background knowledge for the students was very helpful so that way

> they understood what it was about, and then walking them through that process, the application process of being in the Pontem Path.

Another administrator had a similar perspective about impact of the program's presence on their campus and the program's implementation:

> Certainly, the mentoring and your presence in the community. If it was a piece of paper kids were reading, going, "Oh, there's a bridge program." Kids don't really absorb that information or aren't as likely to hand it off to their parents. But your presence and your connections with families, your meetings to inform families of what's possible.

Bridge Program

General feedback on bridge programs was referenced throughout interviews. Administrators were presented with the following definition of a bridge program for this project:

> A bridge program is typically defined as a set of academic supports put in place to help build a 'bridge' from high school to college. Typically bridge programs focus on students who either first generation, low income, diverse, etc.

Based on the provided definition, administrators were asked to speak about their knowledge and experience of bridge programs in their academic careers. In addition to speaking on their personal experiences with bridge programs, administrators were asked to speak about their perception of the Pontem Path's bridge program and its impact on their school community. One administrator said:

> I think it's made a big difference just as I was saying about what any bridge would do. The Pontem Path has really given opportunities to kids who did not think this would be possible for them, that Catholic high school or that Catholic college or college at all would be available to them. The supports that they're getting have been phenomenal.

> While they do note that it's a challenge, there's a lot of responsibility in it that's completely worthwhile, that they see a remarkable amount of growth in their student. So, I see it as very successful.

The next section examines how some of the K–8 teachers viewed the Pontem Path.

Teacher Themes

Three teachers were interviewed for this portion of the research project. All three teachers served as eighth-grade homeroom teachers for the K–8 partner schools working with the Pontem Path program. During interviews with teachers, two main themes emerged: (a) bridge programs and their impact, and (b) college readiness.

Bridge Program

Regarding the impact of bridge programs, all three teachers had firsthand accounts of how they have seen bridge programs, and the Pontem Path specifically, make an impact on their students. One teacher said:

> A 100%, it's made a difference with the students. Two of my kids at Cathedral right now have communicated with me that because they must meet once a week and discuss their progress and discuss their needs, it helps them with their own accountability because they know they're accountable to the program. And those students, their parents are busy working and don't really have the time to sit down with them every night. Whereas you guys are keeping tabs on them once a week and keeping track of their progress. It really helps them with college readiness.

A subtheme emerged highlighting the accountability portion of the bridge program when participants discussed and reflected on the Pontem Path specifically. Teachers spoke about the required weekly workshops and individual check-ins for students. Constantly checking in with

students required students to think about where they were in school, and what they needed to be doing at different times of the year.

One teacher spoke about how they had never seen a bridge program in the 20 years they had been teaching in Catholic schools. Simply put, they said, “Since then, I’ve never seen one, so it’s great to finally see that happen.” Overall feedback from teachers showed a bridge program of Pontem Path’s sort was long overdue in the Catholic school system. College readiness was the next emergent theme from interviews with teachers.

College Readiness

College readiness can be defined operationally as the level of preparation a student needs to enroll and succeed—without remediation—in a credit-bearing general education course at a postsecondary institution offering a baccalaureate degree or in transferring to a baccalaureate program (Conley, 2007).

Nationally, graduating high school students have not been well prepared for college, and this lack of preparation has been of particular concern among underserved and underrepresented communities. Only 25% of the class of 2011 who took an ACT exam, formerly known as the American College Test, demonstrated college readiness in all four subjects (ACT, 2011)

Specifically, students of color have been underrepresented in graduation rates, college readiness benchmarks, gifted and talented identification, and AP enrollment rates (U.S. Department of Education, 2011).

Teachers shared in their interviews the clearest and most tangible impact of the Pontem Path was the academic preparation and guidance the program provided to student participants. Teachers spoke about the workshop themes focusing on college readiness, organizational skills, and time management to help prepare students for college. One teacher said:

> Then we, as a group, all of the junior high teachers, we try to give them assignments that are a little bit longer term, like projects that they can work on that maybe are between 2 days to 2 weeks to work on, and then just kind of check in with them so that they have to learn how to budget their time, to work on it a little bit every day. And it really helps in the long term, through high school, through college to just help them with organizational skills because that's a big part of self-confidence and self-efficacy to have good organizational skills and put that into practice, like, "Okay, I've got an assignment due now, or this afternoon or tomorrow morning, I got to get on that first. And then I'll work on this project a little bit because that's doing two weeks and not put it off and then start the project the night before it's due." Just the budgeting of time and figuring out what resources they're going to need. So, in all three grades, we try to give them those a little bit longer term project as well.

The next section addresses themes emerging from interviews with current Pontem Path students.

Student Themes

Students interviewed for this research project included four current members of the Pontem Path program. Students were chosen for interviews based on the results of their self-efficacy survey. Valuable data were collected in all interviews to answer the research questions posed at the beginning of this project. Pertinent themes emerging from the interviews are presented in the following sections.

Confidence

Each of the student interviewees referenced growth in their confidence. Students spoke about the Pontem Path's programming and opportunity to learn more about how to do well in school. One student reflected:

> Well, I know, because I've seen now that I'm more open. Not open, but ask more questions during the classroom, which is something that I was afraid of doing. And now I ask more questions in the classroom. I also used to think like, oh, that I can't do stuff. For example, for my hardest class, history, I used to think like, oh, this class is so hard, I won't pass. But now I'm like, I can try hard, and we'll see how it goes. So, my mindset is not as negative as it used to be.

This overarching sense of effort and confidence in their effort was the focus of many other quotes emerging from the interviews. Although numerous variables could be attributed to the boost in confidence students felt, each student pointed to the Pontem Path as the specific reason for improvement in their confidence. Another student shared about their growth in confidence:

> I think it has changed because I remember in the slideshows or presentations, you guys have done, and we talk a lot about that. And sometimes, I do get unmotivated, but Pontem Path is constantly like they believe in you. And their feeling kind of transmits back to us if that makes sense. You guys truly believe in us. So, then it's like, we must believe in ourselves and that's a constant reminder, and motivation to just keep doing it, and you can do it. If you believe it, you can do it. Yeah.

The next theme to emerge from the students' interviews was self-efficacy.

Self-Efficacy

Prior to answering any questions about self-efficacy, students were presented with the following definition:

> Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1977, 1986, 1997). Self-efficacy reflects confidence in the ability to exert control over one's own motivation,

> behavior, and social environment. To put simply, how confident, and able are you as a student to assert control over your outcomes. *Do you believe you can*?

When asked how their self-efficacy has changed, one student shared:

> I think it has changed because I remember in the slideshows or presentations, you guys have done, and we talk a lot about that. And sometimes, I do get unmotivated, but Pontem Path is constantly like they believe in you. And their feeling kind of transmits back to us if that makes sense. You guys truly believe in us. So, then it's like, we must believe in ourselves and that's a constant reminder, and motivation to just keep doing it, and you can do it. If you believe it, you can do it.

As noted in this student's reflection, the simple idea of their belief in their abilities was clear. This evidence of self-efficacy was notable not just for this research project, but for future research considerations. The next theme to emerge was imposter syndrome.

Imposter Syndrome

Merriam-Webster (n.d.) dictionary defines *imposter syndrome* as a psychological condition characterized by persistent doubt concerning one's abilities or accomplishments, accompanied by fear of being exposed as a fraud despite evidence of one's ongoing success. Specifically in education, imposter syndrome has been described as a dissociative state in which estranged first–generation students may never feel confident, grounded, or socially connected to their academic experiences on campus (Stebleton & Soria, 2013).

For Pontem Path students, this has been an overarching theme informing individual check-in sessions. The consistent feeling of not belonging has been a barrier these students have faced without a doubt. When talking about their sense of belonging, one student shared:

> I don't think that's really going to change ever. Realistically. I think that's just something that happens when you're a young age, like a seed planted and it's still going to be there. I could think less about it or maybe I could be influenced by something else, but I don't think anything can really change that because there's still lots of jokes being tossed around, lots of memes, lots of information, lots of tragedies, etc., etc., going around social media and just conversations everywhere.

Overall Themes

Further analysis of all interviews presented important insight about all interviewees' discerned themes. Among administrators, teachers, and students, overall themes emerged to further shape the story of how the Pontem Path program's purpose served their lives. Two main themes remained consistent throughout the interviewees: (a) bridge programs and (b) money.

Bridge

All three interview groups offered insight into how the bridge program impacted them in their roles. For administrators, the bridge program offered an opportunity for promising students to make it to the next level of education. All administrators expressed a sense of thankfulness knowing these students with whom they had worked so hard would have an opportunity they did not previously have. To be clear, this thankfulness was directed more toward the opportunity to be a part of a bridge program, not necessarily the Pontem Path. One administrator shared these thoughts on the impact of bridge programs:

> I think the biggest thing that I have seen in my educational career for first–generation students is the, especially at Catholic high schools is how intimidating the college process is. And particularly for their families, because again, first–generation implies their parents have not gone through this, and the process has changed drastically since I was

> even in college. And so, I believe that these types of bridge programs provide that support for parents and students for how to navigate this difficult process. Teachers also seemed to agree that the presence of a bridge program at their sites was a net positive, but did they seem to express more dismay that more opportunities like this were not yet available in the Catholic school system.

Students had not yet been introduced to the idea of a bridge program prior to the interviews, but once they were familiar with the program, they did see the relevance of the program and resources offered.

Looking through the lens of the Pontem Path program, it is easy to see how a bridge program can impact first–generation college students in private Catholic high schools. For example, providing guidance through the bridge program to students at their private Catholic high school has clearly delivered impact.

Money

Regarding the impact of the Pontem Path on the student's experience, administrators, teachers, and students agreed universally the financial opportunity was a clear benefit of the program. Student 3 shared:

> Well, I think it helped a lot, especially on the financial part of it. Also, the presentations that we have in Pontem Path are helpful, like how to manage when you're stressed or how to organize your work. So yeah, they make my high school experience a little easier.

Student 2 shared:

> It's giving me the motivation. I get a lot of motivation from the Pontem path program because every time I feel like giving up, I always think that I got picked for a scholarship so I should put in the work for you. I can't just waste the scholarship because there are

> other kids that could've earned scholarship and it'd be unfair to the people in charge of the scholarship and the people that did not get the scholarship. So, it always acts as a motive for me to keep on pushing harder and harder.

Students interviewed for this study took the opportunity to express the impact money had almost immediately during their interviews. Student 2 shared the financial commitment from the Pontem Path has helped to motivate them further to do better in their studies. Administrators also said they were not sure if many of these students would have otherwise had the opportunity to attend their Catholic college preparatory high school.

Administrators also had a unique view of the impact money had on the students' experiences:

> Families that come from financial challenges, families that face financial challenges or families that come from poverty, struggle with accepting that they are worthy, or that they deserve to use resources that could be used for someone else. They might overlook the fact that their student is gifted or high achieving and already have kind of a track in mind for them, for their future. And the more that a student can feel accomplished and understand with humility, the abilities that they have and where those abilities could take them, the more successful they'll be.

One of the teachers interviewed for this project reflected:

> The amount of support that those schools have for students who are from low-income families from the inner city, there's not a lot out there. And so having these types of programs to support those students in those Catholic high schools is a significant support for equitable opportunities that just aren't there now. I've seen a lot of kids get excited about applying for schools and then being disappointed that they can't afford it, or some

> of them just don't even bother with the process because of many different reasons, but a lot of it's just because they don't know anyone who's told them, "This is one way of going through it." And so, for a lot of them, they just go straight to community college. They don't even bother applying for what they think is out of reach schools. And of course, some of them just go to work after high school and don't even consider education after their high school years.

Summary

This chapter reviewed and presented data collected during all three phases of the research project. Presented data included descriptive statistics from the academic self-efficacy and efficacy for self-regulated learning survey, analysis of each of the five schools attended by students from the Pontem Path, and emergent themes from interviews conducted with administrators, teachers, and students from the K–8 schools attended by students in the program. Results from this data collection helped to inform and guide discussion for the following chapter.

CHAPTER FIVE: DISCUSSION OF FINDINGS AND COLLECTION

Purpose

The four research questions that helped to guide this research project were:

1. How does a bridge program impact first–generation college students in private Catholic high schools?
2. What roles do organizational factors play in implementing a college readiness program in a Catholic K–8 school in an underserved community?
3. What roles do staff/teacher or administrators play in implementing a college readiness program in a Catholic K–8 school in an underserved community?
4. How is self-efficacy developed in a bridge program for first–generation college students attending private Catholic high schools?

The overall purpose of this dissertation was to further address the bounded system of the Pontem Path Catholic bridge program. The program was designed as a program to not only help students who were a part of it, but also to provide a roadmap for other programs to follow in Catholic school settings.

I provided a better understanding of the Pontem Path's impact on the students involved by using results from the academic self-efficacy and efficacy for self-regulated learning survey, analyzing the private Catholic high schools attended by Pontem Path students, and interviewing of some of the students, teachers, and administrators.

The fifth and final chapter of the research project has been structured to address the key findings and provide discussion about their relation to the research questions. Finally, I look at the limitations and implications for future research.

Key Findings

Key Finding 1 – Role of Finances

The first key finding of this research project was the role of finances. Money has been identified as a major barrier for first–generation students to attend college (Gibbons et al., 2019), and this can be seen clearly for high school financial commitments. Private Catholic high schools require a financial commitment not all families are able to make. First–generation college students often come from families who experience greater levels of economic hardship compared to their continuing second– and third–generation counterparts (Grace-Odeleye & Santiago, 2019). Many students from privileged socioeconomic backgrounds attend schools with access to up-to-date academic counseling and rigorous college preparatory coursework (U.S. Department of Education, 2018). Alternatively, many students from disadvantaged socioeconomic backgrounds attend schools lacking these resources (Gamoran & An, 2016; Palardy, 2013).

Research has shown Catholic schools produce higher achieving Black and Hispanic students than public schools, even when those students' background characteristics are "controlled" (Greeley, 1982). In his analysis, Greeley (1982) used the High School and Beyond (HSB) dataset to test whether Catholic schooling had an impact on high school minority students' achievements. There were controls for family and student background characteristics, such as parental education and possessions in the home. Greeley stated Catholic schooling had a considerable effect on minority achievement compared to public schooling (Keith & Page, 1985).

Almost immediately during their interviews, students interviewed for this research project took the opportunity to express how important finances were to them and their families. Student 2 spoke of how the financial commitment from the Pontem Path helped to motivate them

further to do better in their studies. All students spoke about how scholarship money helped to ease the financial burden on their family, thus helping them concentrate on school. These findings were consistent with prior research involving private education and college. The inclusion of a scholarship tied to the bridge program is a new component. This appears to be a critical addition as it allows the bridge program to support the students not only academically, but financially as well. Although this has been seen in college settings, research has been sparse in high school settings. The Pontem Path referring specifically to financial impact is a challenge because it is simply not enough support. The program offers students between 15%–20% of tuition costs; this is simply not enough for most families when they need to cover or find the additional 80%–85% of funds needed to attend private Catholic high schools.

Key Finding 2 – Role of Relationships

The role of relationships in implementation and direction of the program was another key finding in this research project. Teachers and administrators interviewed for this research project echoed the importance of their relationships with each other and the program, and their roles in helping to implement the Pontem Path program at their schools. The following discussion points are best summed up under the guise of relationships.

Specifically, teachers at K–8 schools spoke about their school leadership's ability to be open to new ideas and how this appeared reflective of their relationships with their administration. Prior research and theory have suggested employees of organizations with a climate of being open to experimentation and new ideas have been more likely to assimilate new practices (J. M. Cook et al., 2012; Greenhalgh et al., 2004). This was seen in the interviews. Interestingly, openness to innovation was very clear from the administrators' perspectives as

well. They shared clear intent to allow for innovation and spoke to its ability to help the school achieve academic and social goals leadership had laid out.

Another interesting emergent discussion point was the importance of relationships; not just between school staff, but also between the school and the Pontem Path program. Weiner (2009) theorized contextual factors, such as organizational functioning and quality of working relationships, have promoted or dampened implementation due to influencing members' assessments of the organization's ability to carry out change-related activities (change efficacy) and their attitudes about likely benefits of the change itself (change valence). In the case of the Pontem Path program, teachers and administrators provided qualitative evidence suggesting strong presence of quality relationships, thus providing an opportunity to foster an environment ripe for implementation of the Pontem Path program. In addition, teachers spoke about their attitudes and how they approached introduction of the program as a positive addition to their school.

Perceptions of teacher–teacher affiliation as a dimension of school climate have predicted greater reported use of supplementary program activities and materials (Malloy et al., 2015). This suggests the Pontem Path staff were not directly responsible for smooth implementation of the program. Instead, prior existence of strong relationships and supportive leadership helped to foster or usher in attitudes helping to facilitate smooth implementation. It is fair to wonder whether a program like the Pontem Path could have been implemented in other schools where relationships and community-minded approaches were not fostered and welcomed from the top down.

Communication. Administrators identified their communication as a critical in helping implement the Pontem Path. Specifically, administrators echoed their role in aiding in

communication of advertising and creating buy-in for the program. This occurred with students and families. The existing relationships between administration and the school community reflected a strong sense of community helping in the communication process.

The key to communication also stemmed from who dispersed the information. This observation also helped to include administrators and teachers. Chen (1990) explained the implementation system could include things like training systems. In schools, training systems exist in myriad ways; for example, using staff meetings to help designate information in a bound consistent approach is a training system. Principals from participating schools used staff meetings as central communication hubs for training and informing their staff about the Pontem Path. In addition, schools also used parent meetings to speak about the Pontem Path and its role in the school.

Leadership. Supportive leadership has already been identified as a critical for administrators in implementing programming on their schools' campuses (C. R. Cook et al., 2019; Flottorp et al., 2013; Wensing & Grol, 2005). Data collected during this research project echoed these findings. Administrators and teachers alike spoke consistently of the role of leadership in the implementation of the Pontem Path, including leadership from the schools and the programs. As previously mentioned, both teachers and administrators spoke about the existing relationships between teachers, administrators, and stakeholders in the Pontem Path, but teachers emphasized mostly the role of the administrators' leadership in their ultimate buy-in of the program.

Previous research has shown how leaders can develop proactive implementation plans, address barriers teachers may face, and acknowledge teachers regularly. When challenges arise, leaders can engage in active, open problem solving to support sustaining implementation (Rowe

et al., 2021). This could be seen at the Pontem Path partner schools. Administrators remained engaged in the work and continued to communicate effectively with not only the director of the Pontem Path, but also with teachers on their campuses. It is reasonable to state, teachers rarely, if ever, felt they were on their own with the program. There were visible levels of support allowing teachers to ask questions, learn, and contribute ultimately to growth of the program's stakeholders.

Key Finding 3 – Role of Organizational Factors

The third and final key finding of this research was the role of organizational factors, and how these factors assisted with the program's implementation. As mentioned in Chapter 2, this research project addressed Chen's (1990) conceptual model for factors influencing implementation. Those factors included characteristics of (a) the implementation system (i.e., process and structure of the implementation and training system), (b) the implementer (e.g., teacher and school staff), and (c) the setting in which the program was implemented (e.g., school climate, principal support, and district support).

In the Pontem Path program, the implementation system including process and structure was sound. As the primary investigator, I ensured each K–8 school site was familiar with the program in various ways, including meeting with leadership at each school site almost every week prior to implementing the program. I also provided marketing strategies to notify site teachers about the program implementation on campus. The marketing included a flyer and a presentation detailing the program. Feedback from Chapter 4 also echoed this finding. Administrators spoke about the program director's "presence in the community" as a major contributor to the implementation structure.

In addition to marketing and developing relationships with leadership at each site, I established relationships with the eighth-grade teachers to ensure they knew their input and role in the program were invaluable.

Lastly, the school climate, principal support, and diocesan support were set in place and prepared for program implementation. Some schools choose to use the program implementation as a marketing tool for enrolling new students. The partnership with the local university enabled some schools to capitalize on the opportunity to show surrounding communities their relationship with a prestigious institution some students aspire to attend.

Reflecting on Chen's (1990) conceptual model for factors influencing implementation, a few relevant lessons future potential ventures were learned during the implementation of this project. As I have discussed and discuss further in the following section, I was the program director for the Pontem Path program at the time of this research project. This role is relevant for a few reasons. First, my previous relationships are not necessarily replicable; thus, it is difficult to imagine an exact recreation of this project. I would say it is critically important to focus on relationships with key members of the schools, almost as important as the program's material and organization. Although every school working with the Pontem Path program has a strong school climate with its principal and district, or diocesan support in this case, the existing relationships made it easier and more efficient to gain access to certain critical factors for the program's implementation. Some of these factors include access to school sites, classrooms, parent meetings, etc. Those factors help to paint a picture, or rather, add to the lessons learned during the program's implementation.

Another lesson learned during implementation of the Pontem Path program at these school sites included clear energy and positive attitude of all involved in this program's

implementation. It is important to remember this program was implemented prior to the COVID-19 global pandemic but was maintained and continued to grow during the height of it. This means teachers, principals, and staff members were asked to take on more work benefitting ultimately other individuals than themselves at possibly some of the most stressful times in their lives. These teachers and principals were not paid more to help facilitate implementation of the program. They were not provided any kind of compensation other than knowing their efforts were aiding those less fortunate than them. I believe this is reflective of the overwhelmingly positive attitude these individuals possessed. The reason I believe this is a lesson for the program's implementation is because if these individuals had anything other than the positive attitude they displayed, I do not believe this would have worked.

Limitations

This research project had a few limitations warranting review. Although this research project was a thorough review of a Catholic bridge program, it reviewed just one program. Specifically, it was one program implemented in an environment welcoming and yearning for a program of its kind. Principals, teachers, parents, and community expected additional on-campus assistance. Because of this, it is reasonable to wonder how the program's implementation and progress could have been impacted if the receiving schools were less open to the opportunity.

Another existing limitation to address is the impact of the COVID-19 global pandemic and other historical events surely impacting the school communities and students participating in this project. Students lived through a volatile presidential election, riots due to systemic injustices, an attempted insurrection on the U.S. Capitol, and numerous unknown economic and personal stresses. The impact of these historical anomalies is difficult to truly measure how those

outside influences also impacted perceived self-efficacy of these students throughout the research project.

Positionality

The potential conflict of the primary investigator also serving as the program director for the Pontem Path program was also a limitation for this research project. Although significant steps were taken to minimize the impact of responses (e.g., electronic survey, member checking), the relationship must still be mentioned and considered.

My positionality posed a challenge for data interpretation—specifically the interviews and construction of interview guides. Although it has been previously mentioned, great caution was taken to design and implement the research project. Despite this, awareness of the potential positionality limitations is necessary.

Another perspective addressing my positionality is the unique skills I may have brought to the project; for example, I have previous work experience and relationships with members of the school community. Years ago, I worked at a prestigious private Catholic high school institution where my path crossed with leadership associated with this project. Although our interactions were small, their knowledge of my previous work experience at such a well-respected school may have influenced or established prior expectations of how the project would unfold. I may have benefited from my previous reputation others in my position may not have. My previous reputation, however, might have also influenced these interactions in a more negative way. It is difficult to determine at this point, but this component still warrants disclosure.

Personally, my experience implementing this program was nerve-wracking. My relationships with some of the individuals were 5 to 10 years old, and I was unsure if they were

still intact. Although the program was implemented prior to the COVID-19 global pandemic and schoolwide closures, uncertainty of future success of the program was honestly frightening to me.

The COVID-19 global pandemic hit approximately 9 months into the implementation of the Pontem Path program. This meant I was still in the process of building necessary trust and relationships to help guide a vulnerable student population through their high school experience, and a pandemic. Fortunately, my team and I had anticipated schoolwide shutdowns, but we could not have predicted the length or impact of those shutdowns.

I clearly remember Thursday March 12, 2020. We had the last in-person workshop at the University of San Diego (USD). I spent the entire 2 hours teaching the students how to use Zoom and discussed how we would continue to host workshops weekly. After all, a tenet of our program and its goals has been and will remain consistency.

Discussion

The presented data show clear need for bridge programs in Catholic school settings. Specifically, there is a need for opportunities for students from diverse backgrounds to learn what is needed from them in rigorous school settings. Research has shown first–generation college students may benefit from programs offering clear parameters for time management (Reid & Moore, 2008), study skills, and encouragement to seek tutoring services as they adjust to the academic rigor of college coursework by.

Finances are also another important known area of discussion, but the impact of its judicious use is not understood fully. Money has been identified as a major barrier for first–generation students attending college (Gibbons et al., 2019), and this can be seen clearly for high school financial commitments. Private schools working to diversify and grow can offer

opportunities for first–generation college students and identify additional ways to invest in these communities.

Lastly, Chen (1990) provided a conceptual model for factors influencing implementation. These factors include characteristics of (a) the implementation system (i.e., process and structure of the implementation and training system), (b) the implementer (e.g., teacher and school staff), and (c) the setting in which the program is implemented (e.g., school climate, principal support, and district support; Domitrovich & Greenberg, 2000). Administrators alluded to all these characteristics in combination with the system allowing implementation of the Pontem Path program.

Implications for Future Research

Research has shown first–generation college students may benefit from programs offering clear parameters for time management (Reid & Moore, 2008), study skills, and encouragement to seek tutoring services as they adjust to the academic rigor of college coursework. Looking through the lens of the Pontem Path program, it is reasonable to see how a bridge program can impact first–generation college students in private Catholic high schools. For example, providing guidance through bridge programs when students are at their private Catholic high school students can impacted them. The Pontem Path program has done this, as seen in the student interviews.

If research has shown a clear benefit for programming for first–generation college students, the question remains why there are not more programs. Future research focused on the lack of bridge programming could be helpful answer the question of why things are not being done that are known to work, specifically for a community known to benefit from additional programming.

This research project has addressed another area of research; that is, further researchers should focus on why there are so few, if any, Catholic bridge programs. Of course, funding is a possible barrier, but when other programming opportunities available to Catholic school students nationwide are considered, one must wonder how programs like these are not more common. Further research must be done to determine why there is a scarcity, especially considering the desire and need of private Catholic high schools to provide more opportunities for a burgeoning diverse population. As schools work to diversify further, the desire and need to add programming like this should be innate. Further research exploring why this programming is not innate could be beneficial in the study of bridge programming.

Closing

Societal leaders continue to search for ways to "bridge" the gap in communities. The "gap" can be described in various ways from equitable, to economic, to academic. To me, these gaps can be, and are, related.

Research studying all mentioned fields tend to provide multiple ideas and disagreements regarding how these problems can be approached and ultimately fixed. The idea of a providing a "bridge" in multiple areas of society to help move people from one place to another is unique and important. I believe bridge programs are an excellent option to approach academics.

The results are probably not new for those studying first–generation college students and bridge programs; instead, these results help to reinforce what is already known. Students can achieve necessary steps toward college with proper support in place. The key challenge is providing equal opportunity for all students. When budgets are formed and decisions are made, however, responsible parties either tend to suffer from what may be described as a "curse of knowledge" or a lack of priorities. The curse of knowledge bias is when something is known, it

is extremely difficult to think about it from the perspective of someone who does not know it (Longfield, 2015). Teachers, parents, schools, and districts seem to forget college preparation continually, or they choose not to prioritize it through investment in counseling and other supports necessary to help convey this knowledge.

Outside of academia, this research has broader implications for analyzing the value of relationships benefitting future generations; for example, the value of relationships is clear is business, but relationships typically act as an opportunity to benefit a specific party in a transaction. These business relationships rarely act as bridges to future generations of beneficiaries not directly related to the profit. This is different in education. Beneficiaries of existing relationships and forged relationships between the Pontem Path and these schools act to benefit students not directly related to either party of the relationships. Instead, profit from the business transaction in education benefits the greater society. I believe the sooner this is understood, the rewards of that hard work will be reaped.

Financially, investment is small; for example, once this project is running at full capacity, it should serve 48–50 students with an annual budget of approximately $200,000. The cost per student is $4,000. The annual investment of $4,000 provides students with counseling, motivation, and support to ensure those 50 students have a better opportunity to achieve goals benefitting not only them, but society. Although the actual financial benefit analysis has been left to a future research project, it is fair to infer the $4,000 investment per student provides a significant amount of return in rewards, not only to the community financially, but also overall.

Mentioned as a key finding, the takeaways of finances, relationships, and organizational factors were critical to better understand the impact of the Pontem Path program. Still, when thinking about bigger picture, it is easy to see how those three takeaways may impact areas other

than education as well. In business, technology, and government, it is possible to see how those three tenets act as an opportunity to better understand how to best implement many different programs. And although the impact of finances has always been understood, the conversation around relationships and organizational factors should continue across industries and disciplines.

Benefits of bridge programs are clear. More bridge programming must be available to students from all backgrounds attending all school kinds. Although this research project was intended to add to literature on bridge programs, I also hope it leads to more discussion for those involved in school budgeting. I believe minimal investment needed for bridge programming could have impressive benefits on society, specifically in helping to bridge the "gap."

REFERENCES

Abel, N. R., & Oliver, B. (2018). *Innovative school counseling approaches to improving college and career readiness* [Unpublished manuscript]. Butler University. https://digitalcommons.butler.edu/coe_papers/141/

ACT. (2004). *Crisis at the core: Preparing all students for college and work.* ACT.

Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college.* U.S. Department of Education. https://www2.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf

Alika, H. I. (2012). Career choice in engineering: The influence of peers and parents implication for counseling. *College Student Journal, 46*(3), 537–542.

Allensworth, E. M., Nagaoka, J., & Johnson, D. W. (2018). *High school graduation and college readiness indicator systems: What we know, what we need to know.* University of Chicago Consortium on School Research. https://consortium.uchicago.edu/publications/high-school-graduation-and-college-readiness-indicator-systems-what-we-know-what-we

Alter, C., & Murty, S. (1997). Logic modeling: A tool for teaching practice evaluation. *Journal of Social Work Education*, *33*(1), 103–117. https://doi.org/10.1080/10437797.1997.10778856

Amatea, E. S., & Clark, M. A. (2005). Changing schools, changing counselors: A qualitative study of school administrators' conceptions of the school counselor role. *Professional School Counseling, 9*(1), 16–27. https://doi.org/10.1177%2F2156759X0500900101

American School Counselor Association. (2013). *The school counselor and academic and college/career planning.* ASCA.

Andersson, R., Nabavi, P. & Wilhelmsson, M. (2014). The impact of advanced vocational education and training on earnings in Sweden. *International Journal of Training and Development, 18*(4), 1360–3736. https://doi.org/10.1111/ijtd.12040

Arbona, C. (2000). The development of academic achievement in school aged children: Precursors to career development. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (pp. 270–309). John Wiley & Sons.

Astin, A. W. (1993). *What matters in college?: Four critical years revisited*. Jossey-Bass.

Baggerly, J. N., & Osborn, D. (2006). School counselors' career satisfaction and commitment: Correlates and predictors. *Professional School Counseling, 9*(3), 197–205. https://doi.org/10.1177%2F2156759X0500900304

Balas, E. A., & Boren, S. A. (2000). Managing clinical knowledge for health care improvement. *Yearbook of Medical Informatics, 9*(1), 65–70. https://doi.org/10675.2/617990

Balz, F. J., & Esten, M. R. (1998). Fulfilling private dreams, serving public priorities: An analysis of TRIO students' success at independent colleges and universities. *The Journal of Negro Education, 67*(4), 333–345. https://doi.org/10.2307/2668134

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2)*,* 191–215. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1986). *Social foundation of thought and action: A social cognitive theory.* Prentice-Hall.

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

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001) Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development, 72*(1), 187–206. https://doi.org/10.1111/1467-8624.00273

Barker, C. (2004). *The SAGE dictionary of cultural studies*. SAGE Publications.

Benard, B., & Slade, S. (2009). Moving from resilience research to youth development practice and school connectedness. In M. J. Furlong, R. Gilman, & E. Scott Huebner (Eds.), *Handbook of positive psychology in schools* (pp. 353–369). Routledge.

Berkner, L., & Chavez, L. (1997). *Access to postsecondary education for the 1992 high school graduates. National Center for Education Statistics*. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=98105

Betz, N. E. (2004). Contributions of self-efficacy theory to career counseling: A personal perspective. *Career Development Quarterly, 52*(4), 340–353. https://doi.org/10.1002/j.2161-0045.2004.tb00950.x

Billson, J. M., & Terry, M. B. (1982). In search of the silken purse: Factors in attrition among first-generation students. *College & University, 58*(1), 57–75.

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research in the sociology of education* (pp. 241–258). Greenwood Press. http://doi.org/10.1002/9780470755679

Brooks-Terry, M. (1988). Tracing the disadvantages of first-generation college students: An application of Sussman's option sequence model. In S. K. Steinmetz (Ed.), *Family and support systems across the life span* (pp. 121–134). Springer. https://doi.org/10.1007/978-1-4899-2106-2_10

Bryan, J., Moore-Thomas, C., Day-Vines, N. L., & Holcomb-McCoy, C. (2011). School counselors as social capital: The effects of high school college counseling on college application rates. *Journal of Counseling & Development, 89*(2), 190–199. https://doi.org/10.1002/j.1556-6678.2011.tb00077.x

Capizzi, L. M., Hofstetter, C. H., Mena, D. D., Duckor, B., & Hu, X. (2017). Promoting low-income students' college readiness, well-being, and success: A GEAR UP counseling program study. *Journal of School Counseling*, *15*(3), Article 3.

Carnevale, A. P., Cheah, B., & Hanson, A. R. (2015). *The economic value of college majors.* Georgetown University Center on Education and the Workforce. https://cew.georgetown.edu/wp-content/uploads/The-Economic-Value-of-College-Majors-Full-Report-web-FINAL.pdf

Carnevale, A. P., Jayasundera, T., & Cheah, B. (2012). *The college advantage: Weathering the economic storm.* Georgetown University Center on Education and the Workforce. www.cew.georgetown.edu/collegeadvantage

Chamberlain, P., Brown, C. H., & Saldana, L. (2011). Observational measure of implementation progress in community based settings: The stages of implementation completion (SIC). *Implementation Science, 6*(1), Article 116. https://doi.org/10.1186/1748-5908-6-116

Chemers, M. M., Hu, L. T., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational psychology*, *93*(1), 55–64. https://doi.org/10.1037/0022-0663.93.1.55

Chen, H. (1990). *Theory-driven evaluations*. SAGE Publications.

Chesters, J., & Smith, J. (2015). Social capital and aspirations for educational attainment: a cross-national comparison of Australia and Germany. *Journal of Youth Studies*, *18*(7), 932– 949. https://doi.org/10.1080/13676261.2014.1001831

Cholewa, B., Burkhardt, C. K., & Hull, M. F. (2015). Are school counselors impacting underrepresented students' thinking about postsecondary education? A nationally representative study. *Professional School Counseling, 19*(1), 1096–2409. https://doi.org/10.5330%2F1096-2409-19.1.144

Choy, S. P. (2001). *Students whose parents did not go to college: Postsecondary access, persistence, and attainment* (Report No. NCES 2001–126). National Center for Education Statistics. https://nces.ed.gov/pubs2001/2001126.pdf

Clemens, E. V., Milsom, A., & Cashwell, C. S. (2009). Using leader-member exchange theory to examine principal-school counselor relationships, school counselors' roles, job satisfaction, and turn-over intentions. *Professional School Counseling, 13*(2), 75–85. https://doi.org/10.1177/2156759X0901300203

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, S95–S120. https://www.jstor.org/stable/2780243

College Board. (2010). *Eight components of college and career readiness counseling*. http://media.collegeboard.com/digitalServices/pdf/nosca/11b_4416_8_Components_WEB_111107.pdf

College Board. (2011). *7th annual AP report to the nation*. https://secure-media.collegeboard.org/digitalServices/pdf/research/7th-annual-ap-report-to-the-nation.pdf

Conley, D. T. (2007). *Redefining college readiness.* Educational Policy Improvement Center.

Conklin, A. M., Dahling, J. J., & Garcia, P. A. (2013). Linking affective commitment, career self-efficacy, and outcome expectations: A test of social cognitive career theory. *Journal of Career Development*, *40*(1), 68–83. https://doi.org/10.1177/0894845311423534

Cook, C. R., Lyon, A. R., Locke, J., Waltz, T., & Powell, B. J. (2019). Adapting a compilation of implementation strategies to advance school-based implementation research and practice. *Prevention Science, 20*(6), 914–935. https://doi.org/10.1007/s11121-019-01017-1

Cook, J. M., O'Donnell, C., Dinnen, S., Coyne, J. C., Ruzek, J. I., & Schnurr, P. P. (2012). Measurement of a model of implementation for health care: Toward a testable theory. *Implementation Science, 7*(1), Article 59. https://doi.org/10.1186/1748-5908-7-59

Dariotis, J. K., Mirabal-Beltran, R., Cluxton-Keller, F., Feagans Gould, L., Greenberg, M. T., & Mendelson, T. (2017). A qualitative exploration of implementation factors in a school-based mindfulness and yoga program: Lessons learned from students and teachers. *Psychology in the Schools*, *54*(1), 53–69. https://doi.org/10.1002/pits.21979

Dasgupta, P. (1999). Economic progress and the idea of social capital. In P. Dasgupta & I. Serageldin (Eds.), *Social capital: A multifaceted perspective* (pp. 325–424). The World Bank.

Day, J. C. & Newburger, E. C. (2002). *The big payoff: Educational attainment and synthetic estimates of work-life earnings.* U.S. Census Bureau. https://www.census.gov/prod/2002pubs/p23-210.pdf

Delaney, R. (2010). About those unpaid internships. *The American Prospect.* Retrieved from http://prospect.org

Diener, C. I., & Dweck, C. S. (1978). An analysis of learned helplessness: Continuous changes in performance, strategy, and achievement cognitions following failure. *Journal of Personality and Social Psychology*, *36*(5), 451–462. https://doi.org/10.1037/0022-3514.36.5.451

Dockery, D., & McKelvey S. (2013). Underrepresented college students' experiences with school counselors. *Journal of School Counseling*, *11*(3), 1–30.

Dohn, H. (1991). “Drop out” in the Danish high school: An investigation of psychological, sociological, and pedagogical factors. *International Review of Education, 37*(4), 415–428. https://doi.org/10.1007%2FBF00597619

Dolan, R. C., & Schmidt, R. M. (1987). Assessing the impact of expenditure on achievement: Some methodological and policy considerations. *Economics of Education Review*, *6*(3), 285–299. https://doi.org/10.1016/0272-7757(87)90007-0

Domitrovich, C. E., & Greenberg, M. T. (2000). The study of implementation: Current findings from effective programs that prevent mental disorders in school-aged children. *Journal of Educational and Psychological Consultation, 11*(2), 193–221. https://doi.org/10.1207/S1532768XJEPC1102_04

Dronkers, J., & Robert, P. (2008). Differences in scholastic achievement of public, private government-dependent, and private independent schools: A cross-national analysis. *Educational Policy*, *22*(4), 541–577. https://doi.org/10.1177/0895904807307065

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41*(3–4), 327–350. https://doi.org/10.1007/s10464-008-9165-0

Eccles, M. P., & Mittman, B. S. (2006). *Welcome to implementation science*. Springer.

Finn, J. D., Pannozzo, G. M., & Achilles, C. M. (2003). The "why's" of class size: Student behavior in small classes. *Review of Educational Research, 73*(3), 321–368. https://doi.org/10.3102/00346543073003321

Fitzpatrick, C., & Costantini, K. (2011). *Counseling 21st century students for optimal college and career readiness: A 9th-12th grade curriculum.* Routledge.

Fixsen, D. L., Blase, K. A., Naoom, S. F., & Wallace, F. (2009). Core implementation components. *Research on Social Work Practice*, *19*(5), 531–540. https://doi.org/10.1177%2F1049731509335549

Fixsen, D. L., Blase, K. A., Timbers, G. D., & Wolf, M. M. (2001). In search of program implementation: 792 replications of the teaching-family model. In G. A. Bernfeld, D. P. Farrington, & A. W. Leschied (Eds.), *Offender rehabilitation in practice: Implementing and evaluating effective programs* (pp. 149–166). Wiley.

Fixsen, D., Naoom, S., Blase, K., Friedman, R., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. National Implementation Research Network. https://nirn.fpg.unc.edu/resources/implementation-research-synthesis-literature

Flottorp, S. A., Oxman, A. D., Krause, J., Musila, N. R., Wensing, M., Godycki-Cwirko, M., Baker, R., & Eccles, M. P. (2013). A checklist for identifying determinants of practice: A systematic review and synthesis of frameworks and taxonomies of factors that prevent or enable improvements in healthcare professional practice. *Implementation Science, 8*, Article 35. https://doi.org/10.1186/1748-5908-8-35

Folger, W. A., Carter, J. A., & Chase, P. B. (2004). Supporting first generation college freshmen with small group intervention. *College Student Journal, 38*(3), 472–476.

Forbus, P. R., Newbold, J. J., & Mehta, S. S. (2011). First generation university students: Motivation, academic success, and satisfaction with the university experience. *International Journal of Educational Research, 6*(2), 34–55.

Fukuyama, F. (1995a). Social capital and the global economy. *Foreign Affairs, 74*(5), 89–103. https://doi.org/10.2307/20047302

Fukuyama, F. (1995b). *Trust: The social virtues and the creation of prosperity* (Vol. 99). Free Press.

Galles, J. A., & Lenz, J. G. (2013). Relationships among career thoughts, vocational identity, and calling: Implications for practice. *Career Development Quarterly*, *61*(3), 240–248. https://doi.org/10.1002/J.2161-0045.2013.00052.X

Gamoran, A., & An, B. P. (2016). Effects of school segregation and school resources in a changing policy context. *Educational Evaluation and Policy Analysis, 38*(1), 43–64. https://doi.org/10.3102%2F0162373715585604

Garrett, T., Antrop-González, R., & Vélez, W. (2010). Examining the success factors of high-achieving Puerto Rican male high-school students. *Roeper Review*, *32*(2), 106–115. https://doi.org/10.1080/02783191003587892

Gibbons, M. M., Rhinehart, A., & Hardin, E. (2019). How first-generation college students adjust to college. *Journal of College Student Retention: Research, Theory & Practice, 20*(4), 488–510. https://doi.org/10.1177/1521025116682035

Gordon, V. N., & Steele, G. E. (2003). Undecided first-year students: A 25-year longitudinal study. *Journal of the First-Year Experience & Students in Transition, 15*(1), 19–38. https://www.ingentaconnect.com/contentone/fyesit/fyesit/2003/00000015/00000001/art00002

Grace-Odeleye, B., & Santiago, J. (2019). A review of some diverse models of summer bridge programs for first-generation and at-risk college students. *Administrative Issues Journal: Connecting Education, Practice, and Research, 9*(1), 35–47. https://doi.org/10.5929/9.1.2

Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory, 1*, 201–233. https://doi.org/10.2307/202051

Greeley, A. M. (1982). *Catholic high schools and minority students.* Transaction.

Green, L. W. (2008). Making research relevant: If it is an evidence-based practice, where's the practice-based evidence? *Family Practice, 25*(1), 20–24. https://doi.org/10.1093/fampra/cmn055

Greenfield, J. S. (2015). Challenges and opportunities in the pursuit of college finance literacy. *The High School Journal*, *98*(4), 316–336. https://doi.org/10.1353/hsj.2015.0010

Greenhalgh, T., Robert, G., MacFarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *The Milbank Quarterly, 82*(4), 581–629. https://doi.org/10.1111/j.0887-378x.2004.00325.x

Gysbers, N. C., & Henderson, P. (2012). *Developing and managing your school guidance and counseling program* (5th ed.). American Counseling Association.

Hartnett, M. (2016). *Motivation in online education*. Springer.

Haycock, K., Jerald, C., & Huang, S. (2001). Closing the gap: Done in a decade. *Thinking K-16*, *5*(2), 3–21. https://edtrust.org/wp-content/uploads/2013/10/k16_spring01.pdf

Hernandez, M. (2000). Using logic models and program theory to build outcome accountability. *Education and Treatment of Children*, *23*(1), 24–41. https://www.jstor.org/stable/42899601

Hines, P. L., Lemons, R., & Crews, K. (2011). Poised to lead: How school counselors can drive college and career readiness. *The Education Trust*. http://www.edtrust.org/dc/publication/poised-to-lead

Holland, D.G. & Yousofi, M.H. (2014). The only solution: Education, youth, and social change in Afghanistan. *Anthropology & Education Quarterly, 45*(3), 241–259. http://doi.org/10.1111/aeq.12066

Horn, L., & Nevill, S. (2006). *Profile of undergraduates in U.S. postsecondary education institutions: 2003–04: With a special analysis of community college students* (Report No. NCES 2006-184). National Center for Education Statistics. https://nces.ed.gov/pubs2006/2006184a_rev.pdf

Horn, L., & Nunez, A. (2000). *Mapping the road to college: First-generation students' math track, planning strategies, and context of support* (Report No. NCES 2000–153). National Center for Education Statistics. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000153

Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make.* Johns Hopkins University Press.

Hudley, C., Moschetti, R., Gonzalez, A., Cho, S.-J., Barry, L., & Kelly, M. (2009). College freshmen's perceptions of their high school experiences. *Journal of Advanced Academics, 20*(3), 438–471. https://doi.org/10.1177/1932202X0902000304

Hurwitz, M., & Howell, J. (2014). Estimating causal impacts of school counselors with regression discontinuity designs. *Journal of Counseling & Development, 92*(3)*,* 316–327. http://doi.org/10.1002/j.1556-6676.2014.00159.x

Hutchinson, R. L., & Reagan, C.A. (1989). Problems for which seniors would seek help from school counselors. *The School Counselor. 36*(4), 271–280. https://www.jstor.org/stable/23903415

Ishitani, T. T. (2006). Studying attrition and degree completion behavior among first-generation college students in the United States. *The Journal of Higher Education, 77*(5), 861–885. https://www.jstor.org/stable/3838790

Jackson, K. R., Fixsen, D., & Ward, C. (2018). *Four domains for rapid school improvement: An implementation framework.* National Implementation Research Network. https://nirn.fpg.unc.edu/resources/four-domains-rapid-school-improvement-implementation-framework

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112–133. https://doi.org/10.1177/1558689806298224

Kaplan, J. (2015). *California's support for K-12 education ranks low by almost any measure*. California Budget and Policy Center. https://calbudgetcenter.org/wp-content/uploads/Californias-Support-for-K12-Education-Ranks-Low-by-Almost-Any-Measure_FactSheet_11.17.2015.pdf

Karlin, B. E., & Cross, G. (2014). From the laboratory to the therapy room: National dissemination and implementation of evidence-based psychotherapies in the U.S. Department of Veterans Affairs Health Care System. *American Psychologist, 69*(1), 19–33. https://doi.org/10.1037/a0033888

Keith, T. Z., & Page, E. B. (1985). Do Catholic high schools improve minority student achievement? *American Educational Research Journal, 22*(3), 337–349. https://doi.org/10.2307/1162967

Kincheloe, J. L., & McLaren, P. (2011). Rethinking critical theory and qualitative research. In K. Hayes, S. R. Steinberg, & K. Tobin (Eds.), *Key works in critical pedagogy* (pp. 285–326). Sense Publishers.

Kincheloe, J., & Steinberg, S. R. (1998). Addressing the crisis of Whiteness: Reconfiguring White identity in a pedagogy of whiteness. In J. Kincheloe, S. R. Steinberg, N. M. Rodriguez, & R. E. Chennault (Eds.), *White reign: Deploying Whiteness in America* (pp. 3–29). St. Martin's Press.

Kuhl, J. (1985). Volitional mediators of cognition-behavior consistency: Self-regulatory processes and action versus state orientation. In J. Kuhl & J. Beckmann (Eds.), *Action control* (pp. 101–128). Springer.

Lin, N. (2017). Building a network theory of social capital. In N. Lin, K. Cook, & R. S. Burt (Eds.), *Social capital* (pp. 3–28). Routledge.

Longfield, J. (2015). Excerpt from the "Curse of Knowledge." *Teaching Academy, 25*, 1–3. https://digitalcommons.georgiasouthern.edu/cgi/viewcontent.cgi?article=1018&context=teaching-academy

Lusardi, A., & Mitchell, O.S. (2008). Planning and financial literacy: How do women fare? *American Economic Review, 98*(2), 413–417. https://doi.org/10.1257/aer.98.2.413

Maher, F. A., & Tetreault, M. A. (1993). *The feminist classroom*. Basic Books

Maher, F., & Tetreault, M. K. T. (1998). "They got the paradigm and painted it White": Whiteness and pedagogies of positionality. In J. Kincheloe, S. R. Steinberg, N. M. Rodriguez, & R. E. Chennault (Eds.), *White reign: Deploying Whiteness in America* (pp. 137–158). St. Martin's Press.

Malloy, M., Acock, A., DuBois, D. L., Vuchinich, S., Silverthorn, N., Ji, P., & Flay, B. R. (2015). Teachers' perceptions of school organizational climate as predictors of dosage and quality of implementation of a social-emotional and character development program. *Prevention Science, 16*(8), 1086–1095. https://doi.org/10.1007/s11121-014-0534-7

Martinez, M., & Klopott, S. (2005). *The link between high school reform and college access and success for low-income and minority youth*. American Youth Policy Forum and Pathways to College Network. http://www.aypf.org/wp-content/uploads/2014/07/HSReformCollegeAccessandSuccess.pdf

McDonough, P. M. (1997). *Choosing colleges: How social class and schools structure opportunity.* State University of New York Press.

McDonough, P. M. (1999). *Race-based or conflict-based college admissions?* Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada.

McFarland, J., Hussar, B., Wang, X., Zhang, J., Wang, K., Rathbun, A., Barmer, A., Cataldi, E. F., & Mann, F. B. (2018). *The condition of education 2018* (NCES Report No. 2018-144). National Center for Education Statistics. https://nces.ed.gov/pubs2018/2018144.pdf

McLaughlin, J. A., & Jordan, G. B. (1999). Logic models: A tool for telling your program's performance story. *Evaluation and Program Planning*, *22*(1), 65–72. https://doi.org/10.1016/S0149-7189%2898%2900042-1

Merriam-Webster. (n.d.). Impostor syndrome. In *Merriam-Webster.com dictionary*. Retrieved August 10th, 2021, from https://www.merriam-webster.com/dictionary/imposter%20syndrome

Millett, C. M., Saunders, S. R., & Kevelson, M. J. C. (2018). *The logic underlying a research-based college access program: Depicting the theory of change of the Princeton University Preparatory Program* (Research Report No. RR-18-07). Educational Testing Service. https://doi.org/10.1002/ets2.12175

Morris, D. (2016). Extracurricular activity participation in high school: Mechanisms linking participation to math achievement and 4-year college attendance. *Educational Research Journal, 53*(5), 1376–1410. http://doi.org/10.3102/0002831216667579

Moschetti, R. V., & Hudley, C. (2015). Social capital and academic motivation among first-generation community college students. *Community College Journal of Research and Practice*, *39*(3), 235–251. https://doi.org/10.1080/10668926.2013.819304

Mottola, G. R. (2014, March). Financial capability in young adults—A generational view. *FINRA: Investor Education Foundation*. https://www.usfinancialcapability.org/downloads/FinancialCapabilityofYoungAdults.pdf

Naleppa, M. J., & Cagle, J. G. (2010). Treatment fidelity in social work intervention research: A review of published studies. *Research on Social Work Practice*, *20*(6), 674–681. https://doi.org/10.1177%2F1049731509352088

Naumann, W. C., Bandalos, D., & Gutkin, T. B. (2003). Identifying variables that predict college success for first-generation college students. *Journal of College Admission, 181*, 4–9.

Newton, X. A., Poon, R. C., Nunes, N. L., & Stone, E. M. (2013). Research on teacher education programs: Logic model approach. *Evaluation and Program Planning*, *36*(1)*,* 88–96*.* https://doi.org/10.1016/j.evalprogplan.2012.08.001

Noeth, R. J., & Wimberly, G. L. (2002). *Creating seam-less educational transitions for urban African American and Hispanic students.* ACT Policy Research Center.

Oyserman, D., & Destin, M. (2010). Identity-based motivation: Implications for intervention. *The Counseling Psychologist, 38*(7)*,* 1001–1043. https://doi.org/10.1177/0011000010374775

Paisley, P. O., & Borders, L. D. (1995). School counseling: An evolving specialty. *Journal of Counseling & Development*, *74*(2), 150–153. https://doi.org/10.1002/j.1556-6676.1995.tb01840.x

Palardy, G. J. (2013). High school socioeconomic segregation and student attainment. *American Educational Research Journal, 50*(4), 714–754. https://doi.org/10.3102/0002831213481240

Paldam, M. (2000). Social capital: One or many? Definition and measurement. *Journal of Economic Surveys, 14*(5), 629–653. https://doi.org/10.1111/1467-6419.00127

Palmer, R. T., Davis, R. J., Moore, J. L., & Hilton, A. A. (2010). A nation at risk: Increasing college participation and persistence among African American males to stimulate US global competitiveness. *Journal of African American Males in Education (JAAME), 1*(2), 105–124.

Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *The Journal of Higher Education, 75*(3), 249–284. https://doi.org/10.1080/00221546.2004.11772256

Pearl, R., Bryan, T., & Herzog, A. (1983). Learning disabled and nondisabled children's strategy analyses under high and low success conditions. *Learning Disability Quarterly*, *6*(1), 67–74. https://doi.org/10.2307%2F1510868

Perusse, R., Poynton, T. A., Jennifer, L., & Goodnough, G. E. (2015). The importance and implementation of eight components of college and career readiness counseling in school counselor education programs. *Journal of College Access*, *1*(1), 29–41.

Philp, K. (2019). *How do after-school staff use social networks to support at-risk youth? A social capital analysis* [Doctoral dissertation, University of Central Florida]. UCF Electronic Theses and Dissertations. https://stars.library.ucf.edu/etd/6559

Phinney, J. S., & Haas, K. (2003). The process of coping among ethnic minority first-first generation college freshmen: A narrative approach. *The Journal of Social Psychology, 143*(6)*,* 707–726. http://doi.org/10.1080/00224540309600426

Plank, S. B. & Jordan, W. J. (2001). Effects of information, guidance, and actions on postsecondary destinations: A study of talent loss. *American Educational Research Journal, 38*(4), 947–979. https://doi.org/10.3102/00028312038004947

Powell, A. G. (1996). *Lessons from privilege: The American prep school tradition.* Harvard University Press.

Pulliam, N., Ieva, K. P., & Burlew, L. (2017). The relationship between perceived career barriers and career decision self-efficacy on initial career choice among low-income, first generation, pre-freshman, college-bound students. *Journal of College Access, 3*(2), 78–98. https://scholarworks.wmich.edu/jca/vol3/iss2/7/

Putnam, R. (2001). Social capital: Measurement and consequences. *Canadian Journal of Policy Research, 2001*(2), 41–51.

Rayle, A. D. (2006). Mattering to others: Implications for the counseling relationship. *Journal of Counseling & Development*, *84*(4), 483–487. https://doi.org/10.1002/j.1556-6678.2006.tb00432.x

Reid, M. J., & Moore, J. L. (2008). College readiness and academic preparation for postsecondary education: Oral histories of first-generation urban college students. *Urban Education, 43*(2), 240–261. https://doi.org/10.1177/0042085907312346

Richardson, R. C., Jr., & Skinner, E. F. (1992). Helping first–generation minority students achieve degrees. *New Directions for Community Colleges, 1992*(80), 29–43. https://doi.org/10.1002/cc.36819928005

Ringer, C. H., & Dodd, J. E. (1999). Why are they communication majors?: Factors influencing students' career decisions. *Community College Journalist, 26*, 2–4.

Robinson, G. E., & Wittebols, J. H. (1986). *Class size research: A related cluster analysis for decision making*. ERS Research Brief.

Roderick, M., Nagaoka, J., & Coca, V. (2009). College readiness for all: The challenge for urban high schools. *Future Child*, *19*(1), 185–210. https://doi.org/10.1353/foc.0.0024

Rowe, D. A., Collier-Meek, M. A., Kittelman, A., & Pierce, J. (2021). Ensuring effective implementation of evidence-based practices. *Teaching Exceptional Children, 53*(6), 396–399. https://doi.org/10.1177/00400599211025642

Rowe, F. A. (1989). College students' perceptions of high school counselors. *The School Counselor, 3*6(4), 260–264. https://www.jstor.org/stable/23903412

Royster, P., Gross, J., & Hochbein, C. (2015). Timing is everything: Getting students back on track to college readiness in high school. *The High School Journal, 98*(3), 208–225. https://www.jstor.org/stable/44075294

Rumenberger, R. W., Ghatak, R., Poulos, G., Ritter, P. L., & Dornbusch, S. M. (1990). Family influences on dropout behavior in one California high school. *Sociology of Education, 63*, 283–299.

Salina, C., Girtz, S., Eppinga, J., Martinez, D., Kilian, D., Lozano, E., & Shines, T. (2013). All hands on deck: A comprehensive, results- driven counseling model. *Professional School Counseling, 17*(1), 63–75. https://doi.org/10.1177/2156759X0001700112

Schunk, D. H. (1984). The self-efficacy perspective on achievement behavior. *Educational Psychologist, 19*(1), 199–213. https://doi.org/10.1080/00461528409529281

Sedlacek, W. E. (1993). Employing noncognitive variables in admissions and retention in higher education. In *Achieving diversity: Issues in the recruitment and retention of underrepresented racial/ethnic students in higher education* (pp. 33-39). National Association of College Admission Counselors.

Shaw, A. (2013). Family fortunes: Female students' perceptions and expectations of higher education and an examination of how they, and their parents, see the benefits of university. *Educational Studies, 39*, 195–207. https://doi.org/10.1080/03055698.2012.713549

Stanton-Salazar, R. D. (2001). *Manufacturing hope and despair: The school and kin support networks of U.S.-Mexican youth*. Teachers College Press.

Stebleton, M., & Soria, K. (2013). Breaking down barriers: Academic obstacles of first–generation students at research universities. *The Learning Assistance Review, 17*(2), 7–20.

Steele, C. (2010). *Whistling Vivaldi and other clues to how stereotypes affect us.* WW Norton & Company.

Stegemann, K. C., & Jaciw, A. P. (2018). Making it logical: Implementation of inclusive education using a logic model framework. *Learning Disabilities: A Contemporary Journal, 16*(1), 3–18.

Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology, 102*(6), 1178–1197. https://doi.org/10.1037/a0027143

Summers, A. A., & Wolfe, B. L. (1977). Do schools make a difference? *The American Economic Review, 67*(4), 639–652. https://www.jstor.org/stable/1813396

Super, D. E. (1990). A life-span, life-space, approach to career development. In D. Brown & L. Brooks (Eds.), *Career choice and development* (pp. 197–261). Jossey-Bass.

Taylor, A. & Krahn, H. (2013). Living through our children: Exploring the education and career 'choices' of racialized immigrant youth in Canada. *Journal of Youth Studies, 16*(8), 1000–1021. https://doi.org/10.1080/13676261.2013.772575

Terenzini, P. T., Springer, L., Yaeger, P. M., Pascarella, E. T., & Nora, A. (1996). First-generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education, 37,* 1–22. https://doi.org/10.1007/BF01680039

Tommeraas, T., & Ogden, T. (2017). Is there a scale-up penalty? Testing behavioral change in the scaling up of parent management training in Norway. *Administration and Policy in Mental Health and Mental Health Services Research, 44*(2), 203–216. https://doi.org/10.1007/s10488-015-0712-3

Trevino, N. N., & DeFreitas, S. C. (2014). The relationship between intrinsic motivation and academic achievement for first generation Latino college students. *Social Psychology of Education, 17*(2), 293–306. https://doi.org/10.1007/s11218-013-9245-3

United States Department of Education. (2011). *Civil Rights data collection*. Retrieved from http://ocrdata.ed.gov/Home

United States Department of Education (2018). *The condition of education 2018* (NCES Report No. 2018-144). National Center for Education Statistics. Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=40

U.S. Executive Office of the President. (2014). *Increasing college opportunity for low-income students: Promising models and a call to action*. https://obamawhitehouse.archives.gov/sites/default/files/docs/increasing_college_opportunity_for_low-income_students_report.pdf

UNESCO, UNICEF, & World Bank. (2020). *What have we learnt?: Overview of findings from a survey of ministries of education on national responses to COVID-19*. UNESCO, UNICEF, World Bank. https://openknowledge.worldbank.org/handle/10986/34700

Unverferth, A. R., Talbert-Johnson, C., & Bogard, T. (2012). Perceived barriers for first-generation students: Reforms to level the terrain. *International Journal of Educational Reform, 21*(4) 4238–4252. https://doi.org/10.1177%2F105678791202100402

Van Meter, D. S., & Van Horn, C. E. (1975). The policy implementation process: A conceptual framework. *Administration & Society, 6*(4), 445–488. https://doi.org/10.1177/009539977500600404

Vega, D. (2016). "Why not me?" College enrollment and persistence of high-achieving first–generation Latino college students. *School Psychology Forum, 10*(3), 307–320. https://thrive.arizona.edu/sites/default/files/Why%20Not%20Me%20-%20College%20Enrollment%20and%20Persistence%20of%20High-Achieving%20First-Generation%20Latino%20College%20Students.pdf

Walberg, H. J. (1989). Student aspirations: National and international perspectives. *Journal of Research in Rural Education, 6*(2), 1–6. https://jrre.psu.edu/sites/default/files/2019-07/6-2_1.pdf

Warburton, E. C., Bugarin, R., & Nunez, A.-M. (2001). *Bridging the gap: Academic preparation and postsecondary success of first–generation students: Statistical analysis report.* National Center for Education Statistics. https://nces.ed.gov/pubs2001/2001153.pdf

Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation Science, 4*, Article 67. http://doi.org/10.1186/1748-5908-4-67

Wensing, M., & Grol, R. (2005). Multifaceted interventions. In R. Grol, M. Wensing, & M. Eccles (Eds.), *Improving patient care: The implementation of change in clinical practice* (pp. 197–206). Elsevier.

Western Catholic Education Association. (2018). *Ensuring educational excellence (E3). Mater Dei High School*. https://materdeicatholic.org/mdchs/about/isos-wcea/

Wilkerson, K., & Bellini, J. (2006). Intrapersonal and organizational factors associated with burnout among school counselors. *Journal of Counseling & Development, 84*(4), 440–450. https://doi.org/10.1002/j.1556-6678.2006.tb00428.x

Woosley, S. A., & Shepler, D. K. (2011). Understanding the early integration experiences of first-generation college students. *College Student Journal, 45*(4), 700–715.

York-Anderson, D. C., & Bowman, S. L. (1991). Assessing the college knowledge of first-generation and second-generation college students. *Journal of College Student Development, 32*(2), 116–122.

Young, M. E., & Lambie, G. W. (2007). Wellness in school and mental health systems: Organizational influences. *Journal of Humanistic Counseling, Education, and Development, 46*(1), 98–113. https://doi.org/10.1002/j.2161-1939.2007.tb00028.x

Zalaquett, C. P. (1999). Do students of noncollege-educated parents achieve less academically than students of college-educated parents? *Psychological Reports, 85*(2), 417–421. https://doi.org/10.2466/PR0.85.6.417-421

APPENDIX A

ASCA Student Success Model

The ASCA Mindsets & Behaviors for Student Success: K-12 College- and Career-Readiness Standards for Every Student

Each of the following standards can be applied to the academic, career and social/emotional domains.

Category 1: Mindset Standards
School counselors encourage the following mindsets for all students.

- **M 1.** Belief in development of whole self, including a healthy balance of mental, social/emotional and physical well-being
- **M 2.** Self-confidence in ability to succeed
- **M 3.** Sense of belonging in the school environment
- **M 4.** Understanding that postsecondary education and life-long learning are necessary for long-term career success
- **M 5.** Belief in using abilities to their fullest to achieve high-quality results and outcomes
- **M 6.** Positive attitude toward work and learning

Category 2: Behavior Standards
Students will demonstrate the following standards through classroom lessons, activities and/or individual/small-group counseling.

Learning Strategies		Self-Management Skills		Social Skills	
B-LS 1.	Demonstrate critical-thinking skills to make informed decisions	**B-SMS 1.**	Demonstrate ability to assume responsibility	**B-SS 1.**	Use effective oral and written communication skills and listening skills
B-LS 2.	Demonstrate creativity	**B-SMS 2.**	Demonstrate self-discipline and self-control	**B-SS 2.**	Create positive and supportive relationships with other students
B-LS 3.	Use time-management, organizational and study skills	**B-SMS 3.**	Demonstrate ability to work independently	**B-SS 3.**	Create relationships with adults that support success
B-LS 4.	Apply self-motivation and self-direction to learning	**B-SMS 4.**	Demonstrate ability to delay immediate gratification for long-term rewards	**B-SS 4.**	Demonstrate empathy
B-LS 5.	Apply media and technology skills	**B-SMS 5.**	Demonstrate perseverance to achieve long- and short-term goals	**B-SS 5.**	Demonstrate ethical decision-making and social responsibility
B-LS 6.	Set high standards of quality	**B-SMS 6.**	Demonstrate ability to overcome barriers to learning	**B-SS 6.**	Use effective collaboration and cooperation skills
B-LS 7.	Identify long- and short-term academic, career and social/emotional goals	**B-SMS 7.**	Demonstrate effective coping skills when faced with a problem	**B-SS 7.**	Use leadership and teamwork skills to work effectively in diverse teams
B-LS 8.	Actively engage in challenging coursework	**B-SMS 8.**	Demonstrate the ability to balance school, home and community activities	**B-SS 8.**	Demonstrate advocacy skills and ability to assert self, when necessary
B-LS 9.	Gather evidence and consider multiple perspectives to make informed decisions	**B-SMS 9.**	Demonstrate personal safety skills	**B-SS 9.**	Demonstrate social maturity and behaviors appropriate to the situation and environment
B-LS 10.	Participate in enrichment and extracurricular activities	**B-SMS 10.**	Demonstrate ability to manage transitions and ability to adapt to changing situations and responsibilities		

APPENDIX B

Interview Guide – Principals

Introduction. Thank you for taking the time to interview for this research project. We are hopeful that with your contributions, we will be able to add to the important literature on how to best support first–generation college students on their quest toward college. This research project is focused on three key areas. The first is college readiness, the second is on program implementation, and the third is self-efficacy.

The interviewer will present the following definition on what a bridge program is: "A bridge program is typically defined as a set of academic supports put in place to help build a 'bridge' from high school to college. Typically bridge programs focus on students who either first generation, low income, diverse, etc."

These first set of questions are about college readiness:

1. Please tell me what you know about bridge programs? Prior to the Pontem Path, had you seen any bridge programs implemented in Catholic schools?
2. How do you believe a bridge program can impact first–generation college students at private Catholic high schools?
3. In your experience with the Pontem Path so far, do you believe it has made a difference with the students? If so, how and why?

These second set of questions are about program implementation and organizational factors related to successful implementation.

4. For purposes of this study, organizational factors are things like policies, professional practices and norms, or resources that may influence the successful implementation of a bridge program such as the Pontem Path. With this said, what organizational factors contribute to the successful implementation of this bridge program?
5. What role do you believe leadership and governance plays in helping implement the Pontem Path at your site?
6. How do you think someone in your position is able to assist with the quick implementation of a bridge program on their campus? Why do you think that is?

The next set of questions is about self-efficacy. One of the outcomes of the Pontem Path is to increase self-efficacy among students as research has shown self-efficacy is a vital characteristic for college success. Self-efficacy is defined as people's beliefs regarding their capability to succeed and attain a given level of performance.

7. Why do you think self-efficacy is important?
8. How would you say self-efficacy is developed within educational structures? Specifically at your school?
9. Can you name some students you believe have seen their self-efficacy improve? Can you provide examples of how it has improved and maybe even why you think that is?

APPENDIX C

Interview Guide – Teachers

Introduction. Thank you for taking the time to interview for this research project. We are hopeful that with your contributions, we will be able to add to the important literature on how to best support first–generation college students on their quest toward college. This research project is focused on three key areas. The first is college readiness, second is on program implementation, and the third is self-efficacy.

The interviewer will present the following definition on what a bridge program is: "A bridge program is typically defined as a set of academic supports put in place to help build a 'bridge' from high school to college. Typically bridge programs focus on students who either first generation, low income, diverse, etc."

These first set of questions are about college readiness

1. Please tell me what you know about bridge programs? Prior to the Pontem Path, had you seen any bridge programs implemented in Catholic schools?
2. How do you believe a bridge program can impact first–generation college students at private Catholic high schools?
3. In your experience with the Pontem Path so far, do you believe it has made a difference with the students? If so, how and why?

These second set of questions are about program implementation and organizational factors related to successful implementation.

4. For the purposes of this study, organizational factors are things like policies, professional practices and norms, or resources that may influence the successful implementation of a bridge program such as the Pontem Path. With this said, what organizational factors contributed to the successful implementation of this bridge program?
5. What role do you believe leadership and governance plays in helping implement the Pontem Path at your site?
6. How do you think someone in your position is able to assist with the quick implementation of a bridge program on their campus? Why do you think that is?

The next set of questions is about self-efficacy. One outcome of the Pontem Path is to increase self-efficacy among students as research has shown self-efficacy is a vital characteristic for college success. Self-efficacy is defined as people's beliefs regarding their capability to succeed and attain a given level of performance.

7. Why do you think self-efficacy is important?
8. How would you say self-efficacy is developed within educational structures? Specifically at your school? In your classroom?
9. Can you name some students you believe have seen their self-efficacy improve? Can you provide examples of how it has improved and maybe even why you think that is?

APPENDIX D

Interview Guide – Students

Introduction. Thank you for taking the time to interview for this research project. We are hopeful that with your contributions, we will be able to add to the important literature on how to best support first–generation college students on their quest toward college. This research project is focused on three key areas. The first is college readiness, the second is on program implementation, and the third is self-efficacy.

1. How has the Pontem Path impacted your high school experience?
2. Specifically, how has the Pontem Path impacted your experience at your private high school?

For this research project, we are using the following explanation of what self-efficacy means. Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1977, 1986, 1997). Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behavior, and social environment. To put simply, how confident and able are you as a student to assert control over your outcomes. *Do you believe you can*?

3. How would you say your self-efficacy has changed since you've been a part of the Pontem Path? Has it increased? Decreased? Stayed the same? Why do you think that is?
4. How has your self-efficacy impacted the way you navigate your high school? Can you please provide real-world experiences to speak to this?
5. How do you think you can increase your self-efficacy?
6. Do you have any recommendations for the Pontem Path?

Date: 3-9-2021

IRB #: IRB-2020-136
Title: The Pontem Path A case study of a Catholic bridge program focusing on college readiness and social capital
Creation Date: 12-16-2019
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Key Study Contacts

Member Sean Green	Role Principal Investigator	Contact seangreen@SanDiego.edu
Member Marcus Lam	Role Primary Contact	Contact mlam@sandiego.edu