A CASE STUDY EXAMINING THE SOCIAL CAPITAL OF FIRST-GENERATION STUDENTS VIA A DUAL ENROLLMENT PROGRAM

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DEDICATION

This work is dedicated to Kevin, my husband who has been my constant support over the past several years as I pursued my doctoral degree. Kevin, you have demonstrated incredible patience and made yourself available to our children when I could not be. By doing so, I was able to read, write, and research. I cannot thank you enough, Kevin, for the constant encouragement to continue this endeavor and for your belief in me. I love you and look forward to our next adventures in life.

Elizabeth and Anthony, this is dedicated most especially to you. I could not be prouder of each of you. Know that you are my every reason why I pursued this degree; to show you that through perseverance, dedication, hard work, and determination, your dreams can come true. I pray for God's constant protection over you. I pray that my experiences in life help you launch into so much more as you go through your life. Know that your dad and I will be your constant in this world. I love you.

Finally, these writings are dedicated to all first-generation children. Regardless of your ethnicity, your religious beliefs, your gender, your familial background, your socioeconomic status, your sexual orientation, you can overcome all challenges. The path is not an easy one, and the adventure will certainly bring difficulties, confusion, and, at times, loneliness, but know this: While you may be the first in your families to navigate this journey, you are not the first to overcome such obstacles. Hold tight to the process; the rewards are great in the end. You are the first in your families to have the capacity of changing your and your families' life's trajectory. The grit is in you.

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British philosopher Alfred North Whitehead (1861-1947) once said, "No one who achieves success does so without acknowledging the help of others. The wise and confident acknowledge this help with gratitude." This journey would not have been complete without the support of so many. My success is their success.

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ABSTRACT

Background: Partnerships between public school districts and local community colleges known as dual enrollment programs have led to successful college transition experiences for students. These programs have proven results for student groups that may otherwise struggle to achieve postsecondary success, including first-generation students. First-generation students are those whose parents have no college education (Pascarella et al., 2003) or whose parents have not completed a four-year college degree prior to the student enrolling in college (Collier & Morgan, 2007). An (2013) argued that first-generation students who participated in a dual enrollment program were more likely to earn their college degree when compared to those who had not participated. Additionally, first-generation students were better able to acclimate to a college environment if they participated in a dual enrollment program (Loftin, 2012; Morrison, 2008; Swanson, 2010; Terenzini et al.,1996).

Purpose: The purpose of this case study was to investigate the social capital supports and resources provided to first-generation students via a dual enrollment program. Perceptions of social capital resources and supports were compared in two ways: a) between multi-generation students and first-generation students; and b) between program administrators and first-generation students.

Methods: This qualitative case study, which also utilized descriptive and interview data, sought to gather the perspectives of program administrators, first-generation students, and multi-generation students. Program administrators who were interviewed were responsible for different aspects of the dual enrollment program at

the PISD or GHS. Two student focus groups were also hosted, one for first-generation students and one for multi-generation students. Participating students were seniors who enrolled in at least two dual enrollment courses. To ensure the true essence of each interview was captured, a member-checking process was conducted. The descriptive data were analyzed to develop a comprehensive picture of the students' (i.e. race/ethnicity, gender, socio-economic status) who participated in the dual enrollment program.

Findings: When comparing the perceptions of program administrators to those of the first-generation student group, parallels and disparities were found. First-generation students felt supported by various institutional agents, including teachers, counselors, and administrators. Their level of support and how they offered support, however, depended on the agent. The student identification process used for the dual enrollment program coupled with first-generation students' lack of understanding were found to be the most impactful disparities of the study. Finally, first-generation students relied more heavily on their peers for social capital supports than any other institutional agent.

Differences were also found between the two student groups. First-generation students depended on their peers, and multi-generational students were more dependent on personal college visits, university websites, and parents. Additionally, first-generation students perceived the discounted cost of courses was a burden for their parents due to financial hardships; however, multi-generation students perceived the dual enrollment courses were a cost savings for their parents. Finally, multi-generation students were found to be more aware of the implications of the elementary

and middle school courses and grades needed for access into the program. The results of the descriptive data demonstrated that the multi-generation students were enrolled in more advanced level courses than their first-generation peers.

Conclusion: This case study demonstrated that the dual enrollment program is successful; however, there are areas of improvement that could enhance the program. Educational institutions who support a dual enrollment program have the opportunity and responsibility of propelling them into their brighter futures.

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CHAPTER ONE: INTRODUCTION

In today's competitive educational society between public, private, and charter schools, many administrators are working to develop programming options for high school students that will entice them and their parents in attending their educational institutions (Bernhardt, 2017). The program administrators want to provide high school students with curricular and extra-curricular options that will prepare them academically and socially to be frontrunners over private and charter school students when applying to four-year universities (Bernhardt, 2017). Within the process, public school administrators, counselors, and teachers should be able to advise students and parents of the potential benefits of each program. Moreover, educators should also recognize that programs that work for one student may not necessarily work in the same way with the same results for another student. Therefore, understanding students' differing needs and backgrounds is critical. Moreover, program administrators' awareness of a student group's (i.e. first-generation) postsecondary goals (i.e. college degree attainment, earning technical certifications, going directly into the workforce) should align with program development to ensure processes are in place that will help support their goals.

As a result of the competitive educational environment, public school officials across the country are implementing dual enrollment programs in their schools, which essentially allow high school students to enroll in college courses while simultaneously earning high school credit (An, 2013; Brophy & Johnson, 2007; Hoffman et al., 2008; Jones, 2014). Dual enrollment programs, which require a partnership agreement with local community colleges, are gaining traction across the

country. Federal policymakers recognized that a process needed to be developed beginning at the high school level to build students' college persistence and increase completion rates (i.e. college degree attainment) (Buzynski, 2011; Roach et al., 2014; Smith, 2007). President Barack Obama signed into legislation the "Every Student Succeeds Act" (ESSA), which helped to address the weaknesses and gaps found in President George Bush's No Child Left Behind (NCLB) Act (U.S. Department of Education, 2015). Furthermore, he issued The Race to the Top initiative in 2009, which allocated over \$4 billion to states for the purpose of increasing college success rates (Ward & Vargas, 2012a). Thus, dual enrollment partnerships between public school districts and local community colleges were established in many public school districts and further expanded in others.

A nationwide increase of dual enrollment programming has been noted between public high schools and colleges with 82% of high schools hosting a dual enrollment program during the 2010-2011 academic school year (Thomas et al., 2013). Lowe (2010) cautions, however, that merely increasing the number of dual enrollment programs and the number of students who participate does not ensure academic achievement, particularly for first-generation students. As other scholars have noted, students' social capital, is closely tied to their academic attainment. Social capital places value on supportive relationships and resources for first-generation students (Moschetti & Hudley, 2015; Sommerfeld & Bowen, 2013; Stephan, 2013; Vorhaus, 2014).

I was motivated to explore this topic given that college life was much of an unknown for me as a first-generation student. I was left to learn and experience this

new world on my own because no one in my family graduated with a four-year degree. I was unaware of the supports and resources that were available; the same supports and services my multi-generation peers were readily exposed to as they navigated through college. As I reflected on my high school experiences, programs (i.e. dual enrollment) that supported first-generation students were null. If such programs existed, I was unaware. This research allowed me to gain an understanding of how one program, dual enrollment, could support younger first-generation students as they navigate the unknowns of college life. For me, the college-going experience and eventual degrees attained changed the trajectory of my family's life; this from someone who was unaware of the supports and services offered. If one program, however, is able to bring awareness to other first-generation students while still in high school, the implications are more than life-changing; they may serve as the launch for generational change.

Background

The development of educational programs that are instructionally sound should encompass students' needs, characteristics and goals (Jones, 2014). Dual enrollment programs address students' academic and financial needs, strengthen their persistence, and help introduce them to the college life (Buzynski, 2011; Roach et al., 2014; Smith, 2007). Students are further supported and equipped academically as they experience the rigorous college-level coursework (Engle & Tinto, 2008). Students participating in dual enrollment programs also receive critical college-readiness information, including application processes, financial aid guidelines, and an understanding of course-selection, which allows them to matriculate to college with familiarity of the process

(An, 2013; Brophy & Johnson, 2007; Hoffman et al., 2008; Jones, 2014). First-generation students may not be afforded similar networks and resources to help build their college-knowledge capacity as do some of their multi-generation peers. The access to learning and opportunities that a dual enrollment program can offer have changed the landscape of the college-going experience for first-generation students (Bailey et al., 2002; Hoffman et al., 2009).

Economically Disadvantaged Students

Public schools are obligated to serve all students, including economically disadvantaged students, and often school officials work to determine how best to support them academically, socially, and physically. Research suggests that students' familial income levels serve as a predictor of students' overall academic achievement; therefore, they generally achieve at lower academic levels when compared to their more affluent peers despite many of the schools' efforts (Butler, 2006; Levin, 2007; Nelson, 2006; Pellino, 2007; Reeves, 2009; Rowan et al., 2004).

A number of studies have been conducted that support the success of dual enrollment programs for low socioeconomic students (Allen & Dadgar, 2012; An, 2013; D'Amico & Dika, 2013; Hoffman et al., 2009; Jones, 2014; Karp et al., 2007; Klopfenstein & Lively, 2012; Roach et al., 2014). Karp et al. (2007) concluded that economically disadvantaged students' experiences and knowledge gained from their dual enrollment program increased the likelihood of their postsecondary success. In another study, Hoffman et al. (2009) compared the total number of college credit hours earned by two different groups of economically disadvantaged students, those that actively participated in a dual enrollment program versus those students who had

not. Economically disadvantaged students who participated in a dual enrollment program were found to have earned a higher number of college credit hours than their peers who had not participated in such a program (Hoffman, et al., 2009). A final study determined that college enrollment opportunities increased among economically disadvantaged students because of the college-readiness experiences they received through the dual enrollment program (Lichtenberger et al., 2014).

First-Generation Students

Students classified as first-generation are those whose parents have had no college education (Pascarella et al., 2003) or whose parents have not completed a four-year college degree prior to the student enrolling in college (Collier & Morgan, 2007). Scholars contend that first-generation students are more likely to come from economically disadvantaged homes (Mehta et al., 2011).

School programming efforts have helped to strengthen the academic success of underrepresented student groups (i.e. economically disadvantaged, first-generation). Engle and Tinto (2008) found that economically disadvantaged, first-generation students who completed the rigorous coursework associated with dual enrollment courses increased the likelihood of attending a four-year university. An (2013) revealed that first-generation students who participated in a dual enrollment program while in high school earned college-bearing credits that were transferred to their postsecondary institutions. An (2013) contended that first-generation students were more likely to earn their college degree when compared to their multi-generational peers if they participated in a dual enrollment program. Other studies, such as those conducted by Loftin (2012), Morrison (2008), Swanson (2010), and Terenzini et al.

(1996), claimed that first-generation students were better able to acclimate to a college environment if they participated in a dual enrollment program. Scholars contended that a positive relationship existed between college persistence and academic achievement for first-generation students who participated in a dual enrollment program (Buzynski, 2011; Loftin, 2012; Stansberry, 2013; Wintermeyer, 2012).

State Accountability

The Texas State Accountability System was implemented by the Texas Education Agency (TEA) in 1993 after the Texas Legislature "enacted statutes that mandated the creation of the Texas public school accountability system to rate school districts and evaluate campuses" (TEA, 2019). The state accountability system provides ratings to schools and school districts on an annual basis that "...are based largely on performance on state standardized tests and graduation rates. The ratings examine student achievement, student progress, efforts to close the achievement gap and postsecondary readiness" (TEA, 2017-2019).

Not all first-generation students are economically disadvantaged (or vice versa) (Mehta et al., 2011; Warburton et al., 2001); however, an important note is made regarding the Texas State Accountability System. The performance levels of economically disadvantaged students (i.e. special population) are measured annually for each public school using standardized test results and graduation rates. However, first-generation status is not a recognized indicator (i.e. special population) within the Texas State Accountability System. Therefore, the performance on standardized testing and graduation rates of first-generation students are not evaluated. The accountability system will, however, evaluate the number and percent of students

enrolled in and are successful in dual enrollment courses by campus (TEA, 2017-2019). Understanding the state's accountability system will help illustrate the difficulty high school officials, including administrators, counselors, and teachers, may have in identifying who their first-generation students are in a systematic manner.

Problem Statement

It is important for educational leaders to address critical components of program development to ensure the program delivers optimum results for all student groups. Relevant to this study, school district and high school level administrators hold the responsibility of providing social capital supports and resources to first-generation students via a dual enrollment program. Social capital is the term used to describe the resource and support systems (i.e. networks) provided to students in an educational program or setting (Stanton-Salazar, 2001a).

Within the literature, a difference exists between the social capital of multigenerational and first-generation students. Multi-generational students, who are those
who have at least one parent who earned a college degree, are likely to have access to
an embedded and unspoken social capital which will assist them in preparing for their
postsecondary studies (Barry et al., 2009; Bradberry & Maather, 2009; Terenzini et al.,
1996). However, first-generation students whose parents have not earned a college
degree may not have access to a similar support system (i.e. social capital) simply due
to the family's inexperience and knowledge of the education system (Billson & Terry,
1982; Pascarella et al., 2004; Ramos-Sanchez & Nichols, 2007; Terenzini et al., 1996;
Warburton et al., 2001). In other words, first-generation students' accumulation of

social capital may not be as prominent when compared to that of multi-generational students.

The difference in students' social capital leads to an opportunity for school district officials to ensure a program is inclusive of a strong support system that will help improve first-generation students' social capital. Moreover, first-generation students may rely on the school's faculty who can better equip them with the essential knowledge and functions that will allow them access to postsecondary educational opportunities (Woosley & Shelpler, 2011). Furthermore, a strong support system is required in the high school setting, as well as ensuring students have the resources needed (i.e. knowledge) to successfully transition to college (Woosley & Shelpler, 2011).

Billitteri (2009) found first-generation students encountered challenges in their postsecondary studies when compared to their multi-generation peers regardless of how academically prepared they were. Ishitani (2006) contended that this may be due to first-generation students' lack of knowledge regarding the college application processes, admission requirements, financial aid services, and the course registration guidelines. Wang (2012) further contended that first-generation students who had some minimal understanding of the college application and financial aid processes found them to be cumbersome, extraneous, and intricate.

Research helps explain who may or may not have access to social capital through dual enrollment programs, which leads to the possible repercussions for first-generation students. Moschetti and Hudley (2015) contend that the strongest predictor of whether or not students will succeed in college is their generational classification

(i.e. first or multi). Consequently, the literature contains research that describes lower postsecondary success for first-generation students. Ishitani (2006) argued that the likelihood first-generation students would graduate from college in a four to six-year timeframe was about 25% lower than their multi-generation peers. Furthermore, firstgeneration students had about a 71% chance of withdrawing from their postsecondary studies when compared to their multi-generational peers (Ishitani, 2003). Other studies, such as one by the National Center for Education Statistics (NCES, 2005), found that first-generation students were five times more likely to enroll for less than one year of study (Hoffman & Robins, 2005; Pascarella et al., 2004). They were also less likely to attend college, and if they did, they were more likely to attend a community college, take breaks in-between semesters, or enroll as part-time students (Adelman, 2005; Caldas & Bankson, 1997; Hagy & Staniec, 2002; Kurlaender, 2006; Ward et al., 2012). First-generation students were also found to take a lighter course load, which would lead to fewer credits earned during their first year of study (D'Amico & Dika, 2013; Ishitani, 2006; Terenzini et al., 1996).

D'Amico and Dika (2013) contended that "documented barriers" precluded first-generation students from postsecondary success. However, through dual enrollment programming, first-generation students can overcome "...the cultural shift into higher education, financial issues, academic factors, and integration into the college environment" (D'Amico & Dika, 2013, p. 174). Harnish and Lynch (2005) found that students who participated in a dual enrollment program had a higher chance of enrolling full time into their postsecondary studies. Other studies found a positive relationship between dual enrollment participation and persistence and achievement

among first-generation students (Buzynski, 2011; Loftin, 2012; Stansberry, 2013; Wintermeyer, 2012). Loftin (2012) determined that first-generation students were better able to acclimate themselves to their postsecondary environment if they participated in a dual enrollment program.

Theoretical Framework

Students who took college-level courses via a dual enrollment program, along with a strong support group while in high school, positively influenced their acclimation to the postsecondary environment (Allen & Dadgar, 2012; Harnish & Lynch, 2005; Karp et al., 2007; Karp & Hughes, 2008; Kim & Bragg, 2008; Medvide & Blustein, 2010; North & Jacobs, 2010; Swanson, 2008). However, D'Amico and Dika (2013) described first-generation students' transition to the college environment as a cultural shift due to the lack of awareness. First-generation high school students' experiences and learning processes of the different aspects of the college-related environment included course rigor, peer collaboration, and faculty engagement (Astin, 1994). Tinto (1997) determined that the experiences helped create social and academic knowledge, which led to an increase in persistence. Thus, the experiences gained through the dual enrollment program would be beneficial for first-generation students.

The theoretical framework of social capital facilitated this study. Moreover, dual enrollment programming was the pathway used to accumulate the social capital for first-generation students. Social capital was described as the resources and critical social support systems found in first-generation students' networks (Stanton-Salazar, 2011). To build their social capital, Stanton-Salazar (2006) discussed the importance of fostering quality relationships by creating social connections and associations with

critical key players, known as institutional agents. Moreover, Ream (2005) determined that institutional agents such as teachers, counselors, and administrators made up students' formal social networks; family members and peers made up their informal social networks. Stanton-Salazar (1997) and Attinasi (1989) contended that institutional agents from formal social networks had the responsibility of assisting first-generation students in their transition from high school to college, delivering valuable and critical information, providing guidance and counseling, and developing support systems. Additionally, Stanton-Salazar (1997) countered the idea of stratification, or the structure of placing different groups of people within society. He suggested that mentorship programs be inclusive of first-generation students so that institutional agents could help accumulate their social capital.

Some of the resources included pieces of critical information first-generation students should know in order to successfully transition to college (Kim, 2012b; Stanton-Salazar, 2001a). For example, college-bearing information, such as application processes, minimum ACT/SAT scores, financial aid assistance, and course-enrollment information should be shared with first-generation students by high school counselors (Kim, 2012a). However, Stephen (2013) discovered that such student populations were somewhat restricted because they more commonly needed one-on-one guidance and counseling, and most high schools were unable to provide such an environment due to the high counselor to student ratios. The findings further indicated that some first-generation students may not know how or whom to contact for assistance (Stephan, 2013).

Social capital also provides an opportunity for sustainable relationships,

whether familial, communal, or educational, to exist for the purpose of assisting first-generation students transition to college environments (Stanton-Salazar, 2001a).

Moschetti and Hudley (2015) contended that helping first-generation students accumulate social capital would also help them process and locate assistance when needed. Partnerships between high schools and community colleges could strengthen the capacity of first-generation students' social capital through proper program implementation. Dual enrollment programming allowed for meaningful relationships to develop, which could help accumulate social capital for first-generation students. Furthermore, institutional agents (i.e. teachers, counselors, mentors, tutors, administrators) were able to provide critical resources (i.e. information and processes) for first-generation students through dual enrollment programs, which helped successfully transition them to the college environment. Appendix A serves as an example of first-generation students' social capital network. Both formal and informal networks as well as their institutional agents are provided.

Purpose of the Study

Through a case study approach, I examined first-generation students' social capital via a dual enrollment program. In order to do this, I compared the perceptions of program developers to those of first-generation students to help evaluate whether the program's intended outcomes were the lived experiences of this student group. I also gathered first-generation and multi-generation students' perceptions of the program, and compared both groups.

The school board and superintendent representing this large public suburban school district in Texas, Presidents Independent School District (PISD), established annual goals in its district improvement plan. Moreover, campus goals were required to align with the district goals when appropriate, which were found in the campus improvement plan. Campuses had the autonomy of deciding whether to utilize the district goal as a minimum measurement or could choose to enhance the goal. For example, PISD determined as a goal that "...academic performance and achievement levels (would) reflect excellence in learning and attainment of both high expectations and high standards for all students" (p. 36).² The performance objective stated that the school district would "Increase the number of students enrolled in and earning credit in advanced courses in the economically disadvantaged student group" (p. 36). This goal, along with the performance objective, set the baseline for campuses to follow. Grant High School (GHS)³ further enhanced this goal by specifically targeting not only economically disadvantaged students but also first-generation students in dual enrollment courses. Moreover, the high school determined its goal was to ensure the student demographics of those in advanced courses were aligned with the student demographics of the overall campus. For example, if the campus was 36% Hispanic, the campus goal was to ensure that the student enrollment in advanced courses also be 36% Hispanic. With the goals set, examining the social capital of first-generation students via the dual enrollment program could potentially assist program administrators in reaching the campus and district goals.

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¹ Pseudonym

² District-provided document; source withheld for anonymity.

³ Pseudonym

PISD requires students to earn a yearly average of 85 or better in the core contents (i.e. math, science, social studies, language arts) in middle school if they wish to enroll in advanced level courses. Moreover, students meeting the requirements could also enroll in various high school credit-bearing courses, which are considered advanced-level at the middle school but on-level at the high school.

First-generation students are at a disadvantage if they are not part of the courses that build social capital and provide resources. The advanced level courses, which begin in middle school, provide opportunities for critical analysis and share resources that first-generation students will not receive if they are not part of these academic tracks. Moreover, first-generation students' lack of awareness of the district's elementary school grade requirements may impede their access to social capital from the onset.

Research Problem and Research Questions

Evaluative frameworks are recommended to help measure the accumulation of social capital a specific program can offer. Guidelines and parameters were determined via the partnership agreement between PISD and the college. A number of studies have been conducted regarding the benefits of dual enrollment programs; however, the research lacks focus in program development that was inclusive of first-generation students (Allen & Dadgar, 2012; An, 2013; D'Amico & Dika, 2013; Hoffman et al., 2009; Jones, 2014; Karp et al., 2007; Klopfenstein & Lively, 2012; Roach et al., 2014;). I examined the guidelines, parameters, and other processes to determine the social capital offered to first-generation students via a dual enrollment program. The evaluation process involved collecting data and information, including

documenting the perceptions of first- and multi-generation students, about the activities, characteristics, and outcomes to assess the program's effectiveness (Grigal et al., 2012).

The research questions helped me develop a critical and comprehensive analysis of the dual enrollment program related to first-generation students.

Additionally, I gathered descriptive data to determine comparative measures between first-generation students and multi-generational students. Two student focus groups were conducted consisting of first-generation and multi-generation students.

Structured interviews with program administrators were also conducted. The following research questions guided this case study:

RQ1: What considerations of social capital are given to first-generation students by administrators during program development and implementation of a dual enrollment program?

RQ2: How do the social capital networks and resources compare between first-generation and multi-generation students via the dual enrollment program?

RQ3: What are the perceptions of social capital of first-generation students, and how are they aligned with the administrators' perceptions within a dual enrollment context?

Overview of Methodology

The qualitative data collected sought to gather the perspectives, suggestions, and personal experiences of the administrators involved in program development.

Perspectives were also gathered from a group of first-generation students and multigeneration students who actively participated in the dual enrollment program at the

time of the study. Descriptive data were also collected to draw a comparison between first-generation and multi-generation dual enrollment students. Variables included race/ethnicity, gender, socio-economic status, dual enrollment course data and student achievement data.

Sample Population

The dual enrollment program included several constituents and stakeholders; therefore, the sample population was inclusive of program administrators, first-generation students, and multi-generation students. By gathering information (i.e. experiences, perspectives) from each representative group, the results demonstrated a comparative evaluation of their differing perspectives.

Methods of Data Collection

Patton's conversational interview formats and standardized open-ended interview formats were utilized to ensure a true representation of each stakeholder's information was gathered (Patton, 1987). Interviews and focus-group discussions were transcribed, analyzed, and coded into themes so that comparisons could be made. The descriptive data were requested and obtained from the high school program administrators at the participating high school.

Data Analysis

Each interview was conducted in-person or via Zoom video session and was recorded with permission granted by the participant. The interview sessions were transcribed and analyzed into key themes using open coding (Saldana, 2016). Open coding is the practice of discerning qualitative data into parts (Saldana, 2016). The summary and key themes were sent to the participants to review to ensure the

interpretative validity of the interview captured the true essence of what the interviewee shared. The descriptive data were reviewed and analyzed to illustrate a depiction of the students who participated in the study. All the resources of data were triangulated to identify themes.

Key Terms

The terms below are used throughout this study and are defined below.

Alpha Counselor – counselor who students are assigned according to their last names.

Dual Credit Program – the name given to the dual enrollment programming partnership in the current study.

Campus Research Sponsor – administrator assigned to oversee the research process and assist as needed at the participating high school campus

College Readiness – this term refers to students' ability to demonstrate their cognitive ability of performing well in rigorous course work associated with high school and college-level courses. Additionally, the term is used to describe the familiarity of the college environment (Byrd & MacDonald, 2005).

Community College – an institution that typically allows students to earn an associate degree after two years of study. Additionally, this is an institution that partners with the school district in establishing a dual enrollment program agreement.

Course Credit – number of college hours students earn after successfully passing a dual enrollment course.

Credential Teacher – this term refers to educators who have met the minimum qualifications to not only teach at the high school level but also the college level.

Dual Enrollment – this term refers to students who are enrolled in a college-level course while simultaneously earning the high school required credit. At times throughout this study, this term can be used as an actionable event (i.e. dually enrolled) (Bailey, et al., 2002; Boswell, 2001).

Dual Enrollment Administrator (DEA) – campus-level administrator who generally oversees the dual enrollment program

Dual Enrollment Counselor – counselor who assists the dual enrollment administrator and serves as a campus alpha counselor

First-generation Student – the term used to refer to a student whose parents did not attend or earn a college degree prior to student enrollment (Billson & Terry, 1982; Pascarella et al., 2003).

Grade Point Average (GPA) – the cumulative average of the total number of points earned per course. Typically, a student's GPA is calculated for both high school and college.

Low Socioeconomic – this term refers to students who receive free and reduced lunch in high school.

Multigenerational – this term is used to describe students who had at least one parent attend and earn a college degree.

Persistence –refers to students' ability to continue their educational studies despite obstacles and challenges that may arise or confront them (Tinto, 1997).

Postsecondary – educational institutional settings after high school graduation **Social Capital** – term used to describe the resources and support systems provided to students in an educational program or setting (Stanton-Salazar, 2001a)

Special Population – a subgroup of students taken from the overall campus student population who are categorized based on various descriptors (i.e. race/ethnicity, gender, socioeconomic status, special programs)

Underrepresented Student Population – this phrase refers to student populations that are disproportionally represented in postsecondary institutions, including, but not limited to, students of color, low socioeconomic, and first-generation.

Chapter Summary

Concerted efforts between high schools and colleges could prove to be an effective strategy in supporting first-generation students' matriculation to college. Dual enrollment programs allow school districts and community colleges to enter a mutually agreed-upon partnership that could greatly benefit first-generation students. My purpose for conducting this study was to evaluate and capture the social capital first-generation and multigeneration students receive through a dual enrollment program. In chapter two, I highlight relevant literature related to social capital, first-generation students, and dual enrollment programming. Chapter three allows me to illustrate the design of the study, including the research participants and the methodology used in gathering qualitative and descriptive data. I also describe the analysis processes used to evaluate the collected data in chapter three. I detail the results and the findings of the case study in chapter four. Finally, I share discussions and limitations of the case study in chapter five. I also offer recommendations to program administrators as well as considerations for future research.

CHAPTER TWO: LITERATURE REVIEW

The purpose of the literature review is to offer a discussion utilizing previous research on the foundational components of dual enrollment programming and their implications for first-generation students. Numerous studies investigated the impact dual enrollment program for underrepresented student groups, and the applicability of the research were widespread to include first-generation students. A detailed theoretical framework guided by social capital will first be discussed. Through previous research studies of social capital, along with the applicability and the relevancy, this theoretical framework served as the introduction and helped to set the foundation for the need of a dual enrollment program for first-generation students.

Understanding the history and composition of a dual enrollment program is critical in discussing the program's purpose as well as how the program offers first-generation students the opportunities to accumulate social capital. Acceptance requirements into the program are also shared to understand the possible implications for first-generation students. Finally, previous research on program monitoring and evaluation was examined to understand whether dual enrollment programs were meeting its intended benefits for students (i.e. first-generation).

Theoretical Framework: Social Capital

Social capital theory was the theoretical framework that helped guide the methodology, data collection and analysis process (Grant & Osanloo, 2016). Before I define social capital theory, multiple assumptions must be made regarding the educational system: a) the purpose of high school was to prepare students for either college or vocation schools so that they may lead a productive life in society; b)

earning a four-year degree is an attainable goal for students; c) educational institutions have a moral obligation to create pathways for high school students to attend college; and d) underrepresented student groups have opportunities to attend college (Moquet, 2012; Nahapiet & Ghoshal, 1998). These arguments lead to the rationale of supporting (i.e. social capital) first-generation students (Moquett, 2012; Nahapiet & Ghoshal, 1998). Furthermore, research is increasing regarding underrepresented student groups and the association of social capital, which include resources and support systems (Moschetti & Hudley, 2015; Soria & Stebleton, 2013). The following sections illustrate components of social capital that can benefit first-generation students through a dual enrollment program.

Social Capital Development

Fundamentally, social capital was the thought that people could potentially benefit from their social networks through "actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (Nahapiet & Ghoshal, 1998, p. 243). Individuals' productivity was affected based on the level of trust within social networks (Giddens, 2000; Putnam, 2000; Latkova et al., 2009). Holland (2010) explained that certain norms, including trust and sharing of necessary information, were directly or indirectly established within the social networks.

American sociologist, James Coleman, who was best known for the 1966 publication of "Equality of Educational Opportunity" or *The Coleman Report*, studied and conceptualized social capital. Coleman (1988) viewed social capital as inclusive of differing social classes and not just the dominant, elite group. He parted social

capital into into three categories: a) mutual relationships that were reciprocal of one another (obligations); b) information networks (trustworthiness); and c) norms and sanctions that stimulated the common good over egotism (Coleman, 1988). The functionality of social capital was inclusive of daily useful information, such as rules and permissions (Coleman, 1988).

Stanton-Salazar (1997), a proponent of social capital, studied stratification and counter-stratification forces that may have been present for low socioeconomic students. Stratification, also known as social class, is the method in which different groups of people were placed within society (Stanton-Salazar, 1997). Through the construction of his social capital framework, Stanton-Salazar (1997) characterized essential structures of stratification that explained the problems that often interfered with social capital accumulation for students of color and low socioeconomic students. As a potential solution, counter-stratification processes (i.e. mentorships, social events, resources) were suggested (Stanton-Salazar, 1997). The counter-stratification suggestions did not eliminate stratification structures that existed in society, but the accessibility to institutional agents and resources were crucial in socializing and preparing students for academic success (Stanton-Salazar, 1997).

Understanding the development of social capital is relevant to this case study in that first-generation students could come from different social classes. Regardless of their home environments, educational institutions have the responsibility of ensuring all students have access to the same resources. This case study will also examine different members of students' social networks, which will help delineate stratification structures that may exist for first-generation students.

Informal/Formal Networks

Scholars have argued the outcomes of informal and formal networks as related to educational achievement through social capital (Hurtado & Carter, 1997; Hurtado et al., 2008; Stanton-Salazar, 1997; Stanton-Salazar, 2001a; Stanton-Salazar & Spina, 2000). Families and peers serve as members of students' informal networks, and educational institutions and communities served as their formal networks (Ream, 2005). Stanton-Salazar and Spina (2005) analyzed the informal peer networks of low-income, Mexican-origin adolescents in San Diego, California, which revealed a low-quality of social capital. The results indicated a low-quality of social capital gained from their peers and revealed patterns of "a disquieting and obscure form of alienation," which inferred loneliness and self-containment behaviors from the students (Stanton-Salazar & Spina, 2005, p. 408). Peer interactions appeared quite plentiful at the surface-level; however, "...peer interactions (did) not necessarily translate into relationships of trust and social support" (Stanton-Salazar & Spina, 2005, p. 409).

In a study conducted using educational networks, students who were transitioning from high school to college were able to access valuable and critical information, guidance, and support systems (Stanton-Salazar, 1997; Attinasi, 1989). However, Stanton-Salazar (2001a) argued that access to the resources for some students but not all was part of the stratification system developed by society. Stanton-Salazar (2006) argued that the familiar and acceptable cycles of educational inequality be broken by understanding the social network needs of underrepresented student groups. He recommended social capital be provided through valuable relationships

with institutional agents (Stanton-Salazar, 2001a).

The formal and informal networks are closely related to the research questions in this case study. The questions seek to understand the implications of first-generation students' social capital, which directly involves students' network systems, whether formal or informal. More specifically, I conducted a comparison between first-generation and multi-generation students' social capital. The results of the comparison helped me evaluate whether or not the network systems provided similar social capital to the two student groups.

Relationships

A component of social capital described by Stanton-Salazar (2001a) is the importance of relationships. He commented that, "relationships and networks that transmit vital forms of resources and institutional support that enable young people to become effective participants within mainstream institutional spheres, particularly the school system" (Stanton-Salazar, 2001a, p. 21). The three precepts of social capital (i.e. obligations, trustworthiness, expectations) were based on Coleman's (1988) belief that relationships were founded on the basis of trust. Mutual and reciprocating commitments and expectations were developed, which created quality social capital that could be utilized for future services and knowledge (Coleman, 1988). The services and knowledge were represented through information channels that were shared amongst the social group, which may not have been made available to individuals otherwise (Coleman, 1988). Coleman (1988) suggested that the standards of expected behaviors became characteristics of the group, which served as the guiding principles and rules that helped govern the social group (Coleman, 1988).

Coleman also identified functions of social capital, which included social control, family support, and networks that existed outside of the family (Narayan & Cassidy, 2001; Smith et al., 1995). Moreover, Coleman's work on intergenerational closure brought attention to the importance of parental involvement in developing students' social capital capacity (Dika & Singh, 2002). Lareau (2001) alludes that Coleman's work fundamentally expected the family unit be held accountable for the implementation of standards and norms that would enhance students' opportunities in life.

Established peer relationships enhance students' experiences in a manner that many may not have otherwise received (Quintanar, 2007). Social capital built through the relationships "...facilitate(d) the process of academic and social engagement that students need(ed) to persist towards the culmination of their degree" (Quintanar, 2007, p. 15). Marquez (2017) argued that "as a result... these adolescents share a social and academic space in school" (p. 36). The peer exchange of academic information and social ties directly impacted the quality of trust and social support found in students' peer networks (Stanton-Salazar & Spina, 2005).

The most critical component of this case study pertains to the value of relationships. The study allows first-generation students to discuss the relationships they have with their parents, teachers, administrators, and peers. Each relationship discussed may not directly link to the dual enrollment program; however, a critical analysis is conducted to determine how each relationship provides social capital to first-generation students. Lastly, the relationships themselves are evaluated to determine similarities and differences between first-generation and multi-generation

students.

Institutional Agents

Student achievement was not just based on the efforts of students but also the support structures that were provided by the institutional agents (Stanton-Salazar, 1997; 2001a; Stanton-Salazar et al., 2000; Suárez-Orozco & Suárez-Orozco, 2001). Stanton-Salazar (1997, 2011) suggested that institutional agents referred to as "key players" because they had the ability to share critical resources to all students. Stanton-Salazar (2001a) also described institutional agents as those with authority and high status, who had the obligation of providing networking opportunities for marginalized student groups. Scholars also argued that relationships with key institutional agents were lacking if an educational tracking system was used (Stanton-Salazar, 2001a; Vacca, 2007, 2008). Moreover, students in low-performing tracks were left without opportunities to accumulate social capital which may have negatively impacted their academic success (Stanton-Salazar, 2001a; Vacca, 2007, 2008).

However, Stanton-Salazar and Dornbusch (1995) found that high school students with an increased social network had access to more academic contacts, which positively impacted their overall academic performance. Stanton-Salazar (2001b) found that Latinos who graduated from college and were considered academically successful were found to have a role model (i.e. institutional agent) who took an interest in their success. The social capital of students was dependent on the relationships with institutional agents, as well as the accessibility to resources (Stanton-Salazar, 2001b).

Kim (2012a) contended that high school counselors were responsible for sharing information and resources to their students and serve as essential institutional agents. However, scholars argued that many underrepresented student groups were underserved by their high school counselors (Folk, 2015; Sommerfeld & Bowen, 2013; Stephan, 2013). Stephen (2013) found that underrepresented student populations usually required one-on-one counseling assistance. When comparing the needs of the middle-class to those of low socioeconomic status, Stephen (2013) found that the low socioeconomic students seldom received the comprehensive support needed by their counselors. Stanton-Salazar (2001a) contended that middle-class students had the knowledge and social capital to advocate for themselves.

In this study, I evaluated the social capital that institutional agents provide to first-generation students. Furthermore, the perceptions of first-generation students were gathered and compared to what the institutional agents shared. The resources and networks gathered from the participating groups were evaluated to determine how the institutional agents helped first-generation students accumulate social capital.

Theoretical Framework Summary

Social capital served as the framework for this study, where I aimed to argue for the value and importance of providing support through resources and networking opportunities for first-generation students. Social capital "(consists) of resources and key forms of social support embedded in one's network and associations, and accessible through direct or indirect ties with institutional agents" (Stanton-Salazar, 2011, p. 1067). Schools wishing to close the gaps for first-generation students' social capital could potentially do so by offering a dual enrollment program. Through such a

program, various "relationships and networks that transmit vital forms of resources and institutional support (will) enable young people to become effective participants within mainstream institutional spheres, particularly the school system" (Stanton-Salazar, 2001a, p. 21).

The educational system has an obligation to teach and support all students. The system can choose to either enhance the upper and middle-class student population or work to interrupt the stratification strengths of social reproduction. The latter would assist all student groups in sharing knowledge and advancing academically and socially (Marquez, 2017; Stanton-Salazar, 2001a). Access to social capital networks and resources via dual enrollments program has the power to create similar opportunities for first-generation students.

Dual Enrollment Programming

Social capital could be provided to first-generation students through a number of processes and programs school administrators choose. The program used in this case study is that of dual enrollment programming. Understanding the complexities of a dual enrollment program serve an underlying purpose for this case study. Such a program serves as the pathway school district and high school administrators can use to provide social capital supports and services to first-generation students. Moreover, the dual enrollment program can serve the purpose of supporting students as they transition to their postsecondary studies, both academically and socially.

Decades of previous research have culminated a clear depiction and illustration of first-generation students and the many challenges they have to overcome in order to understand the college-going experience. While colleges and universities have started

taking steps in the right direction, the key to their future success depends on programming that provides a relational component and a quality support system. Colleges and high schools developed partnerships to increase and support students through degree attainment, which exposed students to the college environment in the safe space of their local high school. Such efforts, known as dual enrollment programs, afforded students the opportunity of earning their high school diploma while simultaneously earning college course credit (Bailey et al., 2002; Boswell, 2001).

Research conducted by Engle et al. (2006) expressed the value and importance of meeting the needs of first-generation students. The processes used to meet such needs were vital to students' economic and social futures (Engle et al., 2006).

Woosley and Shepler (2011) further suggested that targeted programs be developed so that first-generation students could better integrate into the academic and social worlds of postsecondary institutions. As such, "...programs that 'bridge' between high schools, community colleges, and four-year institutions (were) proven to be successful" (Terenzini et al., 1996, p. 16). The opportunity to support first-generation students comes from the dual enrollment program, which connect high schools to postsecondary institutions.

Tinto (1975), considered to be the father of dual enrollment programming, began arguing the benefits of these programs through the development and use of his Student Integration Model (SIM). Through his theoretical framework model, Tinto (1975) found that dual enrollment programming served as a strategy to help first-generation and low socioeconomic students integrate into college life. Through the

development of his SIM project, Tinto (1975) found that not only could first-generation students' college achievement increase but their students' persistence levels could also increase. Tinto (1997) defined persistence as students' ability to continue their educational studies despite obstacles and challenges that arose or confronted them.

The Benefits of Dual Enrollment Programming

Reviewing the benefits of a dual enrollment program helps to establish whether or not such a program is instructional sound and based in educational research. As with many programs found in schools, administrators want to ensure that instructionally sound based decisions are made. A direct link exists between the previous research on the benefits of a dual enrollment program and the current program in this case study.

Heath (2008) found that dual enrollment programming increased throughout the country in various forms and agreements as colleges and universities worked to attract a more diverse student population, including first-generation students.

According to the Zinth (2014), over 1.2 million high school students participated in a dual enrollment program by 2009. Taken from a published report from the Education Commission of the States (ECS), Zinth (2014) reported that in the 2011-2012 academic school year, 82% of U.S. high schools had a dual enrollment program, which was an increase over previous years.

The benefits of dual enrollment programs have been noted by many researchers. For example, Terenzini et al. (1996) found that students participating in a dual enrollment program were able to build quality relationships with not only their

current high school environment but their collegial environment as well. Moreover, through the relational aspects, support systems could be built to help enhance the students' (i.e. first-generation) experiences (Woosley & Shepler, 2011). Through the relationships built and support systems implemented in a dual enrollment program, students were 12% more likely to enroll into college within seven months of their high school graduation (Swanson, 2008). Furthermore, dual enrollment students were able to experience a smoother transition into college-life (Lewis & Overman, 2008). As a part of this transition, students were able to make better informed decisions regarding their majors, course loads, and professors (Swanson, 2008).

Woosley and Shepler (2011) found that students' success increased if a collaborative effort existed between the high school teaching staff and the professorship of the postsecondary institution. As part of the collaborative process, Kanny (2014) argued that the implementation of a dual enrollment program should be thoughtful and purposeful to ensure proper student advising and guidance. Scholars found that academic advisors, mentors, and other coaches were able to utilize their skills in supporting underrepresented student groups (Kim, 2012b; Medvide & Blustein, 2010; Sommerfeld & Bowen, 2013; Stephan, 2013). Through purposeful and meaningful support systems and relationships, students were more likely to depend on institutional agents who could assist them with dual enrollment processes and guidelines (Moschetti & Hudley, 2015; Sommerfield & Bowen, 2013; Stephan, 2013; Vorhaus, 2014). When the relational factors and support systems were considered during program implementation, the needs of the receiving student population (i.e.

first-generation) were met in a systematic, comprehensive manner (Marion & Gonzales, 2014).

First-Generation Students in Dual Enrollment Programs

Previous research on the performance of first-generation students in a dual enrollment program aligns directly with this case study. Scholarly writings help illustrate the past experiences of first-generation students. Moreover, these research studies will help when discussing the results of the current case study. Previous researchers will lead to discussions that will either strengthen or confirm the dual enrollment program in this case study.

Hoffman and Robbins (2005) contended that first-generation students were twice as likely to withdraw from their college studies, and Pascarella et al. (2004) argued they were more likely to do so during their first year of enrollment. However, as more and more first-generation students have graduated high school, educators are strengthening their efforts with the use of dual enrollment programs (An, 2013). Researchers suggested that the most crucial component of a dual enrollment program was the embedded support systems of first-generation students' high school teachers, counselors (i.e. advisees), and administrators (Allen & Dadgar, 2012; Astin, 1994; Harnish & Lynch, 2005; Karp et al., 2007; Karp & Hughes, 2008; Kim & Bragg, 2008; Medvide & Blustein, 2010; North & Jacobs, 2010; Swanson, 2008).

Loftin's (2012) study compared first-generation full-time students from the University of Arkansas who previously participated in a dual enrollment program to first-generation students who had not. The findings indicated that dual enrollment programming for first-generation students had a significant positive effect on their

retention (Loftin, 2012). An (2013), however, found that fewer low socioeconomic students, many of whom are first-generation students, actively participated in a dual enrollment program, which did not allow them to take more rigorous courses while in high school. In turn, this created students that were less prepared when they enrolled in college (An, 2013). An (2013) further argued that higher academically achieving students who participated in dual enrollment programming and took more rigorous courses had an advantage over their first-generation, low socioeconomic peers who were not. Loftin (2012) suggested such results were beneficial for policy makers and educational practitioners as they work to increase college enrollment amongst first-generation students.

Additional research suggested that low socioeconomic, first-generation students enrolled in college-level courses while in high school increased their chances of enrolling as a full-time college student after high school graduation (Harnish & Lynch, 2005; Lichtenberger et al., 2014). Through dual enrollment programming, first-generation students were given access to the knowledge and skills needed to succeed in the college environment, which contributed to their retention rates (Learner & Brand, 2006; Woosley & Shepler, 2011). Boswell (2001) and Woosley and Shepler (2011) argued that first-generation students increased their chances of college degree attainment because they started their college courses while in high school. Moreover, An (2013) argued that first-generation students who participated in a dual enrollment program actually benefitted at a greater level than even those participating students who had college-educated parents. Furthermore, college access for underrepresented

student groups was found to be more equitable if they actively participated in a dual enrollment program (Hoffman et al., 2008).

Taylor (2015) addressed two characteristics of first-generation students: minority and low socioeconomic. Taylor (2015) found that minority students were 26% more likely and low socioeconomic students were 30% more likely to continue their studies at the university level if they participated in a dual enrollment program. Moreover, minority students were 14% more likely and low socioeconomic students were 16% more likely to graduate with their college degree when compared to their respective peers who had not participated in a dual enrollment program (Taylor, 2015).

Helping first-generation students build their persistence levels was also key in their academic success. Martinez et al. (2009) evaluated the parental education level of over 3000 students. They found that the lower the education level of the parent, the lower the persistence level of the student (Martinez et al., 2009). The active participation in a dual enrollment program helped combat this finding. The literature claimed that a positive relationship existed between first-generation students who participated in a dual enrollment program, their academic achievement, and their academic persistence (Buzynski, 2011; Loftin, 2012; Stansberry, 2013; Wintermeyer, 2012).

McCarron (2012) and Pascarella et al. (2004) argued that students' persistence levels increased the more time students spent with high school staff and college faculty members via a dual enrollment program. Researchers suggested students' attitudes along with other environmental and psychological factors played a role in

students' persistence levels as well (Bean, 1981; Bean & Metzner, 1985). Tinto (2005) noted that students' academic integration while in high school, including those with partnerships between university-level administrators and high school officials, also contributed to students' persistence levels in college. More specifically, the experiences students gathered from all of their academic courses, including dual enrollment courses, encouraged higher levels of students' engagement and ownership in their learning process (Tinto, 1998).

Santovec (2005) suggested that for student persistence to increase campuswide, all members of the faculty/staff must be on board to help support their students. Astin's (1999) research emphasized that students' achievement and persistence levels were strongly related to their social and academic success. Multiple researchers found that students actively participating in a dual enrollment program earned higher GPAs while in high school, which helped build first- generation students' persistence levels (Ganzert, 2014; Hinojosa & Salinas, 2012; Jones, 2014; Karp et al., 2007; Young et al., 2013).

One study, conducted by Allen and Dadger (2012), determined that students participating in New York's College Now Program, a dual enrollment program, not only earned higher cumulative GPAs but also earned more college credit hours. As a result, their persistence levels increased, and they were able to complete their postsecondary studies at a faster pace (Allen & Dadger, 2012). North and Jacobs (2010) also determined an increase of students moving forward to a college or university after participating in a dual enrollment program from 72.6% in 2005 to

81.4% in 2008. Furthermore, they attributed much of this increase to students' ability to persist (North & Jacobs, 2010).

Enrollment & Participation in a Dual Enrollment Program

Students who wished to enroll and actively participate in dual enrollment programs were required to meet specific entrance guidelines (Karp & Hughes, 2008; Lucas, 2000; Santelices & Wilson, 2010). The entrance qualifications for active participation varied from agreement to agreement; however, underrepresented student groups, including first-generation, were consistently excluded from enrolling (Taylor et al., 2015). Several college and universities set their entrance standards and guidelines that continuously encouraged high-achieving, academically gifted students to enroll (Karp & Hughes, 2008). As a result, fewer first-generation students enrolled in the programs (Karp & Hughes, 2008). Furthermore, Lucas (2000) and Santelices and Wilson (2010) suggested the use of biased college entrance exams did not align with the experiences of minority and low socioeconomic students, which were both characteristics of first-generation students. Thus, fewer underrepresented students met the entrance criteria for active participation (Howley et al., 2013; Lucas, 2000; Santelices & Wilson, 2010).

In some cases, federal, state, and local policies created limitations for first-generation students (Roach et al., 2014). Moreover, many states were in favor of increasing participation in dual enrollment programs; however, the admission requirements encouraged and accepted higher achieving students over mid-level performing students (Howely et al., 2013; Karp, 2014). The researchers also contended that first-generation students could be just as successful as their

academically gifted peers based on their persistence and potential, even though they may have performed at a mid-academic level (Howely et al., 2013; Karp, 2014). For example, Zinth (2014) found that Washington, Ohio, and Illinois had an overrepresentation of affluent, white students. To combat the lack of representation, Howley et al. (2013) suggested that states reconsider such preventative standards to increase dual enrollment participation from low socioeconomic, first-generation, minority students. Furthermore, Howley et al. (2013) argued the importance of transitioning the conversation from "…academic excellence to academic equity" despite students' GPAs" (p. 80). Additionally, Roach et al. (2014) argued that state and local policies created obstacles for first-generation students, including academic challenges (i.e. college entrance exams, GPA) and financial burdens.

Ward and Vargas (2012b) and Zinth (2015) argued that state and federal policies should have been created to help alleviate the financial costs of dual enrollment participation. Scholarships, grants, cost-share, and other incentives should have been considered on a case by case basis (Zinth, 2015; Ward & Vargas, 2012b). The Education Commission of the States (ECS) report suggested that dual enrollment programming be of no cost to students, their participating high schools, or their participating colleges (Ward & Vargas, 2012b; Zinth,2014). Zinth (2014) further suggested that high schools and colleges be fully reimbursed by state and federal government for each students' participation. Tinto (2006) suggested that financial support for students be clearly determined and defined within the partnership agreement.

States that enacted some form of legislation that either appropriated annual funds for students who qualified based on financial need or chose to absorb the cost of tuition and fees saw an increase in underrepresented student populations, including first-generation (Zinth, 2015; Karp et al., 2005). Zinth (2015) further argued that through state and federal funding formulas not only would an increase in dual enrollment programming occur but an increase of college enrollment as well. Other states, including Tennessee, Indiana, and Louisiana, incorporated performance-based funding formulas, which considered the number of dual enrollment credit hours earned by students (Struhl, 2013; Ward & Vargas, 2012b). However, Ward and Vargas (2012b) found that the use of this type of funding formula provided no evidence of an increase in underrepresented student populations.

State and federal legislation may have impacted dual enrollment guidelines and processes, but Meyer (2004) and Harnish and Lynch (2005) believed that high schools and colleges could have done more to increase a more diverse learner population. To encourage and support more first-generation students, Hoffman et al. (2009) argued that well-designed dual enrollment programs should have included the following basic principles: (1) students who demonstrated college readiness (through various means), should represent more minority, underrepresented student groups; (2) students and their families be advised and counseled with realistic data and information needed to fully succeed in college; (3) encourage and motivate high school students by setting high expectations and by eliminating any costs associated with the dual enrollment program; (4) through legislation, federal grants, and other means, significantly reduce the cost of attending a four-year university; and (5) provide a means of observing and

providing feedback between the high schools and the colleges participating in a dual enrollment program to address curriculum issues, concerns with standards, and transition protocols.

Zinth (2014) also suggested specific recommendations via the ECS report so that underrepresented student population enrollment would grow. Zinth (2014) suggested the following: 1) students eligible to participate should be able to regardless of their obstacles; 2) entrance criteria should be inclusive rather than exclusive and allow students to demonstrate ability; 3) based on their ability, students should be allowed to take a significant number of dual enrollment courses and not be limited; 4) when students earn their high school credit for a specific rigorous course, the credit transfer without fail; 5) parent/guardian outreach programs be included in program development; and 6) counseling and proper advising be made available to students and parents/guardians throughout the student's high school career.

The identification process used in this specific case study will also be evaluated. Furthermore, the partnership agreement between the participating school district and community college will be reviewed to ensure a thorough understanding of the guidelines. The processes and guidelines used in the dual enrollment program for this case study will be compared to the suggestions Zinth (2014) offers. The comparison will provide recommendations to program administrators.

Program Monitoring and Evaluation

As with any educational program, the dual enrollment program requires monitoring and an evaluative process. Measures taken from this process can be used to facilitate any necessary changes. Taylor et al (2015) mentioned that when dual

enrollment programs first began, the partnerships were a simple agreement between the two entities (i.e. high school and community college) without many clear policies or guidelines. As programs evolved and grew, so did the complexities of the agreements and partnerships (Taylor et al., 2015). In 2010, the U.S. Department of Education shared that 46 out of 50 states had some sort of governing legislation, including policies and procedures, for dual enrollment programs. The only states without such legislation were Delaware, Alaska, Nebraska, and Connecticut (Taylor et al., 2015; Karp, 2014). Schneider (2010) suggested that dual enrollment policies and practices, including program monitoring and evaluation, be the states' responsibility since the majority of higher education funding came from the state. Taylor et al. (2015) and Karp (2014) also argued that states should bear the responsibility of governing dual enrollment programs. Different states' program monitoring and evaluations were determined to have different areas of focus; therefore, inconsistencies were found from state to state, including the enrollment of firstgeneration students (Taylor et al., 2015; Karp, 2014). For example, some states focused and implemented policies on specific content standards that improved college success; whereas, other states may have focused more on entrance guidelines and teacher credentialing (Hoffman et al., 2009; Karp, 2014).

Very few states established policies that ensured dual enrollment programming was accessible to all students, including underrepresented, first-generation student populations (Ward & Vargas, 2012b). Ward and Vargas (2012b) argued that states which ensured quality programming and developed processes for monitoring student progress were programs that supported the underrepresented, first-generation student

populations. Pretlow and Patterson (2015) found that dual enrollment programs which provided clear and consistent state-wide processes and guidelines allowed for more diverse, underrepresented students groups. Additionally, they suggested that programming should have distinct processes so that students and high school personnel were able to speak clearly about the dual enrollment programs (Pretlow & Patterson, 2015).

Some oversight of program monitoring and evaluation was given to the college partnered with the high school, including instructors' credentials and transferability of student-earned credits (Hoffman, 2012; Karp et al., 2005). For example, Taylor et al. (2015) found that in many states the transferability of credits was at the discretion of the participating colleges. This came as a result from many colleges and universities perceiving that the dual enrollment courses taken at the high school level lacked the level of rigor expected in a college-level course (Sponsler et al., 2015; Hunt & Carroll, 2006). Taylor et al. (2015) suggested that state policies should ensure credits transferred to any two or four-year university. If credits were not mandatorily transferable, students' and parents' perception of dual enrollment courses may have been viewed as less than university-level courses (Sponsler et al., 2015; Hunt & Carroll, 2006). To be effective, Ward and Vargas (2012b) argued that data that monitors the quality of the program and the quantitative outcomes of dual enrollment programs be transparent in order for true accountability to exist similarly to state and local accountability data. Out of the 46 states who had dual enrollment programming, only 30 had state mandates of reporting their data (Zinth, 2014). Zinth (2014) further suggested that data from dual enrollment programs be transparent, specifically for

student demographics, number of credits earned, number of students who enroll in college, number of credits that are transferred from high school to college, and the students' level of persistence and success. Zinth (2014) argued that this level of transparency would ensure program sustainability and could eventually impact the underrepresented student population. Furthermore, Karp (2014) suggested that dual enrollment programming become a discussion for national policy reform so that the federal government could help solidify a more purposeful and consistent program.

Summary

In 2010, the National Alliance of Concurrent Enrollment Partnerships (NACEP) suggested that dual enrollment programming efforts be built through collaborative efforts between high schools and universities (Lowe, 2010). Their efforts led to an increase in achievement both at the high school and college levels (Hoffman et al., 2009; Karp et al., 2007). Moreover, many first-generation students who participated in dual enrollment programming while in high school increased their chances of enrolling into the college that was partnered with their high school (Bailey et al., 2002; Orr, 1998). For example, Morrison (2008) found that students who participated in the North Iowa Area Community College dual enrollment program throughout their high school career were about twenty percent more likely to attend the community college upon high school graduation.

Dual enrollment programming gave first-generation students the opportunity to recognize the relationship between their high school and college experiences (Medvide & Blustein, 2010). This recognition allowed students' confidence levels to increase when facing obstacles that may have prohibited them from earning their

college degree (Medvide & Blustein, 2010). A "cultural shift" existed for first-generation students transitioning to college; therefore, dual enrollment programming provided students with college readiness standards and increased their persistence (D'Amico & Dika, 2013). Moreover, college readiness was a factor for many first-generation students, whether related to their cognitive ability or their familiarity with the college environment (Byrd & McDonald, 2005).

Dual enrollment programs directly aligned with the needs of first-generation students although they remained underrepresented. They too could become familiar with the college environment and expectations, the rigor of the courses taken, and could serve as a springboard into eventual degree attainment when compared to their multi-generation peers. The lack of specific attention to ensure accessibility and support into dual enrollment programming could be cause for the underrepresentation of first-generation students in dual enrollment programming (Tobolowsky & Allen, 2016).

CHAPTER THREE: METHODOLOGY

Introduction and Purpose

As previously discussed, scholars have studied the implications of dual enrollment programming for first-generation students. Their studies contended that first-generation students: a) engaged in rigorous college-level coursework; b) increased their academic achievement; c) had higher persistence levels,; d) earned an increased number of college credits; e) better acclimated to the college environment; and f) increased their likelihood of attending a four-year university and earning their college degree (An, 2013; Buzynski, 2011; Engle & Tinto, 2008; Loftin, 2012; Morrison, 2008; Stansberry, 2013; Swanson, 2010; Terenzini et al., 1996; Wintermeyer, 2012). The purpose of this case study was to critically examine one dual enrollment program located in a large public suburban school district in Texas. To do so, I examined the dual enrollment program's implementation guidelines and processes, which helped me evaluate considerations made for first-generation students. I also evaluated the program's supports and services systems (i.e. social capital) for first-generation students. I conducted two comparisons: 1) the perceptions of the program administrators to those of first-generation students; and 2) the perceptions of first-generation students to their multi-generation peers. Through the comparisons, I was able to evaluate the program's intended outcomes versus students' perceptions.

Research Design

I utilized a qualitative-methods approach, which allowed me to decipher the perspectives and views, which were gathered through open-ended questions and discussions (Johnson & Christensen, 2008). I sought to gather the qualitative data

through the perspectives and personal experiences of the program administrators involved in program development and implementation. I also gathered perspective feedback from a group of first-generation students and a group of multi-generation students who were actively participating in the dual enrollment program. I also studied and evaluated the initial enrollment requirements students must meet to participate in the dual enrollment program. I sought to gather the program administrators' rationale and thought processes when developing and implementing the qualifiers. Furthermore, I reviewed the evaluative processes used to determine whether the program was meeting its intended outcomes and objectives.

I reviewed descriptive data to determine the number of high school senior-level students participating in the dual enrollment program, as well as courses and course loads of each student. The data were compared between first-generation and multigeneration students. Finally, the descriptive data helped to illustrate a depiction of the students who were actively participating in the dual enrollment program. I made comparisons between multi-generation and first-generation students participating in the dual enrollment program, which helped me further determine whether the goals of the program were met.

Research Questions

The following research questions guided the study:

RQ1: What considerations of social capital are given to first-generation students by administrators during program development and implementation of a dual enrollment program?

RQ2: How do the social capital networks and resources compare between

first-generation and multi-generation students via the dual enrollment program?

RQ3: What are the perceptions of social capital of first-generation students, and how are they aligned with the administrators' perceptions within a dual enrollment context?

Sample Population

A convenience sample of six administrators were recruited to interview for this case study from the school district and high school campus. A sample of five first-generation students and five multi-generation students were asked to participate in separate focus groups to gather their perspectives of the program. Therefore, the results were inclusive of all constituents and stakeholders. Table 1 provides the organizational partnership member and the student groups who made up the sample population.

Table 1
Sample Population

Organizational Partnership Member	Stakeholders		
School District	Dual enrollment program administrators		
High School	Administrators (i.e. principal, associate principal program administrator, counselor)		
Focus Group #1	First-generation students participating in the dual enrollment program		
Focus Group #2	Multi-generation students participating in the dual enrollment program		

Participant Forms and Profiles

All consent forms and applications were created from templates shared by the participating school district and the sponsoring university. All forms were delivered to the participants by me or the Campus Research Sponsor. A consistent and fair attempt was made by examining my personal biases as an administrator. I also triangulated the data and utilized a member-checking process to present accurate findings.

Program Administrators

Program administrators represented two educational entities, district-level and high school level. The criteria for selecting the administrators included the following:

1) had a role in his or her job description that was associated with the dual enrollment program; 2) were members of the school district or the high school campus administrative teams used in this case study; and 3) submitted the appropriate consent form prior to answering interview questions. Program administrators were assigned pseudonyms for the purpose of anonymity. Participants had an average of 10 years administrative experience, and an average of 6 years in their current administrative role.

The high school program administrators included the principal, the associate principal, the dual enrollment administrator (DEA), and the dual enrollment counselor (DEC). The principal served as the chief supervisor of the program at GHS. She submits recommendations for hiring of credentialed personnel to the human resources department at the district level and serves as their annual appraiser. The associate principal of GHS also serves as an annual appraiser for credentialed staff. She acts as the key facilitator of the campus master schedule, which included the dual enrollment

courses that were offered as well as the number of sections available.

The Dual Enrollment Administrator (DEA) served as the primary facilitator of students' dual enrollment applications, college-readiness testing procedures, student registration and withdrawal of dual enrollment courses, and other management aspects. The DEA works with the campus curriculum director regarding dual enrollment curriculum, teacher trainings, and gradebook management. She also served as the key contact for parental informational meetings and student share sessions where information regarding the dual enrollment program is shared. Lastly, the Dual Enrollment Counselor (DEC) works together with the DEA in the areas of student registration, course selections and withdrawals, and college-readiness testing procedures.

District-level administrators participated in this case study as well. The school district's coordinator for advanced programming serves as the key catalyst for the gifted and talented program, Advanced Placement, district-created advanced courses, and the dual enrollment program. She also serves as the program coordinator and district-level facilitator of the dual enrollment program. As the district coordinator, she serves as the liaison between PISD and the community college. Finally, she ensures that all standards and expectations set forth by the community college are communicated to campus-level administrators.

The district dual enrollment administrator serves a more direct role in assisting campuses with dual enrollment registration processes. He works closely with the campus DEA, the campus curriculum director, and the DEC to develop "College Talks," which are similar to the campus informational meetings for students and

parents. He is was able to address district-level information through the "College Talks;" however, he is not able to address any campus-specific procedures processes or information. He plans the district-level college events that help provides students with resources for college applications, scholarships and financial aid. Lastly, he works with the DEA and DEC in facilitating and organizing college visits and field trips.

Table 2 outlines an overview of the program administrators, including their title, the educational institution each represents, the total number of years of administrative experience, the number of years in their current roles, and a brief list of dual enrollment program responsibilities.

Table 2

Program Administrators Overview

Program	Title	Educational	Admin	Current	Role in
Admin		Institution	Exp	Role	Dual Enrollment Program
Shelby	Principal	High School	19	4.5	Supervisor; Hiring/Evaluation
Verdana	•	-			of Credentials Personnel
Callie	Associate	High School	7	3	Master Schedule; Evaluation of
Armstrong	Principal				Credentialed Personnel
Sarah	Dual	High School	7	7	Facilitator of applications,
Ausbacher	Enrollment				testing, & registration; Parent &
	Administrator				student informational meetings
Nancy	Dir of Adv	District Level	15	3	Lead facilitator; Liaison
Kingston	Academics				between school district and
					college; Program coordinator
					for advanced level courses
Henry	District Dual	District Level	2	2	Registration, College Talks,
Enriquez	Enrollment				College Events, College
•	Admin				Application Help, Scholarship
					& Financial Aid Resource,
					Facilitate College Visits &
					Field Trips
Michelle	Dual	High School	10	10	Student schedules; Course
Thompson	Enrollment	C			registration & withdrawal;
1	Counselor				Parent & student informational
					meetings
•					

Student Focus Groups

Each student was invited to participate in the focus group and was given a parent consent form. The parent consent form introduced me (the researcher), shared the purpose of the study, indicated the time needed, and shared confidentiality information. I used the following criteria for student participation in developing the two student focus groups: 1) must have been between the ages of 14 and 17 during the focus group session, which was a requirement of the IRB approval; 2) must have been classified a senior; 3) must have been actively enrolled in a minimum of two dual enrollment courses during the spring semester of their senior year; and 4) must have submitted the appropriate parent consent form prior to the day and time the focus groups were held. I assigned each participant a pseudonym as he or she submitted the parent consent form.

A student schedule report was run using a high school database by a member of the high school campus administrative team who had access to the data but was not directly associated with the dual enrollment program. The student schedule report determined that out of the potential 745 seniors, 53 were found to be enrolled in a minimum of two dual enrollment courses during the spring semester. Next, I used the campus-specific process to determine which of the 53 seniors were first-generation, which was developed the DEA. I learned how first-generation students were identified since "first-generation" status is not a recognized indicator in the State Accountability System of Texas. Additionally, generational status is not recorded on students' transcripts but is critical to this case study.

The process for identifying first-generation students began as student

conferences were held with their alpha counselors to determine course selections for the following school year. Students were asked to submit information, including first-generation status, post-graduation plans, universities of interest, and scholarships received using a digital form (see Appendix B). Students were able to submit this information using laptops provided in the counselors' office suite before or after their individual student-counselor conference. Students were also able to complete this information on their cell phones. Secretarial staff ensured students submitted their information, and they confirmed with parents and guardians that the information was accurate. The results of this process revealed that 13 of the 53 high school seniors in the program were first-generation. Of the 13 first-generation students, 12 attended an informational meeting and were invited to participate in the focus group. Each student was given a parent consent form as well.

Utilizing the same schedule report, 40 of the 53 high school seniors had at least one parent who graduated from a four-year university (i.e. multi-generation). A process was used for randomization purposes to select which multi-generation students would be invited to attend the informational meeting. The students were listed alphabetically on a spreadsheet and numbered 1 – 40. An electronic random number generator was used to determine which 12 students to invite to the informational meeting. Only 12 multi-generation students were invited to the informational presentation to remain consistent with the first-generation student group.

Additional demographic data was gathered from each participating students' transcript. Students' gender and ethnicity are initially gathered from parents at the time of enrollment in the school district. Additionally, students' socioeconomic status is

determined if and when students submit their "Free/Reduced Lunch Application." Table 3 shows the demographic data for each student.

Table 3
Student Demographic Overview

Student Name	Gender	Ethnicity	Generational Status
Kevin	Male	White	First
Elizabeth	Female	White	First
*Kana	Female	Asian	First
*Anthony	Male	Hispanic/Latino	First
Aponi	Female	Hispanic/Latino	First
*Emi	Female	Asian	Multi
Abigail	Female	White	Multi
Imala	Female	Hispanic/Latino	Multi
Rena	Female	Asian	Multi
Jennifer	Female	White	Multi

^{*}Low socio-economic status students

Interview Protocols

The interview protocol for the study contained two different elements. First, a one-on-one structured interview process was used with each program administrator to gather their insights and perspectives. Open-ended questions were used during the interview process, which also provided opportunities for discussion between me and the administrator. The guiding questions provided in Appendices C and D helped structure the interviews that were held with the program administrators. The results of the guiding questions helped provide in-depth and critical information for the different components of the dual enrollment program. Each interview session was conducted inperson or via Zoom video session and was audio recorded and conducted in an agreed-upon time and location. Notes were taken during each of the interviews. Voice recording of each interview session was used to not lose any important information provided by the interviewees.

A similar interview protocol was used for the two student focus groups. I used the responses to the open-ended interview questions and created a comprehensive answer that incorporated the groups' responses. As questions were asked (see appendix E), some students responded based on what their peers said, which led additional unstructured conversations. Both student focus groups were conducted at the high school site with the Campus Research Sponsor present. I also compared students' transcripts to capture their academic experience. Moreover, similarities and differences were distinguished between the first-generation student group and program administrators.

Methods and Data Collection

Program Administrators

In-depth interviews were used to gather the "...participants' thoughts, beliefs, knowledge, reasoning, motivations, and feelings" (Johnson and Christensen, 2012, p. 202). More specifically, Patton's conversational interviews and standardized openended interviews were utilized (Patton, 1987). The interviews included questions that evolved into less structured conversations (Patton, 1987). Questions were asked in a natural tone and were pre-developed. They were asked in the same manner to each administrator (Patton, 1987). Appendices C and D provides the list of questions asked to each of the interviewees.

The questions asked to the participants were divided into four sections. The first section included general questions about the participant and the dual enrollment program. They were asked to describe his or her professional role related to the program, and they were asked to describe the objectives and intentions of the program.

The second section contained questions related to students, including: a) how are first-generation students identified; b) how and which students are eligible for participation in the dual enrollment program; c) what are the requirements for participation; and d) what input does the participant have regarding students' acceptance into the program. The third section facilitated conversations about students' social capital accumulation. The final section allowed participants to reflect on perceived barriers first-generation students may face which could prevent them from participating in the dual enrollment program. In addition to asking for responses to the interview questions, basic demographic information was gathered, including the following: a) role, professionally and specific to the dual enrollment program; b) highest degree earned; c) number of years in administration; and d) number of years in present position.

Student Focus Groups

The purpose of the different student focus groups was to gather the differing perspectives of the dual enrollment program. Each focus group was asked identical questions, which led to unstructured, more open-ended conversations. Both student focus groups were conducted at the high school site with the Campus Research Sponsor present.

The focus group questions sought to gather the experiences and perceptions of the dual enrollment program, which were divided into three sets. The first set included general questions about the participants and how they learned of the dual enrollment program, including its potential benefits. The second set regarded the rigorous coursework that was available, attempted, and completed throughout their high school experience. The final set of questions opened a discussion on supports (social capital)

provided to them via the dual enrollment program. This set of questions included students' reflections on social capital provided by their parents and other institutional agents.

Data Analysis

Program Administrators

The first function of analyzing the qualitative data was to transcribe each individual interview. A more trustworthy analysis was created by reviewing and comparing each transcript line-by-line focusing and evaluating for codes (Saldana, 2016). The data were organized and coded using descriptive words and category names using open coding. Saldana (2016) described open coding as the practice of discerning qualitative data into parts, and by examining the data, similarities and differences of the transcripts could be determined.

I created inductive and deductive codes while analyzing the qualitative data. Inductive and deductive analysis were utilized to develop common themes and codes from the transcripts (i.e. interviews) and to determine whether additional information was needed (Creswell, 2014). More specifically, the inductive analysis was used to build concepts and codes (See Appendices H and I), which were based on the framework of the study (see Chapter 2, Theoretical Framework) and grouped into categories (Merriam & Tisdell, 2016). Deductive analysis, based on the data, helped me determine if additional evidence was needed to help support the categories (Merriam & Tisdell, 2016), which were used to determine if the themes and codes supported students' social capital.

To evaluate the interview results, a summary of key themes and codes were sent to some of the program administrators to ensure the accuracy of their interviews were captured. This process, known as interpretive validity, which Johnson and Christensen (2008) say, "accurately (portrayed) the meaning given by the (interview) participants" (p. 265), helped ensure the accuracy of their perceptions and experiences. Moreover, member checking methods were utilized to capture the interpretive validity of stakeholders (see Table 4). The Interpretative Validity Evaluation offered questions that were utilized during the member-checking process. The questions offered participants the opportunity for further clarifications and recommended changes. Furthermore, low-inference descriptors were used to ensure the stakeholders' language, dialect, and personal meanings were captured accurately (Johnson & Christensen., 2008).

Table 4

Interpretative Validity Evaluation

Criteria	Yes	No	Clarifications, Comments, and/or Recommended Changes
Did the overall interview themes describe or			-
understand the information of interest from			
your perspective?			
Did the activities, attributes, and			
characteristics describe or understand the			
information of interest from your			
perspective?			
Are there any other comments you would			
prefer to add that may not have been			
captured during the interview?			

Finally, miscommunications or misinterpretations were cleared up prior to writing the findings.

Student Focus Groups

The answers students provided during the focus group conversations, as well as notes taken, were read to determine recurrent themes through a reduction process. The process helped me to critically uncover the essence of the first-generation and multi-generation students' perceptions. The descriptive data, which were gathered from students' high school transcripts, were also analyzed. The data were used to develop a comprehensive picture of the students participating in this case study (i.e. race/ethnicity, gender, socio-economic status). Additionally, dual enrollment course data and student achievement data were used to make comparisons between multigeneration and first-generation students.

Conclusion

The methodology I used in this study sought to meet the research objectives, which were to: a) determine the considerations of social capital that were given to first-generation students by administrators via the dual enrollment program; b) determine if and how first-generation students had access to the same social capital networks as multi-generation students via the dual enrollment program; and c) determine how the perceptions of social capital of first-generation students were aligned with those of program administrators' within a dual enrollment context. Interviews were conducted with various program administrators and student focus groups. I used the member checking process to ensure interpretive validity, which prevented misinterpretations and miscommunications between the administrators and me. Additionally, descriptive data were used to paint a comprehensive picture of the two student focus groups. Achievement data allowed comparisons to be made between

multi-generation and first-generation students.

CHAPTER FOUR: MAJOR FINDINGS

Introduction

The purpose of this chapter is to present the findings of this case study, which are twofold: 1) I share the social capital that first-generation students were exposed to prior to the dual enrollment program; and 2) I present the social capital that first-generation students received during their participation in the program. This chapter is divided into three sections. I begin by first re-visiting the research questions along with a brief explanation of how the data were used to answer the questions. Next, the major findings of the case study are shared. Finally, a summary of the research results is provided.

Research Questions

I used the research questions to help guide this study to uncover similarities and differences in social capital based on the participants' perceptions. The initial question asked, "What considerations of social capital are given to first-generation students by administrators during program development and implementation of a dual enrollment program?" Program administrators were given the opportunity to reflect on their professional experiences. Individual data were collected, and I developed a comprehensive answer to the questions that were representative of the program administrators. The next question asked, "How do the social capital networks and resources compare between first-generation and multi-generation students via the dual enrollment program?" I compared the findings of the two student groups to help answer the question. The final question asked, "What are the perceptions of social capital of first-generation students, and how are they aligned with the administrators'

perceptions within a dual enrollment context?" Through an evaluative process, I examined the perceptions of first-generation students to those of program administrators, which resulted in similarities and differences.

Major Findings

The findings of this case study are shared in four sections. First, I share the findings of the descriptive data, which were found after reviewing the 10 student participants' high school transcripts. Next, I review the findings of the program administrators' perceptions of social capital that are directly or indirectly fostered for first-generation students via the dual enrollment program. Afterwards, I compare the perceptions of the two student groups (i.e. first-generation, multi-generation) regarding social capital and the dual enrollment program. The final section provides a comparison of the social capital provided by program administrators to the lived experiences of the first-generation student group. The findings helped determine if the first-generation students' social capital was aligned to what program administrators believe they offer them.

A Representation of the Campus and Student Participants Grant High School

During the 2019-2020 school year, GHS had a student enrollment of over 3,100 students from multiple ethnic and racial backgrounds. As PISD sought to expand college-ready opportunities for students, the campus determined it would utilize the prospects to benefit their students. Because most students at the campus were students of color, the campus set a goal to ensure the demographics of those in advanced courses (i.e. dual enrollment) were aligned with the overall student

demographics of the campus. I compared the ethnicities represented in the dual enrollment program to those of the campus in Table 5 using the most available data.

Grant High School Demographic Dual Enrollment Data

Table 5

	Campus	Dual Enrollment Participation	Difference
African American	24%	11%	-13%
Asian	12%	25%	+13%
Hispanic/Latino	36%	32%	-4%
White	24%	27%	+3%
Two or More Races	4%	5%	+1%
Free/Reduced Lunch	52%	40%	-12%

This comparison helped to establish an understanding of the students' demographics at GHS. Furthermore, these data evidenced that the no specific student demographic was absent from the program. However, the data revealed that a larger difference was found amongst the African American students, as well as those on Free/Reduced Lunch.

GHS was evaluated on an annual basis by the Texas State Accountability System. The campus received credit for senior-level students who were enrolled in an advanced level course (i.e. dual enrollment) as it evaluated the "College, Career, and Military Readiness" component⁴. Table 6 presents the ethnic breakdown of seniors at GHS participating in the dual enrollment program (N=185). Moreover, the table also includes the possible student sample size I used in this case study. From the possible sample size, 25% (n=13) were first-generation students, and 75% (n=40) were multigeneration students.

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⁴ Campus-specific document; source withheld for anonymity.

Table 6
Senior Level Dual Enrollment Data

	Number of Students	African American	Asian	Hispanic/Latino	White	Two or More Races	Free/ Reduced Lunch
Seniors in	185	15%	25%	32%	25%	3%	40%
Program							
Possible	53	8%	23%	30%	47%	0%	15%
Sample							
First-	13	15%	23%	38%	23%	0%	46%
Generation							
Multi-	40	2%	23%	29%	45%	0%	15%
Generation							

The data in Table 6 allowed me to understand the demographic distribution of the students who were considered for this case study.

Academic Data of Student Focus Groups

I compared and evaluated the transcripts of the students who participated in this case study. The process helped me understand in which middle and high school courses each student was enrolled. I was able to use the data to make comparisons between the two focus groups, which resulted in an imbalance between the groups of students. The first disproportionality was found based on students' middle school courses, and the next was based on students' high school advanced-level courses.

Students were able to enroll in high school credit-bearing courses while in middle school. The first-generation student focus group earned 10.5 high school credits altogether; whereas, the multi-generation student focus group's total was 16 high school credits. Next, I evaluated the advance-level course credits the participating students earned in high school, which included Advanced Placement (AP), dual

enrollment, and other advanced-level⁵ courses as determined by the school district. The average number of advanced level courses taken by the first-generation student focus group was 18, and the average number for multi-generation is 21.

Additionally, first-generation students successfully completed 22 dual enrollment courses (average of 4.4 courses per student), while multi-generation students completed 24 (average of 4.8 courses per student). The first-generation student group earned a total of 124 college credit hours with an average of 24.8 per student. The multi-generation student group earned a total of 134 college credit hours with an average of 26.8 per student.

The first-generation students shared that the part of the imbalances were due to their unawareness. For example, they were unaware of the district's advanced-level requirements, which included the following: a) students must have earned a minimum of a 75 in their previous sequenced advanced course (i.e., Advanced Placement, district-created advanced course) or a minimum of an 85 in their previous sequenced on-level course; and b) meet college entrance exam criteria based on TSI, ACT, ACT-Aspire, PSAT, or SAT qualifying scores. Furthermore, they shared that their parents did not know the expectations either. The multi-generation students agreed that their parents helped them decide which courses they would enroll in both in middle and high school. Additionally, the students agreed that their parents would encourage them to visit with their counselor, who also provided advisement.

As a result of these findings, the social capital varied between the two groups of students. The social capital supports were lacking for first-generation students. The

⁵ PISD had created advanced-level courses that are closely associated with Pre-Advanced Placement standards but does not refer to them as such.

students did not have the critical information (i.e. resources) needed to make an informed decision. Additionally, their parents were not able to provide support due to their unawareness. Parents, however, helped their multi-generation students accumulate social capital by providing critical information. Furthermore, they supported their students in a manner unfamiliar to the first-generation students.

All high school courses in PISD bear grade points, which were based on students' semester grades. Advanced-level courses earned students additional grade points, and the points were used towards students' overall Grade Point Average (GPA) and class ranking. Using a 6.0 GPA scale, Table 7 clarifies the number of points students earned based on the level of the course and the semester grade earned.

Table 7

Grade Points Earned Per Semester

Semester Grade Earned	On-Level Course	Advanced-Level Course
90 - 100	6	7
80 - 89	5	6
75 – 79	4	5
70 - 74	3	4
Below 70	0	0

All students in PISD were required to take on-level courses for which no advanced level option was offered. Each student's GPA included points earned from their advanced-level and on-level courses, which helped to fulfill state and school district graduation requirements. Table 9 lists each focus group participants' GPA based on the school district's 6.0 scale along with his/her class rank. GPA and class rank are not inclusive of students' Spring, 2020 courses as those grades were not finalized at the time of the study.

Table 9

Participants' Grade Point Average and Class Rank

First-Generation Students				
Student	GPA	Class Rank (Out of 762)	Top 10%?	
Kevin	6.2857	126	No	
Elizabeth	6.4348	96	No	
Kana	6.4694	86	No	
Aponi	6.2245	139	No	
Anthony	6.2391	136	No	
Multi-Generation Students				
Imala	6.5435	65	Yes	
Emi	6.5962	54	Yes	
Abigail	6.3542	118	No	
Rena	6.7083	34	Yes	
Jennifer	6.7333	28	Yes	

Individual grade point averages for the first-generation focus group were lower than that of the multi-generation focus group. Only one multi-generation participant, Abigail, earned a GPA that fell in the range of the first-generation group. The average GPA for the first-generation focus group was 6.3307 and 6.5871 for the multi-generation focus group. Additionally, Abigail was the only multi-generation participant not in the top 10% of the graduating class; whereas, none of the first-generation participants were ranked in the top 10%. They were, however, in the top quarter of the graduating class.

GPA and class rank implications for first-generation students substantially impacted their social capital. First-generation students shared their lack of awareness of the school district's grade requirements to enroll in some of the advanced-level courses. Therefore, first-generation students who may have performed well in some of these courses were not afforded the same opportunities as those students who were aware. Further implications of their GPA and class rank could impact first-generation

students beyond high school. For example, scholarship opportunities (i.e. resources) could be void for students not earning a specific GPA. Additionally, first-generation students not in the top 10% of the class may miss opportunities of attending universities who value class ranks in their acceptance processes.

Social Capital Fostered by Program Administrators

Prior to initiating the dual enrollment program into its curriculum and instruction, PISD had two advanced-level course opportunities for students, including Advanced Placement and the district-created advanced courses.⁶ Initializing a dual enrollment program began with the school district's goal of expanding college-ready opportunities for students. Ms. Kingston, Director of Advanced Level Academics for the school district, stated,

Our goal as a district has always been to ensure we prepare as many of our students as possible for college. Although we understand not everyone is destined to attend a four-year university, we want to enhance their opportunities.

Program administrators began working closely with the local community college in developing a partnership agreement. Within the agreement terms, academically eligible students would have the opportunity of taking a college-level course while in high school and earn both high school and college-level credit; hence, the beginning of the dual enrollment program. The program started off small with only a few high school campuses offering minimal courses due to the lack of teacher credentialing. As parent and student interest grew, so did the school district's goal of

⁶ PISD had created advanced-level courses that were closely associated with Pre-Advanced Placement standards but did not refer to them as such.

offering dual enrollment courses on all its high school campuses. Teachers with a master's degree in specific content areas were highly sought after in order to offer additional core courses. The school district's dual enrollment program became the second largest in the state as more and more credentialed staff were hired and course offerings increased, according to Ms. Kingston.

Program administrators perceived that their efforts in program implementation were designed for students' best interest as they worked to ensure participating students would be college ready. Implementation processes were consistent since the dual enrollment program was implemented, although updates and revisions were made over the years. Program administrators determined the purpose of the program was to provide students college-readiness exposure. "This can be quite an undertaking. Making sure we provide as much as we can to our students is critical. Sometimes I question myself whether the information we shared was enough," stated Ms. Ausbacher, the DEA. Additionally, administrators intended the program offer support services (i.e. tutorials, counseling, advisement) and resources (i.e. college terminology, application and financial aid processes) that would assist students in accumulating social capital. In the following sub-sections, I discuss some of the major findings from speaking to administrators: 1) resources made available to students; 2) support services provided via the dual enrollment program; and 3) student relationships with institutional agents.

Resources Made Available to Students

Program administrators determined some of the resources related to the dual enrollment program included application and financial aid processes and documents,

as well as college-related documents. Also considered a resource were the annual dual enrollment meetings program administrators host for students and parents. Program administrators initiate students' interest in the program through the informational meetings. The meetings also provide information pertinent to student enrollment, deadlines, and program updates. Additionally, program administrators discuss specific processes (i.e. college applications, financial aid and scholarship) critical to dual enrollment students. Handouts are also provided during the informational meetings by program administrators, which also include a hardcopy of the presentations as well as contact information should students and parents have questions.

Administrators in this case study agreed that some of the resources related to the dual enrollment program should be multi-lingual. "We have to do better and become more deliberate in our practice. In a district our size, we have so many languages that at times we don't have the appropriate translators, which makes things difficult," shared Ms. Kingston. Program administrators admitted that most of the resources were made available in Spanish; however, they recognized the multitude of other languages that represented their diverse community. At the time of the interviews, administrators were making efforts to translate their program's information to additional languages.

Critical to accumulating social capital for students is ensuring resources are made available to them. The informational meetings were an invaluable component of the dual enrollment program. Other resources allowed students to access and view documents related to the dual enrollment program and college enrollment.

Understanding what the documents look like and how to complete them begins to

acclimate first-generation students to college-life. However, as determined by the program administrators, language barriers proved to be missed opportunities for some students.

Support Services

Program administrators agreed that students eligible for participation in the program should be supported in reaching their full academic potential. Ms. Ausbacher, the DEA, stated that, "once students have shown they are academically able to perform in our (dual enrollment program), our job is to continue supporting them so they can continue to fly high." The support services as indicated by program administrators range from financial to academic. Essentially, program administrators want to ensure that students participating in the dual enrollment program are continuously supported, especially in times of struggle.

Program administrators perceived that the support services offered through the dual enrollment program would also increase students' college knowledge. Their desire for successful student transition to college was at the forefront when establishing the support services. The findings of this study revealed three essential support services: a) financial support; b) institutional agent support; and c) campusspecific support.

Financial Support

The partnership agreement between the school district and community college allowed all tuition costs to be waived by the college. Therefore, the cost of a 3-hour dual enrollment college course was at a rate of \$72.00; whereas, students were responsible for only paying the administrative college fees. For many of their low

socioeconomic students who qualified for the free-reduced lunch program, program administrators provided financial support by means of scholarship opportunities from local community agencies. Additionally, for students' extenuating circumstances, district-level administrators in conjunction with the community college were able to waive the administrative college fees altogether. Waiving of fees, however, was rare as most students received scholarships from outside community agencies that worked closely with the school district. Program administrators projected that approximately 25% of dual enrollment students across the school district and GHS received either scholarships or fee waivers.

Low socio-economic students' social capital is accumulated when financial assistance is provided. Moreover, the processes and financial documents required when submitting applications serve as a learning experience for students who may need additional assistance as they transition to college. Social capital is further provided to students in a social manner. Students who lack a sense of belonging due to social status (i.e. low income) are able to acclimate to a network if their financial burdens are addressed.

Institutional Agent Support

Program administrators stated that institutional agents were responsible for specific support services. The roles and responsibilities of some of the institutional agents may have some overlap, which program administrators purposefully established. The overlap was to ensure that the support services were provided to students without fail. In other words, if one institutional agent did not provide a support, other institutional agents were able to provide the support. Campus-level

administrators were able to more directly assist students when compared to district-level administrators. Two specific administrators, Dual Enrollment Counselor and Dual Enrollment Administrator, were able to directly support students.

Through their combined efforts, the DEC and the DEA were able to support students with the following: a) dual enrollment course selection and registration; b) career exploration; c) goalsetting; d) social and emotional support; and e) financial aid. The DEC provided guidance to students when selecting appropriate dual enrollment courses. By discussing students' academic strengths and areas of concern, she was able to provide direction to them. Based on the direction provided, students chose to take the dual enrollment course, its corresponding advanced-level course, or its corresponding on-level course. Students who chose to participate in the dual enrollment course were further supported by the DEA. She ensured students were properly registered for the course and that payment was submitted to the community college. The two administrators helped students explore possible careers, reviewed college-level degree plans, and helped establish short-term and long-term goals. They also aligned dual enrollment courses with possible four-year degree plans. Program administrators also outlined specific supports for which the DEC and the DEA were solely responsible. The DEC, like the other alpha counselors, ensured students' wellbeing by providing social and emotional support in times of stress and anxiety. The DEA was responsible for determining students' financial aid needs. She also followed up with scholarship opportunities and fee waivers for qualifying students. She also worked to organize and develop college-related field trips for students.

The support services offered to students by the two institutional agents were

critical in providing social capital to dual enrollment students. Through the supports provided, the administrators are able to give students assistance when needed. As students' social capital is accumulated, they are better able to make informed decisions about courses, careers, and goals.

Campus-Specific Support

Program administrators at GHS shared their campus-specific support services that are offered to dual enrollment students. The school offered tutorial supports to all students. Specific to dual enrollment students, the tutorials offered extended time for writing assignments, opportunities to work on projects, or study groups. An additional support service was found through the campus librarian. She assisted dual enrollment students with research data bases. Students were also able to access technology devices through the library if needed. They were also allowed to check out laptops and at-home internet connectors. Finally, dual enrollment students had access to the librarian who would review and edit their college-level essays if certain requirements were met.

The supports offered by the campus are inclusive of all students; however, specific supports are provided solely for dual enrollment students (i.e. reviews and edits of essays). These support services accumulate social capital for first-generation students in that they have opportunities to network, access to technology resources, and an additional institutional agent (i.e. librarian) who serves as a support. Dual enrollment students are not required to take advantage of the campus-based support services; however, students who utilize the resources and supports will inevitably acquire a stronger social capital.

Relationships with Institutional Agents

Relationships are the most critical component of social capital. Program administrators agreed that the supports and resources provided by the different institutional agents was dependent on the value of the relationship with the individual student. More specifically, the campus-level program administrators noted that dual enrollment students who had a strong relationship with an institutional agent were found to be the most successful in the program. The DEC, the DEA, and some of the dual enrollment teachers were credited by the administrators for developing relationships with their students.

I argue that students who have a relationship established with one of the institutional agents who support the dual enrollment program will accumulate social capital. The institutional agent is able to provide the critical resources and the support services the students need. Furthermore, students will have a sense of belonging. Specifically, first-generation students who may not have the same experiences as their multi-generation peers will have someone who can help build their social network.

Summary

The social capital offered to dual enrollment students by the program administrators were evident during the interviews. Program administrators established that students participating in the dual enrollment program were to be supported through the resources, support services, and relationships with institutional agents.

They also stated that when a gap in support was found, they aimed to close the gap by addressing and modifying the necessary supports.

First-Generation & Multi-Generation: Similarities of Social Capital

The student participants in this case study were eager to describe their lived academic, dual enrollment program experiences. Both student groups perceived that elements of support existed via the dual enrollment program. Parallels of social capital were found amongst the two focus groups, including: a) institutional agents; b) parents; and c) peers. Students clearly perceived that specific people, including those inside and outside of the high school setting, played a key role in their academic success. In the following sections I expand on each of these findings.

Social Capital from Institutional Agents

Stanton-Salazar et al. (2000) contended that institutional agents have the opportunity of offering social capital to students. Both student focus groups shared they felt supported by some of their dual enrollment teachers, their counselors, and their administrators. In the following sub-sections, I elaborate on what the students shared during the focus groups regarding the institutional agents.

Dual Enrollment Teachers

Students perceived that some of their dual enrollment teachers assisted them in accumulating social capital. The teachers provided students a sense of belonging, resources related to the dual enrollment program, and developed professional relationships. Students perceived specific teachers as dependable, supportive, and knowledgeable. Kevin, who is a first-generation student, shared the following about one of his dual enrollment teachers,

Ms. Martinez is so smart with everything having to do with the (dual enrollment program). I can go to her for help or send her an email and

she also has the answers. I have to go to her a lot, especially when I need help with my homework. It doesn't matter what time I reach out to her; she always responds to me within a couple of hours.

Kevin also valued the relationship he had with Ms. Martinez. She played an influential role in his academic performance. Furthermore, he, along with other first-generation students, appreciated that they could depend on her to listen without judgement when discussing personal matters. Jennifer, multi-generation student, reiterated the same sentiments: "Ms. Martinez is like the go-to teacher. She is super helpful, and you never feel like you're bothering her. She told us at the beginning of the year that she was there to help us out and support us."

Other experiences were shared by the focus group students as well. Some described the experiences they had when their dual enrollment teachers tutored them individually. For example, when discussing the required essays to submit with their college applications, students stated they asked one of their English dual enrollment teachers to review it and provide feedback to strengthen the quality of their writing. Other students took advantage of the resources provided by the campus library. One multi-generation student, Jennifer, shared her appreciation for her teacher. "I told Mr. Miller my laptop screen was cracked, and I had a hard time reading my computer. He went to the library and checked one out for me." Dual enrollment teachers were credited by the students with a number of positive experiences, which culminating in social capital resources, supports, and relationships.

Alpha Counselors

Regarding students' alpha counselors, two key findings apropos to social

capital were established: a) students perceived the level of support given was dependent on who their alpha counselor was; and b) they did not believe their counselors had the time to invest with the more advanced students, although they perceived they had the best of intentions. First, students associated the them to the dual enrollment informational meetings. They believed their counselors were responsible for developing and hosting the meetings. Students in the focus groups argued that alpha counselors who did not attend the informational meetings were probably not as aware or knowledgeable of the dual enrollment program. For example, Elizabeth mentioned that she did not see her alpha counselor at the informational meetings; therefore, she chose not to visit with her.

I think my (alpha) counselor is always busy because I never saw her at those meetings. Maybe she has to help with another program at (GHS) or something because I don't think she knows a lot about the (dual enrollment program).

Other students in the focus groups added that when submitting a request to visit with their alpha counselor regarding a dual enrollment program question, the request may not be honored each time; therefore, they associated non-attendance to unawareness of the dual enrollment program.

Some students perceived that because they were taking advanced-level courses, they were expected to perform well on their own; therefore, their alpha counselor was not as accessible to them. They believed they were expected to be more self-reliant and become more problem-solvers. Anthony, a first-generation student, shared his sentiments about his alpha counselor.

If you're taking the harder more advanced classes at (GHS), I think your counselor believes you can do it, and you don't need as much help as the struggling students. I mean, they don't have time to come to those meetings or even call you down when you turn in a request to see them. I know it's not their fault though. They have a lot of students they have to help. Maybe that's why we depend on each other and on teachers.

Focus group students also discussed the alpha counselors' time. They perceived that their alpha counselors probably helped struggling learners and their parents more often with graduation requirements, grades, and attendance concerns. Several focus group students did not want to trouble alpha counselors with questions they knew their teachers could probably answer.

Included with the alpha counselors is the DEC. As discussed earlier, students perceived her as knowledgeable and helpful throughout the dual enrollment program. However, availability and time constraints remained a concern for the students. The DEC was not only responsible for dual enrollment programming, she also served as other students' alpha counselor. Therefore, the focus group students believed she was overwhelmed. At times, students shared they would consult with one of their teachers regarding their dual enrollment questions rather than inconvenience the DEC.

Students' perceptions of the supports provided by their alpha counselors was the opposite of social capital. The opportunities alpha counselors had to support dual enrollment students were not utilized in a manner the focus group students perceived. Although the student groups believed they had the best of intentions, their non-

attendance at the informational meetings and time constraints were perceived as nonsupportive aspects of social capital.

Administrators

The most influential institutional agents who have the ability to influence students' social capital are the program administrators. They are able to develop and somewhat financially support processes that will provide resources and guide support services that will benefit students' social capital. Program administrators are also able to assess resource and support service needs and modify appropriately so that students are able to accumulate social capital.

Focus group students valued the resources and support services offered by the program administrators. More specifically, students voiced their appreciation for the DEA. Students found her communication processes invaluable. Students perceived her as approachable and readily available to answer questions regarding the dual enrollment program. Students shared that she facilitated conversations between them and teachers regarding content and curriculum. Some students shared how the DEA helped them not only process course selections but how said courses would transfer to their desired four-year university.

One concern that was shared by students was that the campus had only one DEA; therefore, scheduling a time to visit with her was not as easily as they would hope. However, students indicated that when they emailed the DEA, her response time was appropriate. Furthermore, they shared that if the DEA was unable answer the question via an email, she would find an appropriate time to meet with the students before or after school or during lunch. A few students shared she held conference calls

on the weekend with the student and parents to answer any of the questions they or their parents had about the dual enrollment program.

Although students' focus was on a single program administrator, social capital supports are evident from the DEA. She is perceived as going above and beyond, particularly with accepting calls over the weekend. The DEA's value to the dual enrollment program is much appreciated by the students. Her ability to communicate and assist students with processes, help access resources, and her willingness to support students is all encompassing of social capital.

Social Capital from Parents

Student's social capital also includes informal networks that are representative of their home environments, including their parents and their parents' educational level (Stanton-Salazar et al., 2000). The two focus groups were separated based on their parents' educational level; however, both student groups discussed similar elements of social capital. First, students discussed the financial support offered to them by their parents to participate in the dual enrollment program. Students shared that their parents were aware of the financial savings the dual enrollment program offered. First, Aponi, first-generation student, shared that she compared the cost of courses to her parents. She described how she explained the cost-difference between a dual enrollment course versus a community college course. Aponi mentioned, "I think my mom and dad knew it might be cheaper, but I don't think they realized how much cheaper. They were pretty excited and kept telling me to go for it." The reduced cost⁷

⁷ The cost of a 3-hour dual enrollment college course was \$72.00. The community college waived all tuition costs for a dual enrollment course; however, students were responsible for paying administrative college fees.

of a 3-hour dual enrollment course was also appreciated by multi-generation students. Rena, multi-generation student, explained how her parents "...are all about saving money. My dad told me to take every (dual enrollment course) I could because he knew when I go to (a four-year university), it would be much more expensive."

The supports provided by parents, whether financial or emotional, played a critical role in developing students' social capital. When students perceive they are supported, their motivation to perform well increases. Furthermore, the accumulation of social capital will encourage student responsibility performing well in an effort to satisfy their parents.

Social Capital from Peers

Students' informal institutional agents, such as peers, were also acknowledged for their support. Most students in the focus groups identified specific peers by name who they perceived was a strong support for them. Students appreciated peers who were transparent, honest, and did not make them feel lesser than simply because they did not know elements of the dual enrollment program. "My friends who took these classes have really helped me. I would ask them about certain classes and teachers, and they would tell me how it went for them," expressed Emi, a multi-generation student. Students also appreciated their peers' compassion and understanding. For example, first-generation student Elizabeth shared that she does not "...feel dumb around my friends. My closest friends know that I'm new to this, and they know how hard things are for my family." Aponi, also a first-generation student, elaborated, "I'm able to go to them without them embarrassing me. Some of the adults sometimes intimidate me; I don't think they mean to, but that's why I have to depend on my

friends." Students suggested that through some of their peers, they learned to navigate university websites to help learn about acceptance and enrollment processes and guidelines, scholarship opportunities, college-readiness assessment scores, and course transferability. Additionally, peers assisted some of the students in developing and strengthening their study skills, including time management, note-taking, and organization.

Students also discussed the invaluable relationships that were developed with some of their peers who already graduated from high school with whom many have remained in contact. Students shared that they periodically emailed their papers to their peers so they could edit and organize their work. Moreover, some students, including first-generation student Kevin, complimented their peers for teaching them how to properly research a topic using reliable resources. He said, "Some of my friends have taught me things that I think my teacher wanted me to learn, but I guess I learn it better through (my friends)."

In many instances, students' course selections were based on conversations they had with their peers and upperclassmen. The students appreciated learning from their peers about specific dual enrollment teachers' reputations. Students did not shy away from the rigorous coursework or the time commitment required by the class; however, they regarded their peers' opinion on how the teacher instructed, whether or not the teacher was approachable and available, and whether or not the teachers openly communicated with their students regarding grades and tutorials. Students admitted that in some instances they chose to take the optional advanced level courses provided by the school district rather than the dual enrollment course based on

I've heard horror stories about (teacher). I decided to take the AP

(Advanced Placement) class instead because I am taking a lot of advanced courses, and the last thing I need is for me not to get along with a teacher.

In some cases, and going against their peers' advice, which was based on teacher reputation, some students shared their decision to enroll in certain dual enrollment courses anyway. Multi-generation student Abigail was one. She said the following:

I went ahead and took that class because I figured if I could get through her class, I would be able to survive any college class I would have to take. My friends told me her class was hard and that she was hard to understand, but I told my friend that if (the teacher) didn't help me, I was going to be calling him (friend) and that he would have to help get me through the class.

Some students suggested they had similar experiences with the teacher as their peers; however, others argued their experiences were more positive. Abigail discussed the outcome of her class. She found that although the course was challenging; however, the key to her success was ensuring she put her best foot forward. "I knew she was tough, but she knew I was trying my best and wasn't going to give up. She helped me every time I asked for it." The relationship the teacher established with Abigail played a critical role in her success.

Elements of social capital were appreciated by the students in the focus groups.

Furthermore, peers' influence plays a critical role when offering suggestions, sharing

experiences, and offering supports and resources. Students are more prone to receive the social capital supports and resources from their peers. As demonstrated in this study, the focus group students perceived that peers were more understanding of their lived experiences or lack thereof.

First-Generation & Multi-Generation: Differences of Social Capital

Social capital differences were also found amongst the two student focus groups regarding: a) peers; b) parents; c) non-dual enrollment teachers; and d) college knowledge. The differing interpretations are discussed in the following results.

Differences in Social Capital by Peers

First-Generation Students

The first-generation student group continued to depend on their peers when discussing dual enrollment courses. They valued their peers' lived experiences, which assisted them in determining which courses to select. First, students wanted to learn from their peers the usual time of day the course was offered. Some of the first-generation students were expected to financially contribute to their families' overall income; therefore, several students applied and were granted "late arrival" or "early release" status. "Late arrival" status allowed the student to miss first period; "early release" allowed students to miss sixth and/or seventh period. Students wanted to ensure they did not register for courses during some of those class periods because of their job responsibilities; therefore, they referred to their peers to determine the time of day the dual enrollment courses were offered. First-generation students benefitted from their peers' advice because they could choose courses while remaining employed. Referring to their peers was noted as more of a convenience due to easier

access rather than asking their teachers or administrators.

Knowing the additional supplies required for select courses mattered to this select group of students as well. For instance, peers shared with them that a specific graphing calculator and laptop was required for some of the courses. Students admitted they paused before enrolling in some of the courses for two reasons: 1) they could not afford the supplies; and 2) they were unaware that the campus might loan them the supplies. Some students deferred taking some of their dual enrollment courses because of the expense, or they chose to take the alternative advanced-level courses offered because their peers suggested teachers would provide them with the necessary supplies. For example, when discussing his pre-calculus course, Anthony shared that the "...cost of a graphing calculator was too much. I have to help my family pay bills. I didn't want to spend the money on the calculator." Anthony stated,

I remember my algebra teachers let me borrow one a couple of years ago, but I didn't think I could borrow one in a (dual enrollment course).

I thought this was my responsibility since it's a college class. I never asked to borrow one because I was too embarrassed since everyone else had one.

Students appreciated their peers' knowledge; however, the lack of social capital in this case was evident by them not being aware of the ability to borrow supplies, and their lacking a sense of belonging with a feeling of embarrassment due to lack of resources to buy these supplies.

Multi-Generation Students

Multi-generation students appreciated their peers' opinions of some dual

enrollment teachers, and they also utilized the community college's resources that were available online. The website included course descriptions and the number of college credits earned. More than the first-generation students, they went against their peers' advice of taking a course with a specific teacher who may have a less than appealing reputation. Some students suggested they had similar experiences with the teacher as their peers; others argued their experiences had been more positive. For example, Imala shared that she "...went into the class with a positive attitude and tried my hardest to get on the teacher's good side. He helped me whenever I had questions, but he was rude and sometimes sarcastic. I just learned that if he knew you were trying and working hard, he would help you out."

The multi-generation student group vaguely discussed the need for additional supplies; however, they did not indicate this caused a hinderance for them. Some students who could not afford the supplies discussed the matter with their teacher or the campus librarian. They argued that the additional supplies required for some courses did not prevent them from enrolling. For example, Jennifer shared,

I told my mom I needed to get a graphing calculator. She told me should would email the teacher to see if she needed to buy one for me or if the teacher could loan me one. It wasn't a big deal.

Some multi-generational students qualified for "late arrival" or "early release;" however, they suggested they worked because they wanted to and not because they contributed to their families' incomes. Notably, they commented they were aware that some of their senior peers who were in dual enrollment courses had the financial obligation of family contribution.

The multi-generation students accessed previous social capital in that they did not allow a teacher's behavior to negatively influence them. Furthermore, they advocated for themselves. Social capital that has been previously developed allows students to feel more confident and more goal focused. Their social networks have provided support systems that enable them to disregard others' behavior when it does not align to their norms (i.e. teacher with a bad attitude).

Differences in Social Capital by Parents

First-Generation Students

Another vast difference between the two student focus groups reflected their opinions of their parents' role concerning the dual enrollment program. Beginning with the first-generation student focus group, they acknowledged they had not discussed dual enrollment course selection with their parents in the past. Moreover, they had not asked their parents' thoughts or opinions for any of their middle school or high school courses. Some of the students disclosed that their parents were more than likely unfamiliar with the value and importance of course selection. The firstgeneration students shared their perspectives, including Anthony, who stated, "Man, my parents didn't know anything about these classes. As long as I passed (the classes) I was taking, they were fine." Students further perceived that while their parents were satisfied with them passing their courses, they were uninformed of the required grades needed to pursue advanced-level coursework as shared by Kana, "None of us knew that there were different levels of classes. We kind of thought everyone took the same classes. I thought if I passed the classes I was taking, I would be ok. I didn't know any different."

Traditionally, parents are encouraged to be active participants in their students' education; however, in this case, first-generation students perceived that their parents were unaware, which demonstrates a lack of social capital. Although parents' unawareness will not for certain prevent students from being successful in the dual enrollment program, their lack of understanding prevents students from perceiving their parents as a supporter. To this, school administrators could provide social capital support services and resources to their students' parents as well.

Multi-Generation Students

Contrary were the insights parents gave to their multi-generation students.

Oftentimes, with or without the student present, parents visited the university websites their student was interested in attending. Parents would discuss with students how the dual enrollment course might transfer to those universities, either as-is credit or an elective credit. The students appreciated the processes their parents used in helping them decide in which courses to enroll. Students claimed they depended on their parents' knowledge of course-selection to make an informed decision.

Multi-generation students in this case study greatly benefit from their parents' support services and the resources their parents offer them. The social capital elements were prevalent in the discussion of parental involvement with students. The students are dependent and almost expect their parents to service as a strong supporter for them. Furthermore, the students anticipated that their parents were knowledgeable of important information related to the dual enrollment program (i.e. credit transferability, cost of each course); however, they were not reluctant in sharing what their parents did not know. The group of students knew if their parents were not able

to help them, they were aware of who to contact, which demonstrates factors of social capital.

Parents' Unawareness of Dual Enrollment Program

Both student groups agreed that their parents were unaware of dual enrollment application processes and college-readiness assessments; albeit for different reasons.

First-generation students. The first-generation student group argued that their parents had little idea of the application and testing processes. Students in this group indicated that after speaking with them, their parents agreed that taking the courses was a good idea and helped them prepare for college. However, students acknowledged that initially they had no idea what the application and testing processes were, how credits would transfer, or how to enroll. They perceived that because their parents had not experienced the opportunities, they were essentially in the dark without their peers' assistance. The students believed they were encouraged by their parents but would have to learn the processes without their help. For example, Kevin shared his experience when he first spoke to his parents about the program.

My parents don't really know about college. They know it's a good thing, and they want me to go. When I talked to them about the (dual enrollment program), they didn't know what it meant. They didn't

For example, Kevin shared his experience when he first spoke to his parents about the

program.

know why it was a good thing and how it would help me go to college.

My parents don't really know about college. They know it's a good thing, and they want me to go. When I talked to them about the (dual

enrollment program), they didn't know what it meant. They didn't know why it was a good thing and how it would help me go to college.

Kana, also a first-generation student, expressed her parents' lack of understanding:

My parents, especially my dad, thought that as long as I took whatever classes and passed them, I would be fine. I explained to them how I had to study harder and had to make sure my grades were high enough to stay in the classes. I remember my dad telling me that he was fine with it, but I had to make sure I still helped my family (babysitting my younger siblings). I still don't think they really get it.

Kana's personal account of her father's expressions also solidify some first-generation students' obligations to family.

The results of this component demonstrated that students are unintentionally placed in uncomfortable situations. The expectations students' families place on them may not align with the dual enrollment program, which could help student develop social capital. School officials could work with parents by informing them of the benefits (i.e. social capital) of the dual enrollment program. Furthermore, by working in partnership with one another, both students and parents may feel supported; therefore, the social capital of both is accumulated.

Multi-generation students. Similar lack of awareness was found with the multi-generation student group. The students determined that their parents were unaware because they had not experienced a dual enrollment program themselves during their high school days. According to the students, application and testing processes for dual enrollment participation were unknown factors for their parents.

Moreover, they perceived that their parents' college application and testing processes were different from their own because they initialized the processes while in high school; therefore, the students believed high school processes and university processes were not alike. Students indicated their parents were agreeable to their participation in the program because the opportunities allowed them to get a head-start on their four-year degrees. However, the students did not rely on their parents' help or guidance for application and testing processes.

Jennifer shared that her parents first learned of the dual enrollment program from their neighbors, whose son was enrolled in several dual enrollment courses. She shared that,

A few years ago, my mom asked if I had considered taking the classes. When I told her that I needed her and my dad's help, they told me their high schools didn't have a (dual enrollment program). They told me to visit with (Jack), who was our neighbor taking the classes. My parents know how the classes will probably help me, but they had never experienced a program like this.

Imala, also a multi-generation student, described her culture as an American Indian whose parents were unaware of the dual enrollment program. She added:

My parents are super smart, and they work hard. Our home country doesn't offer things like this (dual enrollment program). When I told my father how I thought the classes would help me, he told me to enroll in as many as possible.

She was further prompted when asked if her father helped or guided her. She stated

that her parents were hard-working, and in her culture, she was expected to perform well academically. Imala expressed her appreciation for her peers and teachers because she had to ensure she did not disappoint her parents with her academic performance.

Even though a lack of familiarity existed, all students expressed their parents' unequivocal encouragement for participation in the program. The support, both emotional and financial, help students develop confidence and a sense of belonging, which are critical to social capital.

Parents' Financial Support

First-generation students. Students also discussed their parents' financial support, which led to different points of view. As the first-generation student group discussed this question, their heart-felt appreciation for their parents stood out. All the students in this focus group felt highly encouraged by their parents or guardians. They discussed how many of their parents were unaware of dual enrollment processes, procedures, and expectations, and how their parents struggled financially. Moreover, several students openly wondered how they would access college given their parents' financial difficulties. Students were grateful for the lower cost of a dual enrollment course, and they were more appreciative of their parents' willingness and ability to "find a way" of paying the \$72.00 course fee. For several of the students, this was a struggle for their families. Elizabeth and Kevin shared how they would "do things differently" with their own children as they mature and have families of their own. Aponi added, "That's why (we) want to graduate from college." The first-generation student group demonstrated the invaluable appreciation for their parents'

encouragement and willingness to support them financially, difficult as that may be.

Multi-generation students. When asked the same question, the multigeneration student group did not discuss parental encouragement. Instead, the multigeneration focus group believed that their parents appreciated the dual enrollment course opportunities because the lower cost of courses brought about a financial savings. Most of the students in this group believed their parents were financially capable and able to pay for "as many dual enrollment courses as (we) are willing to take," as stated by Abigail. Students shared that their parents supported them financially, even though they were not able to help them with processes. Multigeneration students also made the comparison between the cost of a three-hour dual enrollment course (\$72.00) and the cost of taking an Advanced Placement exam (\$95.00). Students believed they were doing their parents a favor by taking a dual enrollment course over an Advanced Placement course. They indicated that if they passed the dual enrollment course, they would receive credit; however, asking their parents to pay for an exam in which they may or may not score well might be a waste of money.

Differences in Social Capital by Non-Dual Enrollment Teachers

First-Generation Students

As the discussions turned from parents to the high school, only the first-generation student group acknowledged how some of their non-dual enrollment teachers helped them initially enroll in the program. First-generation student participants Elizabeth and Aponi provided specific examples of teachers who they believed supported them in dual enrollment programming. Elizabeth reflected her

experience with one of her freshman-level teachers. The teacher, using the pseudonym Ms. Matthews, taught the freshmen-level district-mandated course whose curriculum included academic and career exploration opportunities. The academic explorations delved into advanced-level courses offered by the district, including dual enrollment, and the career explorations not only discussed college-required career paths but also technical-related job opportunities. The positive relationship she built with Ms. Matthews helped her gain a sense of trust and quickly became her "go-to" teacher although she was not a dual enrollment teacher. Elizabeth shared,

Ms. Matthews is the best. I know she doesn't teach any (dual enrollment courses), but I know her son (not part of this case study) took (dual enrollment courses). That's why I thought she knew about it (program). She's always helping me when I have questions. She doesn't pretend to know either. She always tells me that she'll find the right answers for me. I appreciate her getting back to me.

Another personal experience was shared by first-generation Aponi, who had not taken any dual enrollment courses until his senior year of high school. He developed a strong student-teacher relationship with his audio-visual teacher over the past several years. During the spring semester of his junior year, his teacher (pseudonym Ms. Range) encouraged him to challenge himself and take more advanced courses during his senior year. She shared with him that colleges looked at the rigor of courses that would be listed on his high school transcript. Aponi had no idea of where to begin the process, but Ms. Range set up a meeting with him, herself, and the DEA. After gathering the information, Ms. Range allowed him class time to

prepare for the necessary college-readiness exams. Once he received his results, he sat with Ms. Range who helped him navigate and select his two dual enrollment courses, in which he is currently succeeding. He attributes his success to Ms. Range, her level of support and encouragement, and his perception that she "changed the path of (his) future."

As stated earlier, institutional agents serve a critical role in providing social capital support services and supports for students. More importantly, however, are the relationships they are able to cultivate with their students. The findings of this case study revealed the appreciation and the value placed on teachers (i.e. institutional agents) by the first-generation students. While the teachers are able to provide resources and share information, the critical point is how they make their students feel. When students have a strong sense of belonging and perceive that their teachers believe in them, they will go to great lengths to not disappoint. The cultivation of these relationships allows for their social capital, both tangible and emotional, to be strengthened.

Multi-generation students

The multi-generation student group did not credit any one specific teacher as some of the first-generation students; however, they discussed their intrinsic motivations. Students described their goals of attending college, class rank, GPA, and the desire to "get ahead." Through their older siblings and peers, they were aware of the positive implications of the dual enrollment program; therefore, they wanted to take this opportunity to help accomplish some of their educational goals. They acknowledged the supports received by their parents and high school personnel, but

the decision to enroll and participate in the program was based on their own personal motivations. For some of the students, their desire to increase their GPA while simultaneously earning college credit while in high school was motivation enough to participate in the program. For other multi-generation students, their motivations were driven by the financial savings the dual enrollment program offered.

Multi-generation students appreciated their teachers' efforts in supporting them; however, the results determined that this student group was more intrinsically motivated. They were not disrespectful of their teachers; however, they did not express the value of relationships as much as the first-generation group.

Summary

The results of social capital that was fostered by program administrators led to similarities and differences between the two focus groups. Students' perceptions revealed consistencies amongst different institutional agents, parents, and peers. The accumulation of students' social capital was relatively equal between the two groups. However, differences amongst the groups were also noted. Differences in the elements of social capital were found regarding peers, parents, and non-dual enrollment teachers (i.e. institutional agents). More specifically, parents' unawareness of the dual enrollment program and the financial costs of the program added to the differences in social capital for first-generation students.

Similarities of Social Capital: Intentions v. Actual Lived Experiences

As previously stated, PISD's intent behind the dual enrollment program was to expand college-ready opportunities for students. Program administrators shared the importance of using the dual enrollment program as a pathway of providing social

capital supports to students. With that, I compared the social capital offered by program administrators to the perceptions of first-generation students. Through the evaluative process, I was able to determine parallels between the two groups. In the following sub-sections, I share the results of the similarities, which included the resources made available to first-generation students and institutional agent support services. Within both similarities, aspects of financial aid and scholarships were also found.

Resources Available to First-Generation Students

Program administrators provided essential resources to first-generation students via the dual enrollment program. The most critical source of the resources, as perceived by the students, came from the annual informational meetings that were held at the campus. Basic understandings students gained from the informational meetings included: a) application processes for the program; b) financial aid assistance, including scholarship opportunities; and c) college-related terminology (i.e., degree, admittance, academic standing, course numbers, credit hours). Furthermore, students received handouts, which contained critical updates and timelines (i.e. deadlines) during the informational meetings. Students agreed that the annual informational meetings provided critical knowledge for the dual enrollment program. Moreover, some first-generation students appreciated that the documents and presentations were translated into Spanish. Students shared that their parents too were appreciative of the translations.

Another parallel found was the cost-savings provided to students via the dual enrollment program. When initially establishing the partnership agreement with the

community college, district-level administrators intended to establish an affordable program that could attract students and parents of all socioeconomic status. The reduced cost of a three-hour college course was appreciated by first-generation students. Although the cost remained a financial burden to some families, students understood that campus program administrators were not responsible for the cost. Some students shared they were aware of the processes used to grant scholarships and fee waivers, which helped them address the financial obligation tied to the dual enrollment program.

A final resource provided by program administrators via the dual enrollment program was critical for ensuring students were prepared for their postsecondary studies. First-generation students perceived that their experiences in the dual enrollment program prepared them for: a) the rigorous coursework in their future college studies; b) developed and strengthened their study skills; and c) prepared them for the time needed and quality of possible homework activities and assignments.

Program administrators intended to provide students with real-life applicable learning opportunities they could carry with them to their postsecondary studies. The students acknowledged their intentions and shared their appreciation for the experiences. Students indicated the experiences helped them improve academically. Additionally, the first-generation students were appreciative they were able to learn these aspects in the comfort of their high school setting.

Institutional Agent Support Services

Support services provided by institutional agents was critical in accumulating first-generation students' social capital. Additionally, the relationships students build

with them agents provided a sense of belonging as well. One example came by means of the scholarship application process. Two low socioeconomic first-generation students in the group submitted their scholarship applications. Students were required to write essays explaining why they should be awarded the scholarships. Both students shared that their dual enrollment teacher (i.e. institutional agent) took the time to review the writing process with them during their tutorials. After both students were awarded scholarships, they thanked the teacher by nominating her for "Teacher of the Year." The students further shared that the scholarship application process allowed them to use the writing process, which they perceived would help them moving forward with future college applications.

Students admitted some of their dual enrollment teachers (i.e. institutional agents) were "tough" on them academically and held them to high standards, as described by Kana and Aponi. The students admitted they initially considered dropping their dual enrollment courses because of the time commitment and course rigor. They both had part-time jobs; therefore, their time was extremely valuable. Furthermore, they perceived their parents expected them to contribute to their families' overall household income. After having individual conversations with their teacher, Mr. Smith, they agreed to remain in the course. The students appreciated his commitment to their success. Kana shared, "Mr. Smith told me that if I shared my work schedule with him, he was willing to give me my assignments ahead of time. That way, I could make my own weekly calendar." Although Mr. Smith did not reduce his high expectations, the students shared that the experience strengthened their study skills and time management.

Other institutional agents who provided support services included the DEA and DEC, who were invaluable to first-generation students in the program. Through individual conferences, first-generation students perceived the DEA and DEC helped acclimate them into the dual enrollment program. Moreover, some students shared they gained a deeper understanding of what to expect when transitioning to college (i.e. enrollment processes, dorm-life, meal plans). Anthony, a first-generation student, shared one experience he had with the DEC. She asked him to visit with her, and she "took the time" to explain the financial aid process and how he might qualify for a scholarship. He found this conversation invaluable because he was awarded the scholarship the same day his parents' electricity was turned off due to non-payment. The scholarship funds were distributed in a timely manner, and he perceived he was not "forced" to withdraw from the course.

Summary

The social capital program administrators intended to provide first-generation students were well-received. The students gained critical knowledge and resources of the dual enrollment program as well as tools that could help guide their transition to their postsecondary studies. Perhaps more valuable were the relationships the institutional agents developed with the students. Program administrators did not dictate that personnel establish relationships; however, students perceived that the institutional agents provided resources and support services in a manner that held them to high standards. Furthermore, a sense of belonging (i.e. networks) and motivation were provided to students, which are critical elements of students' social capital.

Differences of Social Capital: Intentions v. Actual Lived Experiences

Differences between program administrators' intentions and the reality of first-generation students' experiences were also found in this case study. The most profound outcome in the study was that all support services and resources were shared with all students in the same manner. No intentional social capital support services and resources were identified specifically for first-generation students. Research shows that social capital aimed for specific groups of students (i.e. first-generation) help close the academic achievement gap and help address the group's individual needs (Stanton-Salazar, 1997). Differences between program administrators' intentions and first-generation students lived experiences were found in the following areas: a) identification processes and accessibility to the program; b) college readiness testing and requirements; c) non-dual enrollment teacher awareness; and d) community college support services.

Student Identification

When examining the social capital provided to students, it is important to consider the student identification processes. Some of the eligibility requirements for dual enrollment participation were state-mandated, and others were a result of the partnership agreement between the school district and community college. The eligibility requirements for participation helped establish student-identification processes, which students began earning by the end of their fifth-grade year in school. First-generation students' lack of knowledge led to low social capital accumulation. Furthermore, they perceived the possible repercussions for not understanding the implications of the grades earned in fifth grade. Some students had not earned an 85 in

their core classes as a fifth grader; therefore, they were not eligible to enroll in advanced courses their sixth-grade year, which starts their middle school experience. Their perceptions were that earning at least a 70 in fifth grade "was good enough," as perceived by Anthony. One student assumed he earned the required grades; however, he and his parents were unaware of the implications and did not enroll him in the advanced-level courses. This led to some students disclosed that because they were not exposed to more advanced curriculum in middle school, they were not as prepared for advanced-level curriculum in high school. Several of the students supposed that is why they consistently felt behind in their high school advanced courses. One student analogized the lack of understanding to a ripple effect in water; one missed opportunity led to several others.

The discussion for two first-generation students, Anthony and Aponi, transitioned from the grades earned in fifth grade to their missed opportunities in high school, particularly their Algebra course. The other three students were able to take their state-mandated Algebra course as an eighth -grade student, although they chose not to do so. The opportunities were verified by analyzing each students' high school transcript. The difference between the students who took Algebra as an eighth grader and those who had not was dependent on the middle school the students attended. The students in the focus group from one middle school were not given the opportunity to enroll in Algebra. The students also argued that their middle school counselor had not spoken to them of the potential of earning their high school Algebra credit while in middle school.

The results demonstrated that the student identification process did not begin in

high school, but rather the process started in elementary school. The lack of knowledge led students to low accumulation of social capital. Moreover, students' perceptions of their inabilities to perform well in advanced-level high school courses led to the opposite of social capital. The multi-generation students benefitted from access to social capital in the form of the courses. In this case, the playing field was not leveled for both student groups.

College-Readiness

Within the eligibility requirements, students were required to demonstrate college-readiness through several approved exams, including ACT-Aspire, ACT, and TSI, all of which were administered on the high school campus. First-generation students admitted they were unaware of the exams and the qualifying scores needed for participation. The school district offered the exams to students; therefore, first-generation students took the ACT-Aspire as sophomores and the ACT as juniors.

Students appreciated the afforded opportunities; however, they were unaware of how to prepare for the exams, how to read their results, and what each score meant.

Students later learned from their peers and non-dual enrollment teachers what the implications were for the exams and scores. Furthermore, students learned they could have accessed study materials for the exams. Three of the five first-generation students believed they could have scored higher on either of the exams had they been better prepared; however, their perceptions were that they did not received information related to the exams because they were not on anyone's radar.

Furthermore, a connection was made by the students between the exams and the state-mandated End-of-Course (EOC) exams, which were required by the state of

Texas for high school graduation. Students believed that if their teachers offered specific testing strategies and reviews for the EOC exams, the same should have been provided for the college-readiness exams. Students shared that the study materials for EOC exams were readily disseminated by their teachers without having to ask for them, and they believed the same should have been done for the college-readiness exams. Students agreed that the required minimum score for participation in the dual enrollment program should have been communicated with them.

The purpose of the dual enrollment program is to help students demonstrate college-readiness. However, the lack of knowledge experienced by the first-generation students pertaining to college-readiness demonstrated a lack of social capital as well. As gathered from this case study, students will develop their own connections in a school setting (i.e. EOC study materials to college-testing study materials). With that, expectations of similar processes are expected by the first-generation students. When misconnections occur, the students develop a sense of confusion and misunderstanding, which result in the lack of social capital supports.

Non-Dual Enrollment Teachers

First-generation students indicated that the closest connection between students and the dual enrollment program were non-dual enrollment teachers. This perception was shared as students evaluated the number of non-dual enrollment classes in which they were enrolled. Program administrators did not explicitly convey the need for teacher awareness of the dual enrollment program; however, students perceived the opposite. This awareness is important for social capital development in that teachers are able to support first-generation students by providing critical information and

resources. The first-generation students shared about their personal experiences with non-dual enrollment teachers who initiated conversations with them about participating. Students perceived that several non-dual enrollment teachers were aware of students' academic potential but did not share invaluable information with them about the program. They believed this was due to teachers' lack of understanding, although they did not believe this was intentional.

Opportunities to offer social capital to students are dependent on the number of institutional agents who have or are aware of the support services and resources available. Non-dual enrollment teachers who lack awareness of the dual enrollment program are not able to provide the social capital first-generation students require. Furthermore, program administrators have an obligation of ensuring all of their faculty are knowledgeable of the programs offered at the campus. The faculty would be more available to provide social capital supports to students they identify.

Summary

During the administrators' interviews and the two student focus groups, participants were able to share their perspectives regarding first-generations students' social capital as well as their perspectives of the dual enrollment program. The two student focus groups were able to provide thorough reflections of their lived experiences, including those from their middle school and high school days as well as those specific to the dual enrollment program. Program administrators provided considerations about the dual enrollment program as well as the social capital of first-generation students.

The qualitative data collected amongst the three different groups helped to

address each of the research questions. Examples from students and program administrators were provided, and a comprehensive analysis was used to gather each of their perceptions and personal experiences. The results of the case study determined similarities and differences amongst the two student focus groups, and when comparing the perceptions of program administrators to those of the first-generation student group, parallels and disparities were also found.

Among the two student focus groups' perceptions of social capital, students felt supported by various institutional agents, including teachers, counselors, and administrators. Their level of support and how they offered support varied depending on the agent. Additionally, students perceived that they were financially supported by their parents and guardians. Moreover, the student groups agreed that their parents did not have a full understanding of the dual enrollment program, including its processes and procedures, albeit for different reasons. Lastly, similarities in social capital between the two student groups included college-knowledge; whereas, program administrators and peers supported students. With that, students in both focus groups relied heavily on their peers as their social capital network.

I also discussed differences between the two student groups. When selecting and registering for dual enrollment courses, first-generation students relied more on their peers' perceptions, while multi-generational students' course selections were more dependent on the information gathered via personal college visits and websites from their intended university of studies and their presumptuous college majors. Financial support from parents was perceived differently as well. The first-generation students felt the discounted cost continued to be a burden for their parents due to

financial hardships. Meanwhile, the multi-generation student group believed the dual enrollment courses were a cost savings for their parents.

This case study allowed me to elaborate on several major findings that are aligned to previous research, which I discuss further in the following chapter.

Moreover, I revisit the theoretical framework to make parallels between the major findings and the social capital supports and services offered to first-generation students.

CHAPTER FIVE: DISCUSSIONS AND CONCLUSION

Introduction

When discussing college-knowledge, research has demonstrated that many first-generation students may not have access to the same social capital as their multigeneration peers for various reasons (Stanton-Salazar, 2001a; Stanton-Salazar and Dornbusch; 1995). I found this was the case through my research as well. The students may struggle in understanding the complex processes needed to successfully begin their university studies; from initial application processes, college-readiness testing, and course selection to understanding the financial opportunities that may be afforded to them. However, first-generation students are able to successfully gain this knowledge through high school programs that help build their social capital (Stanton-Salazar, 2001b; Stanton-Salazar et al., 2000; Suárez-Orozco & Suárez-Orozco, 2001, Vacca, 2007). One such platform, which served as the premise of this case study, was the dual enrollment program at GHS, which is a large public suburban high school in Texas. First-generation students' parents are supportive of their children's education; however, they may not have the experiences or the knowledge to help them successfully transition to college. The school district and high school administrators provided critical college knowledge to students, and they were able to offer social capital supports and resources as well.

The purpose of this chapter is to provide a discussion of the case study by determining how the findings related to previous research. This discussion will help me assess first-generation students' social capital via a dual enrollment program. Next,

I discuss possible implications and recommendations of the program. Finally, I share the limitations of this case study.

Discussion

Dual Enrollment Programs for First-Generation Students

The major findings of this case study align with previous research regarding dual enrollment programming and first-generation students (Hoffman et al., 2008). As stated earlier first-generation students in this case study were defined as those whose parents did not earned their four-year degree (Billson & Terry, 1982; Pascarella et al., 2003). The dual enrollment program at GHS provided first-generation students opportunities to learn and access the knowledge and skills needed to succeed in the college environment. Students were exposed to critical information ranging from registration and course selection processes to the rigor of the coursework, which helped acclimate first-generations students to college-life, albeit in the comfort of their high school (Astin, 1994). As supported by the findings of the American College Test (2010) and Engle et al. (2006), learning opportunities afforded to first-generation students in this case study via the dual enrollment program helped to extend their learning beyond the regular high school curriculum.

Design of a Dual Enrollment Program

With its growing popularity, the dual enrollment program at GHS was designed to support students in a manner that would propel them to future postsecondary studies. Hoffman et al. (2009) and Zinth (2014) each suggested principles they argued were critical to the development of a dual enrollment program. By examining each of the researchers' recommendations, a comparison was made to

the design of the PISD's dual enrollment program. I discuss the suggestions provided by Hoffman et al. (2009) and Zinth (2014) as they relate to the design of the dual enrollment program at GHS.

Inclusive Programs

Hoffman et al. (2009) argued that a well-designed dual enrollment program should be inclusive of underrepresented student groups, including first-generation. Specific entrance guidelines were found to be inclusive of high-achieving, academically gifted students as supported by Kary and Hughes (2008). Program administrators from GHS set a campus goal to ensure the demographics of the overall campus match the demographics in each of its advanced-level course offerings, including dual enrollment courses. Furthermore, GHS established an identification process in determining who its first-generation students were. The campus process allowed program administrators to evaluate whether or not an increase or decrease of first-generation students were in advanced-level courses, including dual enrollment. Furthermore, they agreed that more needed to be done to increase first-generation student enrollment although generational status was not a measured indicator.

Entrance Criteria

Zinth (2014) first argued that students' entrance criteria into a dual enrollment program should be inclusive rather than exclusive and allow students to demonstrate their abilities. In the current study, students wishing to be placed on an advanced-level track must have met entrance criteria, which were shared earlier. Students are placed into advanced-level courses during their middle school years with the possibility of also earning high school credit. Parents' lack of awareness, however, led to the

exclusivity of some students. Therefore, an unintentional gap of inclusion was found (Howley et al., 2013; Lucas, 2000; Santelices & Wilson, 2010). No students are directly and purposefully excluded from dual enrollment participation, but if the critical entrance requirements are not known by a specific student population (i.e. first-generation), unintentional exclusionary outcomes will continue to exist.

Zinth (2014) also recommended that the number of dual enrollment courses in which students enroll be determined by their ability and not programming guidelines and restrictions. All students demonstrate ability and capability differently; therefore, some may be able to carry a heavier course load than others (Byrd & McDonald, 2005). On the other hand, some students may need to enroll in fewer courses because of extenuating circumstances (i.e. job responsibilities to help support family). In any case, Zinth (2014) argued that the number of dual enrollment courses be determined individually and based on students' abilities. In this case study, I did not find that students were limited in the number of courses for which they enrolled. Program administrators were aligned with Zinth's (2014) recommendations to offer as many dual enrollment courses as possible. Once students met initial eligibility requirements, they were not limited to a certain number of courses.

Advisement and Counseling

Hoffman et al. (2009) and Zinth (2014) suggested that students and their families be advised and counseled with realistic data and information needed to fully succeed in college. The findings in this case study demonstrated that students from both groups gained a sense of college-knowledge that would help them succeed in college. However, first-generation students argued their learning curve was steeper

due to their families' unawareness of college-related experiences (Ream, 2005).

Program administrators' intent to share critical college-knowledge was well received by students. Moreover, the personnel responsible for such communications relied heavily on the DEA and the DEC. In a Texas 6A high school setting, the messaging to a student population of 3,200 students by only two personnel could be considered overwhelming. District-level program administrators perceived that alpha counselors were involved in the communications, but students had a different perception.

Considering Hoffman et al.'s (2009) recommendations, I found elements of advisement and counseling missing based on student perceptions' of personnel members' time constraints (Moschetti & Hudley, 2015; Sommerfield & Bowen, 2013; Stephan, 2013; Vorhaus, 2014). First-generation students perceived that the DEC and their alpha counselors were not as readily available due to time constraints associated with struggling students (behaviorally and academically).

Credit Transferability

As students earn their high school and college credit in a dual enrollment course, Zinth (2014) suggested that the credit transfer should without fail. He argued they should not be penalized (i.e. lack of credit transfer) based on college-level rules and guidelines since they demonstrated success in rigorous coursework (Zinth, 2014). Moreover, the transferability of credit to four-year universities would promote first-generation student college enrollment, thereby preventing students from course repetition (Hoffman, 2012; Karp et al., 2005; Taylor et al., 2015). Unfortunately, program administrators are unable to control such guidelines. However, program

administrators perceived that transferability of dual enrollment course credit could play an essential role in increasing student enrollment.

Cost Reduction

Program administrators offered a cost reduction of dual enrollment courses, and students from both groups appreciated the cost-savings. However, the perceptions of the cost-savings differed between the two student groups in that the multigeneration students perceived the program was saving their parents' money. On the other hand, the first-generation students appreciated their parents' ability to find a way to pay the course fee. With that, even at a reduced cost, several first-generation students were aware their parents would financially struggle to pay. To support firstgeneration students' financial obstacles, Hoffman et al. (2009) suggested that any costs associated with the dual enrollment program be eliminated. Unfortunately, the partnership agreement between the school district and the community college did not allow for the suggested elimination and would require legislative approval as well as state and federal financial support (Zinth, 2015). At the time of this research, program administrators were not aware of any legislation that was in the works in the immediate future. However, program administrators have provided scholarship opportunities offered by local agencies for their students who demonstrated financial need. Hoffman et al. (2009) recommended broader agencies, including state and federal agencies, pass legislation to offer such scholarships. Furthermore, they suggested additional federal grants and other means be created to significantly reduce the cost of attending a four-year university, which would serve as a direct benefit to all students and not just first-generation (Hoffman et al., 2009).

Student Identification Process

The design of a successful dual enrollment program requires the establishment of a student identification process that will ensure inclusivity of first-generation students. Based on what the program administrators shared, students' opportunities of participation in dual enrollment courses essentially starts when students are finishing their elementary years and transition through middle school. Students who do not achieve the fifth-grade end of year grade requirements in their core academic courses will not be placed in an advanced-level track in middle school. Previous research has argued that students who were placed in a lower academically performing track were consistently excluded from dual enrollment program participation (Taylor et al., 2015). Program administrators did not specifically identify performance tracks (i.e. high, low); however, they agreed that students who had not met the academic criteria prior to middle school enrollment were not likely to participate in the dual enrollment program. This discussion leads to two points: 1) bringing awareness to students, parents, and administrators from the elementary and middle schools regarding the possible implications of students' fifth-grade end-of-year core course grades; and 2) considering mid-academic performing students and their academic capabilities for inclusion into dual enrollment programs. In the following sub-sections I discuss students' awareness of the program, as well as the implications for mid-academic performing students.

Awareness of the Program

Program administrators acknowledged that students participating in their dual enrollment program traditionally began their advanced-level coursework in middle

school. More specifically, most of the students took Algebra I during their eighth-grade year. In this school district, Algebra I was typically a freshman (ninth grade) level math course. Moreover, the same eighth grade students taking Algebra I were also enrolled in the district created advanced-level English Language Arts class. Thus, the students were able to partake in the advanced level coursework as they transitioned to ninth grade. Most of the students would then be prepared for the caliber of dual enrollment coursework by their junior and senior years in high school. The descriptive data in this case study demonstrated that only 53 senior students were enrolled in at least two dual enrollment courses at the time of the study, which was 7% of the graduating senior class. Additionally, of the 53, only 13 were determined to be first-generation, which was almost 2% of the graduating senior class.

Program administrators acknowledged that the communications should be disclosed to all the school district's middle and high school parents and students. A missing component, however, were the elementary school administrators, parents, and students. If the identification process began at the end of students' fifth-grade year, the related stakeholders should be made aware as well. From the first-generation students' viewpoint, however, informational sessions were held with them and their parents once they started high school. Several indicated they were unaware of the fifth-grade requirement, middle school advanced-level coursework, and the implications of each. The absence of this critical knowledge may serve as the basis for the low enrollment that the descriptive data proved in this case study. The earlier the communication of critical knowledge is expressed to first-generation students and parents in their native language, the earlier they could prepare and partake in the program. Considering all

this, I argue that the delay in sharing and understanding of the entrance criteria led to low first-generation student enrollment and participation, which validates the findings of Tabolowsky et al., (2016) who suggested that an underrepresentation of first-generation students existed in dual enrollment programs.

Mid-Academic Performing Students

Mid-academic students are those who are able to perform at or above grade level; however, they may not traditionally score advanced-level status on standardized tests. Howely et al. (2013) and Karp (2014) argued that some first-generation students who may have performed at a mid-academic level could be just as successful as their academically gifted peers based on their persistence and potential. In the current case study, program administrators do not address these students as they more than likely did not meet the entrance criteria. Moreover, the first-generation student focus group also did not include students who may have performed at the mid-academic level. The point of this discussion re-solidifies the need for early, clear, and concise entrance criteria communication processes so that students performing at the mid-academic level may receive the necessary supports from their parents and school institutional agents.

Previous research claimed that schools utilizing a tracking system, whether intentional or not, oftentimes found a lack of encouraging and understanding relationships with key institutional agents for students in lower performing tracks (Stanton-Salazar, 2001a; Vacca, 2007, 2008). Therefore, students in such tracks were left without opportunities to accumulate social capital and critical networks which could possibly negatively impact their academic success (Stanton-Salazar, 2001a;

Vacca, 2007, 2008). A precise identification process that begins in the elementary school setting and continues in the middle school setting could build the students' academic skills in a strategic and purposeful manner. Moreover, through the supports, perhaps students could transition from mid-academic to advanced-academic level performance.

Networks and Institutional Support

This case study utilized Stanton-Salazar's (2001a) who explained social capital as "consisting of resources and key forms of social support embedded in one's network and associations, and accessible through direct or indirect ties with institutional agents" (p. 1067). The discussion on social capital emphasizes different processes: a) the normative camp, which unveils social integrative processes (i.e. sense of belonging); and b) the social resource camp, which addresses the accessibility of institutional support (i.e., actual or potential resources made available through the network) (Stanton-Salazar, 2004, 2006).

Relative to this study, the normative camp according to Ream (2005), includes informal networks of students' families and peers, addresses first-generation students' sense of belonging in the dual enrollment program. First-generation students were the first in their families to experience an advanced course at times not fully understanding the implications of their actions. As they transitioned through middle school and into high school, some first-generation students accidentally stumbled upon the dual enrollment program through informal conversations with their peers who had previous dual enrollment experience or through the influence of non-dual enrollment teachers. I found that first-generation students relied heavily on their peers who were

transparent, honest, and did not make them feel lesser than simply because they were in unfamiliar territory within the dual enrollment program. First-generation students worked to learn via their dual enrollment experiences. They indirectly acknowledged a sense of belonging gained from their peers. Furthermore, first-generation students were able to increase their social network by accessing more extensive and expansive academic contacts. Such increase positively impacts their overall academic accomplishments (Stanton-Salazar & Dornbusch 1995).

The second sector of social capital as determined by Stanton-Salazar (2004, 2006), referred to as the social resource camp, elaborates on the accessibility of institutional support, which includes the actual or potential resources made available through the network. The formal networks, as described by Ream (2005), are inclusive of the institutional agents within the educational institutions and communities who provide the support and resources to first-generation students. The findings helped reveal the social capital first-generation students accumulated from their institutional agents, including support services (i.e. tutorials, advisement) and resources (i.e. financial aid, informational meetings). Their perceptions are discussed regarding program administrators, counselors, and teachers, as well as the supports and services they provided.

Institutional Agents

Scholars have argued that social capital was often presented as a constant to explain the lack of not only student achievement but also college awareness, dropout rates, and accessibility to critical information through social networks (i.e. institutional agents) (Bourdieu, 1986; Coleman, 1988, Stanton-Salazar, 2001a; Stanton-Salazar &

Dornbusch, 1995; Stanton-Salazar, 2006; Vorhaus, 2014). First-generation students' personal educational experiences speak to the findings in this case study that lack of awareness and accessibility to critical information potentially closed opportunities for them. Santovec (2005) suggested that in order for student awareness to increase campus-wide, all members of the faculty and staff should be on board to help support their students, including first-generation. With this argument, Stanton-Salazar and Dornbusch (1995) discussed the importance of quality institutional agents who accessed the resources and information needed for academic success; thus, students' social capital can be accumulated. This is critical for students who do not have access to such institutional agents outside of the schools' social networks (Stanton-Salazar & Dornbusch, 1995; Marquez, 2017). Moving forward, I discuss the perspectives of first-generation students and their relationships with various institutional agents, including peers, counselors, teachers, and program administrators.

Peers

The findings of this case study demonstrated that the most influential institutional agent of first-generation students were their peers, which is supported by the arguments of Gilbert (1982) and Stanton-Salazar (2001a) who suggested that peer interactions provided influential and emotional collaboration to traverse through the educational society. In most cases, the relationship first-generation students had with some of their peers helped enhance their experiences before and after participating in the dual enrollment program. As argued by Stanton-Salazar and Spina (2005), the peer exchange of academic information and social ties directly and positively impact the quality of trust and social support found in students' peer networks.

This case study found that first-generation students were able to build trusting relationships with some of their peers. The findings revealed that through their trusting peer relationships, they successfully navigated through the education and processes provided by the dual enrollment program. For example, peers helped some first-generation students navigate university websites, which helped them learn about acceptance and enrollment processes and guidelines, scholarship opportunities (and how to apply for them, college-readiness assessment scores, and course transferability. Additionally, by observing their peers' behavior, first-generation students were able to strengthen their study skills, including time management, note-taking, and organization. Peers served as peer-reviewers of first-generation students' assignments. Finally, when registering for courses, first-generation students admitted in most instances they sought out the advice of their peers and used their perceptions of a teacher to determine whether they would register for a particular course.

In research conducted by Stanton-Salazar and Spina (2005), students expressed a sense of loneliness and self-containment behaviors. Through the interviews conducted in the study "...a disquieting and obscure form of alienation" (p. 408) was found in the study that revealed a low-quality of social capital gained from their peers. During the case study, first-generation students shared personal experiences that could have led them to similar emotional expressions; however, their strong supportive peer relationships allowed them to be transparent when seeking their peers' advice. For example, in some cases, course selection was based on the time of day the course was offered. Some of the first-generation students were expected to financially contribute to their families' overall income; therefore, they applied and were granted either "late

arrival" or "early release," which essentially means they would arrive late to school or leave school early due to their outside job responsibilities. Students wanted to ensure they did not register for courses during some of those class periods because of their job responsibilities; therefore, they referred to their peers to determine the time of day the dual enrollment courses were offered. Another example involved additional supplies and materials that may be required for certain courses. Students had to determine whether they could afford the supplies. Through the supportive peer relationships, the first-generation students did not hesitate in having transparent discussions with their peers. Stanton-Salazar and Spina (2005) findings of students' expressions were not the same as the current case study in that a sense of belonging was evident. The peer networks developed by first-generation students indicated an invaluable appreciation of transparency and honesty that was reciprocated.

Counselors

First-generation students referred to two kinds of counselors: alpha counselors and the DEC. Students' alpha-counselors are assigned to them based on their last names and without regard to grade level or academic level. Alpha counselors were responsible for ensuring students were registered for the appropriate courses and ensured they meet high school graduation requirements. Students typically remained with the same alpha counselor throughout their high school years. The DEC is also responsible for a part of the student population; however, she also supports all students who enroll in the dual enrollment program. Alongside the DEA, the DEC ensures students meet eligibility requirements for participation in the program, assists with student registration, course selections and withdrawals, and provides support with

college-readiness testing procedures. The findings of the current case study unveiled the perceptions of first-generation students regarding their alpha counselor and the DEC. Such essential job responsibilities fall in line with Kim's (2012a) argument in that information and resources should be dependent on high school counselors because they serve as essential institutional agents for all students. The critical role high school counselors play in student guidance and advisement cannot be understated.

Stephan (2013), Folk (2015), and Sommerfeld and Bowen (2013), however, found that many underrepresented student groups, including first-generation, were underserved by their high school counselors. For example, most of the first-generation students in the focus group attended at least one of the campus-hosted informational meetings about the dual enrollment program; however, they perceived that their counselors were responsible for developing the share sessions (they were the responsibility of the DEA). Several first-generation students perceived that alpha counselors who were not in attendance for the informational meetings were less aware of the dual enrollment program. Moreover, their arguments came from what they perceived as disengagement between the first-generation students and their alpha counselors. Students shared that because they were advanced level, they were expected to perform well on their own. Moreover, some students shared they only visited with their counselors during their annual grade level conferences where they sat with a cohort of other students to register for the following year's courses, and each conference lasted about ten minutes. Some students did not depend on their alpha counselor. Some students believed the level of support and engagement was dependent on who their alpha counselors were. Students shared that if the DEC was also their

alpha counselor, an increase of engagement and support for dual enrollment program was likely.

The findings also revealed that first-generation students perceived their alpha counselors did not have the time to invest with the more advanced students. (This supports their arguments that low disengagement and support were not intentional.) Instead, they believed that struggling students required more time and attention from the alpha counselors regarding graduation requirements, grades, and attendance concerns; therefore, several students did not want to trouble alpha counselors with questions they knew their teachers could probably answer. Furthermore, a similar expectation was shared in that they believed they were expected to be more self-reliant and become more problem-solvers; therefore, several students chose to not seek their alpha counselors' guidance or input. Stephan (2013), Folk (2015), and Sommerfeld et al. (2013) argued that many underrepresented student groups, including firstgeneration, were underserved by their high school counselors. High schools that primarily served low-income, minority students had a counselor to student ratio more than twice the national average, according to a 2014 publication from the Office of President Barack Obama ("Increasing College Opportunity for Low-Income Students"). First-generation students perceived that their alpha counselors were not able to visit with them due to time constraints, and counselor-to-student ratio may have played a factor. At GHS, each alpha counselor was responsible for advising and consulting with approximately 425 students. As suggested by Stephen (2013), an increase in the number of counselors for each high school would allow more one-onone opportunities for students. Augmenting some of the responsibilities of the alpha

counselors would provide more time and opportunity to support and advise firstgeneration students (Stephen, 2013).

I argue for the critical role high school counselors play in the success of first-generation students. Previous research argues that through strong, purposeful, and meaningful support systems and relationships, first-generation students are more likely to depend on their high school advisees (i.e., counselors) who could assist them with dual enrollment processes and guidelines (Moschetti & Hudley, 2015; Sommerfield & Bowen, 2013; Stephan, 2013; Vorhaus, 2014). However, current practices at GHS revealed that first-generation students perceive their counselors as unavailable because of their responsibilities to struggling learners. The time constraints and counselor to student ratio bring about the need for additional counselors or opportunities to augment their responsibilities.

Teachers

The classroom environment is where students spend a remarkable amount of time as they navigate through their school education. With each passing year, students are able to access the knowledge that each individual teacher offers them. Most students can acquire the knowledge typically based on state mandated standards (i.e. Texas Essential Knowledge and Skills). Ideally, in classrooms, they also learn about acceptable social behaviors, collaboration, and study skills. Through the opportunities, however, researchers have found that the most critical element of students' success in teachers' classrooms comes from the relational capacity that is built (Allen & Dadger, 2012; Astin, 1994; Harnish & Lynch, 2005; Karp et al., 2007; Karp & Hughes, 2008; Kim & Bragg, 2008; Medvide & Blustein, 2010; North & Jacobs, 2010; Swanson,

2008). The quality of the relationship that teachers choose to develop with their students could not only build strong educational capacity but help support students' social and emotional health.

Such arguments rang true for the first-generation students as they shared their perspectives of their dual enrollment teachers as well as their non-dual enrollment teachers. They disclosed the facets of college knowledge their teachers provided them, and also how some of the teachers impacted their lives. Stanton-Salazar et al. (2000) argued that the most significant level of social capital offered to students occurs while they are in the actual school building. The resources and network support systems are more easily transferable to first-generation students when teachers have immediate access to them (Stanton-Salazar et al., 2000). Furthermore, Stanton-Salazar (2001a) determined that the social capital for first-generation students was dependent on the relationships with teachers, along with the information, resources, and supports teachers provide.

First-generation students' experiences were found to be generally aligned with the findings of Stanton-Salazar (2001a) and Stanton-Salazar et al. (2000) as related to the influence institutional agents have. Beginning with their non-dual enrollment teachers, several first-generation students credited them for encouraging and assisting them in their initial enrollment into the program. When referring to their unawareness of the implications regarding their fifth-grade end-of-year core course averages, several first-generation students had no knowledge of the dual enrollment program as freshmen in high school. Additionally, they may not have been as actively involved in advanced level curriculum during their middle school years. Attributing some of their

non-dual enrollment teachers, first-generation students' interest in the dual enrollment program initially peaked through conversations held with them. The fallout of the relational capacity Stanton-Salazar (2001a) described in his research is evident in this case study as well. Through the influential and relational elements built within the classroom, multiple first-generation students were able to transition successfully into the dual enrollment program.

Once they successfully qualified for dual enrollment program participation, first-generation students had access to various dual enrollment teachers whom they also acknowledge for building their social capital. This group of teachers assisted them with the following: a) course selection; b) enrollment processes; c) learning how to navigate research university websites and researching transferability of course credit; and d) development of study skills, particularly time management. Teachers who created opportunities for conversations with students regarding the resources established the foundation needed for social networks to be built (Stanton-Salazar, 2001a). Moreover, because first-generation students were directly accessible to teachers when they were in their classrooms, they were able to also provide students with unspoken institutional norms that surrounded the dual enrollment program such as developing rigorous study habits, performing at a high academic level, and conforming to behaviors in a manner that was conducive to their learning as well as their peers. Lastly, dual enrollment teachers were acknowledged by first-generation students for offering collaborative opportunities with peers, an example of social capital networks.

Program Administrators

Stanton-Salazar (2001a) contended that social capital for first-generation students was not only dependent on the relationships with institutional agents (i.e. peers, counselors, teachers) but was also based on the information, resources, and supports each one provided. The institutional agents are able to build their relational capacity with first-generation students and are able to share resources. Stanton-Salazar (2001a) believed that such institutional agents were obligated to do so for marginalized student groups (i.e. first-generation) due to their influential positions. Moreover, agents with authority and high status were responsible for helping first-generation students accumulate social capital (Stanton-Salazar, 2001a).

Several program administrators who were interviewed essentially work behind the scenes unbeknownst to participating students with the dual enrollment program. District level program administrators have the influence in making decisions for the program; however, their positions do not necessarily allow direct contact to students. Additionally, the high school program administrators may have more opportunities for direct student contact, several also develop campus-based processes of the dual enrollment program to which students do not have access. The program administrators often discussed by first-generation students were the DEA and the DEC. Fortunately, both have the opportunities for direct student contact spoken of by Stanton-Salazar (2001a) in that they are sitting in influential positions and can assist first-generation students in navigating the processes by sharing information, resources, and supports; however, their roles do not have the authoritative capacity as do district-level or other high school program administrators.

The DEA was overwhelmingly accredited for her contributions in providing supports for students. No major differences were found between the multi-generation students and the first-generation students. Beginning with the dual enrollment program's informational meetings, students shared their appreciation of the DEA's efforts in providing opportunities to all the high school students. Additionally, students expanded on their experiences provided by the DEA, including college visits, study material for college-readiness exams, and at times served as a facilitator of conversations between students and dual enrollment teachers regarding their content and curriculum. Students further indicated that the DEA was instrumental in simplifying the benefits dual enrollment courses offered them as future college students, including processes for course selections and how the courses would transfer to their desired four-year university. One concern that was shared by students was that the campus had only one DEA; therefore, scheduling a time to visit with her was not as simple as they would hope. Students found, however, that when they emailed the DEA, her response time was appropriate. Furthermore, they shared that if the DEA was unable answer the question via an email, she would find an appropriate time to meet with the students before or after school or during lunch. A few students shared she held conference calls on the weekend with the student and parent.

The Dual Enrollment Administrator (DEA) was found to be aligned with what Stanton-Salazar (2001a) found in that the social capital for first-generation students was dependent on the relationships, as well as her availability and accessibility to information, resources, and supports. Arguments could be made that the DEA has less authoritative decision-making abilities; however, the processes used to provide social

capital supports and resources for them did not go unnoticed. The DEA would not have received such popular acclaim if not for the valuable relationships she developed with first-generation students (Stanton-Salazar, 2001a). The results of the relationships helped students navigate the resources and information needed to find success through the dual enrollment program.

Parents

The dual enrollment program at GHS and campus personel have little to no influence regarding the social capital provided by parents. However, a discussion is worthy in that the less social capital first-generation students bring to the campus, district and campus personnel are more responsible and obligated to level the playing field for such students. Stanton-Salazar et al. (2000) made arguments for peers, teachers, counselors, and administrators in building first-generation students' social capital; however, Dika and Singh. (2002) brought attention to the importance of parental involvement in developing students' social capital capacity.

Educators have valued parental involvement for years, and the findings of this case study share two critical points of discussion: 1) first-generation students perceived their parents wanted them to be successful in their studies; and 2) first-generation students are not knowledgeable of the implications and processes regarding the dual enrollment program. Parents' support and influence is strongly favored for first-generation students. In other words, their parents may not know *how* to support them with information and experiences, but the fact that they *feel* supported is instrumental.

The findings in the case study revealed that first-generation students depended on their peers or campus personnel to help facilitate their participation in the dual enrollment program. Moreover, the students did not have conversations with their parents regarding course selection. Students further perceived that their parents were satisfied with them passing their courses but were uninformed of the required grades needed to pursue advanced-level coursework. The level of responsibility to ensure that first-generation students are not left behind falls directly on campus personnel and indirectly on district level personnel. Even with the idea of program awareness, first-generation students argued that their parents were not aware of the program. The students shared that their parents were supportive and encouraging as they participated in the program.

Lastly, the dual enrollment partnership agreement allowed students to pay a reduced tuition fee for their courses. Several first-generation students argued that the fee was a financial struggle for their families. The conversation led me to review school data about the students to determine why some first-generation students were not classified as low socioeconomic considering the financial burden to their families. The research revealed that some of the students did not submit their "Free/Reduced Lunch Application" with the school district. The importance of a students' meal status could have potentially offered financial assistance (i.e. waivers, additional fee reductions, scholarships) for the dual enrollment program. The results indicate, once again, the importance of providing critical information, supports, and processes in a timely manner for first-generation students.

Summary of Discussion

The findings of this case study have revealed that a dual enrollment program is beneficial for first-generation students. As they transition from high school to their postsecondary studies, they take with them all the experiences the program offered them including college knowledge, registration and enrollment processes, the knowhows of rigorous coursework, and a keen sense of study habits. First-generation students may have come to the table with an absence of such knowledge schema, and the dual enrollment program may be able to provide the experiences and knowledge. As changes in this dual enrollment program are made to better suit the school district's purposes and goals, program administrators have made attempts to be more inclusive of underrepresented student populations, including first-generation students.

Additionally, a gap in the identification process, which essentially begin at the elementary level, was found. Students were found to be unaware of the implications their fifth -grade yearly averages as they transitioned to middle school. By not actively participating in the advanced course level track in middle school, first-generation students were less aware of the dual enrollment program. Furthermore, I argue that once in high school, transitioning to an advanced level track (i.e. dual enrollment program) was more challenging due to the program's intricate details which were not readily made available to them.

The framework of this case study was founded on social capital. I concluded that first-generation students' involvement and success in the dual enrollment program was dependent on the relationships they developed with key players (i.e. institutional agents). Students were more likely to depend on their peers and teachers due than their

alpha-counselors' due to their available time. Furthermore, this case study revealed that first-generation students most heavily depended on their peers. The students also passionately discussed their parents' role. They were not oblivious to their parents' inexperience and were aware they would need to depend on other institutional agents. However, they were also aware and appreciative of their parents' support. Whether their parents encouraged them or financially "found a way" to pay the reduced cost of the courses, each first-generation student was grateful.

The findings revealed that the dual enrollment program is serving its intended purpose of providing college-readiness opportunities for some students; however, modifications and adaptations are needed if an increase of first-generation students are to reap the same opportunities via the dual enrollment program. The key is streamlining the identification process, which will simultaneously build stronger social capital for first-generation students. As found in this case study, once first-generation students found themselves actively participating in the program, they were able to succeed equally when compared to the multi-generation students. A more inclusive student group has the potential of reaping the benefits of the program, thereby enhancing the purpose and goals set forth by the district.

Recommendations

PISD sought to expand and offer a variety of college-readiness opportunities for students, including the dual enrollment program. Program administrators perceived that their robust efforts in program implementation were designed with students' best interest in mind. Additionally, GHS administrators sought to ensure the demographics of the students in the dual enrollment program sought to align with the overall

demographics of the campus. With the two overarching goals, recommendations are suggested to address the student identification process and on-board institutional agents from each institute (i.e. elementary, middle, and high schools).

Student Identification Process

Missed opportunities for first-generation student access into the dual enrollment program was prevalent in this case study. The interviews proved a sense of unawareness regarding the implications of students' fifth grade yearly averages along with course selection in middle school, which resulted in negatively impacting first-generation students' opportunities for dual enrollment participation. In most cases, first-generation students who were unaware of the program prior to high school enrollment found themselves trying to catch up with their multi-generation peers.

Other key institutional agents assisted the students in accessing the dual enrollment program; however, the gap in prior learning of the program remained. The likelihood of first-generation students enrolling in the program once they enroll in high school is low; therefore, efforts should be made for early identification and awareness.

Identifying first-generation students within a large school district can become challenging simply because first-generation status is not a recognized indicator (i.e. special population) within the state accountability system of Texas. Students are identified by other measurable indicators (i.e. students' ethnicity, special education, English Language Learners); however, first-generation status is not included, although previous research directly supports processes and programs for them.

With that, the findings revealed a campus-specific process that was used to identify first-generation students. Other campuses, including middle and high, should

consider using a similar process until PISD adds generational status to its registration forms. Additionally, the definition of first-generation used in this study is not an encompassing description; therefore, the school district in this case study should first consider using developing a comprehensive definition it prefers its campuses use.

Once this information has been determined, the initial capturing process of whether students are first-generation should occur as students first enroll in the school district.

Much like gathering other demographic information, such as students' birthdate, home address, emergency contacts, etc., generation-status could be an added indicator. PISD gathers this information either through an online enrollment process or in-person. Due to students' generation status changing, updating this information annually, like other demographic information, is critical. For example, if a student enrolls in elementary school and his parent earns a college degree before the student transitions to high school, he is no longer considered a first-generation student.

Essentially, previous research has emphasized the importance of identifying first-generation students. Much like other special populations who require targeted, specific supports, first-generation status should also be considered. Dual enrollment programming provides first-generation students the experiences and the college knowledge needed to not only academically excel in high school but also stand a fighting change as they transition to college. Without a solid identification process, however, first-generation students may lose the opportunities simply due to their unawareness and the institutional agents' unawareness of who the students are. Educators have ways of knowing which students are labeled as special education, Hispanic, African American, and/or economically disadvantaged. However, in most

cases, this study revealed that they may not know who their first-generation students are.

Seats of Learning: Opportunities for Information Sharing

Professional development opportunities called *Seats of Learning* is a recommendation I offer. By developing and implementing Seats of Learning, which would provide specific professional development for a specific intended audience, a structured process of dual enrollment program information sharing could likely capture a higher number of first-generation students. The first Seat of Learning involves fourth and fifth grade Reading/English Language Arts and Math teachers.

Points of learning for the teachers include: a) introduction to the dual enrollment program, which would share the possible benefits of the program; b) entrance requirements for participation, including grade requirements; c) best teaching practices that support high achieving students; d) best teaching practices that help identify and capture mid and low-performing students who could achieve at a higher academic level; and e) strategies for parent communication specific to the dual enrollment program (i.e. one-on-one conferences held in parents' native language).

The target audience for the next Seat of Learning would be middle school teachers who teach Math, Reading/English Language Arts, Social Studies, Science, and any of the high school credit-bearing courses (i.e. Spanish, Algebra I). Points of learning for the teachers include: a) introduction and benefits of the dual enrollment program; b) entrance requirements for participation and guidelines to maintain active status; c) best teaching practices that support high achieving students; d) best teaching practices that help identify and capture mid and low-performing students who could

achieve at a higher academic level; e) building students' study habits; and e) strategies for parent and student communication specific to the dual enrollment program.

The next Seat of Learning involves elementary and middle school administrators, including principals and counselors. The importance of building their faculty and staff's capacity of the program will trickle to students and parents in a manner that becomes common knowledge within the school's community. With that, the Seat of Learning for building administrators would include: a) introduction and benefits of the dual enrollment program; b) entrance requirements for participation and guidelines to maintain active status; c) processes that help identify low to midperforming students who could achieve in higher academic courses; d) processes which will advance students from on-level courses (in middle school) to advanced-level; e) support strategies for teachers; and f) strategies for parent, student, and community communication specific to the dual enrollment program, including but not limited to providing translations of all communication and program documents.

The final Seat of Learning would involve high school campus personnel. The size of the school district's campus is quite large; therefore, the implementation of the series could be campus-specific rather than district-wide. Program administrators, who already exist at the high school, could support the series through professional development opportunities offered to the teachers. The teachers would learn about the following: a) introduction and benefits of the dual enrollment program; b) entrance requirements for participation and guidelines to maintain active status; c) processes that help identify low to mid-performing students who could achieve in higher academic courses; d) processes which will advance students from on-level courses to

advanced-level; and e) strategies for parent, student, and community communication specific to the dual enrollment program.

The Seats of Learning professional development opportunities offered to each of the (possible) institutional agents creates a streamlined process of support, networks, and common knowledge. Seats of Learning would help capture students and parents at a younger age where academic performance could be achieved.

Additionally, first-generation students' social capital would begin at an earlier age, which would only be strengthened by the participation in the dual enrollment program in high school. By developing focused intentional professional learning opportunities for faculties and staffs, first-generation students are assured to be supported from elementary through high school, which would in turn help support the school district and high school campus goals.

Limitations of the Study

I researched the dual enrollment program of one high school in a large suburban school district, which leads to limitations that may not allow the findings to be widespread amongst other dual enrollment programs, high school campuses, or school districts. The definition used in this case study may not necessarily encompass all first-generation students. This case study represented Collier and Morgan's (2007) description of first-generation students as those whose parents had not earned a four-year college degree prior to the student enrolling in college. The definition was used to ensure a sense of constancy amongst the student participants.

The student sample size used in this case study was small when compared to the high school campus student population, which is over 3,100 students. The descriptive data determined that only 53 high school seniors met the qualifying factors to participate in the study; however, only five first-generation and five multigeneration students were used to represent their respective groups. This case study is only representative of senior-level students' perceptions; therefore, any modifications and adaptations the school district or the high school campus has made for lower grade level students in the dual enrollment program are not represented in this case study. Finally, only the perspectives of program administrators and students were gathered. Other institutional agents were not included in the study (i.e. teachers, counselors, peers, parents, community college representatives).

Recommendations for Future Research

I conclude with recommendations for future research which would strengthen the literature regarding dual enrollment programming, social capital, and first-generation students. First, a longitudinal study would serve as a follow-up to the participating first-generation students. The study would help measure students' level of success (i.e. college degree attainment, careers initiated) by conducting this future research in (approximately) four years. Additionally, such a study would allow them to share whether, and to what degree, the dual enrollment program assisted them in their success.

Future research could also be conducted on current eighth grade firstgeneration students who enroll and actively participate in the dual enrollment
program. As students transition through the dual enrollment program, a similar
research case study could be conducted when they are seniors. A comparison of their
experiences versus those of the current research could help determine whether the

program's modifications, adaptations, and sense of social capital have influenced students' perceptions.

Additionally, the descriptive data in the case study reflected a lower number of students of color (i.e. African American) as well as low socioeconomic students. GHS set a goal to ensure stronger alignment in the dual enrollment program, and future studies could be conducted to determine why such a gap exists. The results of the study could strengthen the program to not only meet the campus goals but to also strengthen students' college-going opportunities.

A final consideration for future research is to evaluate first-generation students' perceptions of different institutional agents. Dual enrollment teachers, non-dual enrollment teachers, elementary and middle school teachers and administrators could take part in this research. Program administrators are ultimately responsible for the outcomes; however, the influences other institutional agents play in providing social capital supports and services to first-generation students should be evaluated as well.

Conclusion

In this study, program administrators shared their intent of supporting first-generation students through the dual enrollment program; however, no specific or targeted social capital supports were considered for first-generation students. Program administrators utilized best practices, which supported all student groups; however, the knowledge gap that may exist for first-generation students is not specifically addressed in a special or different manner. This critical element necessitates the need for providing social capital supports and resources for first-generation students' prior

to beginning their high school careers. Furthermore, they should involve networks outside of the dual enrollment program, including elementary and middle school personnel.

The findings determined whether the social capital support and resources were aligned between program administrators and first-generation students' lived experiences via the dual enrollment program. This study proved that first-generation students appreciated the social capital supports that program administrators intended to provide; albeit, for all students and not directly for only first-generation students. First-generation students grasped the purpose of the program, which would expose them to college-readiness standards while simultaneously earning dual credit (high school and college). Through the program, first-generation students became knowledgeable with college terminology, the application process, financial aid processes, and course rigor. Furthermore, first-generation students felt supported through the reduced course fees they paid. Gaps were also found between program administrators' intentions and the lived experiences of first-generation students. The identification process of eligible students, communications about the possible implications of the dual enrollment program, and social capital supports in elementary and middle schools were intended to provide social capital supports and network systems for first-generation students; however, their lived experiences proved otherwise.

Dual enrollment programming for first-generation students could provide lifechanging opportunities for their future success. This study demonstrated different levels of success; however, areas of improvement were also found that could enhance the program. The knowledge first-generation students grasp through such a program not only directly benefit them, but they in turn can leverage this to support their family members, as was evident through students sharing how they could now help their siblings. The trajectory of their future lives can immensely change beginning with the benefits of the dual enrollment program. Educational institutions who support a dual enrollment program also have the opportunity and responsibility of propelling first-generation students into successful futures.

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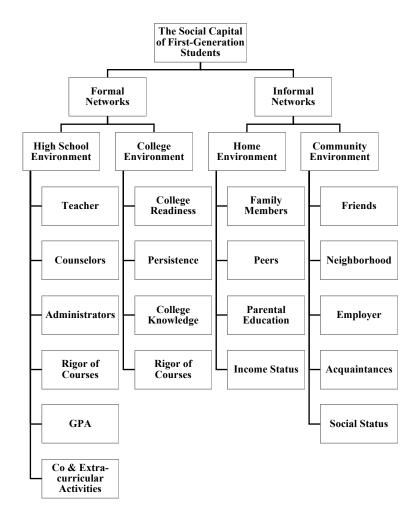
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APPENDICES

Appendix A

The Social Capital of First-Generation Students



Appendix B

Counselor Conference Form

Counselor Conference Form

Student Last Name	Student First Name	Student ID Number
Endorsement		
Class Rank		GPA
Post Graduate Plans:		
Universities of Interest:		
Scholarships Received:		
Total Amount of Scholarship(s)		
PSAT Score:		ASPIRE Composite:
Student Email Address:		
Student Phone Number:		
First-Generation Student	YES T	NO

Appendix C

Guiding Questions: School District Administrators

Inductive Code	Questions	
Early Awareness	 What is your role in the dual enrollment program? How would you describe the purpose of the dual enrollment program? 	
Application Process	3) How does your organization identify and determine who first-generation students are? How is this data tracked?4) How are students selected to participate in the dual enrollment program?5) How do you participate in making the final decisions?	
Support	 6) How would you describe the first-generation students' social capital via the dual enrollment program? 7) How does your organization support the high school campus? 8) What resources does your organization provide to the high school campus? 9) What resources and network systems does your organization provide directly to first-generation students in the dual enrollment program? 	
Organizational Connectivity & Partnership	10) How does your organization ensure effective communication between the different partnership organizations?	

Appendix D

Guiding Questions: High School Administrators

Inductive Code	Questions
Early Awareness	 What is your role in the dual enrollment program? How would you describe the purpose of the dual enrollment program?
Application Process	3) How does your organization identify and determine who first-generation students are? How is this data tracked?4) From the school district viewpoint, how are students selected to participate in the dual enrollment program?5) How do you participate in making the final decisions?
Support	 6) How would you describe first-generation students' social capital via the dual enrollment program? 7) How does your organization support the school district regarding the dual enrollment program? 8) What resources and network systems does your organization provide directly to first-generation students in the dual enrollment program? 9) What resources does your organization provide to the school district??
Organizational Connectivity & Partnership	10) How does your organization ensure effective communication between the different partnership organizations?

Appendix E

Guiding Questions: Student Focus Groups

T 1 2 0 1	
Inductive Code	Questions
Information Gathering	 How did you learn about the high school's dual enrollment program? College-readiness is not only being prepared for college with your grades and GPA, but it also means knowing the application process, financial aid processes, course selection, etc. How are you gaining this information? How did you determine the dual enrollment courses you would take? Who helped make those decisions?
Perception	 4) What are your perceptions of your experience of the dual enrollment program? 5) How would you compare the rigor of dual enrollment courses when compared to other advanced level courses? 6) Do you perceive your high school dual enrollment courses are preparing you for the rigorous coursework required at the college level? How? 7) How do you perceive the dual enrollment program will assist you in your transition to college? 8) What other elements of the dual enrollment program do you believe should be considered for future students?
Social Capital	 9) What supports were provided to you regarding dual enrollment courses? 10) Who provided supports about and for the dual enrollment program? How? 11) How would you describe your parents' role in assisting you throughout high school? Specific to the dual enrollment program? 12) How would you describe the school's role (counselor, administrators, teachers) in assisting you throughout high school? Specific to the dual enrollment program? 13) How would you describe your peers' role in assisting you throughout high school? Specific to the dual enrollment program?

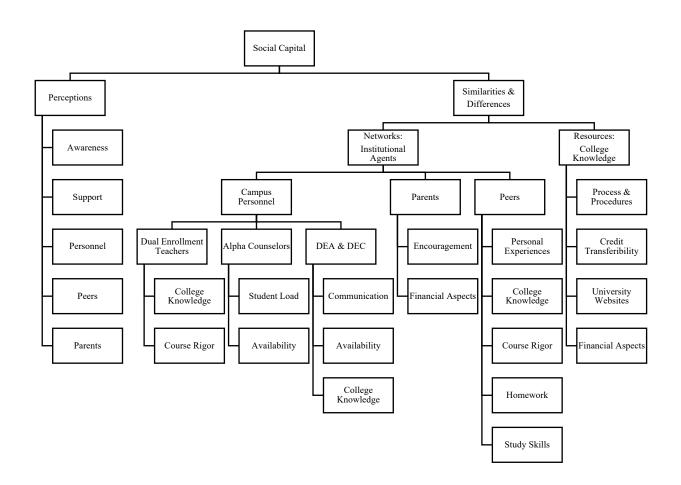
Appendix F

Descriptive Data: Student Focus Groups

Category	Questions
Student Demographic Data	 Race/ethnicity Gender Socio-economic status Generational Status (First- or Multi-)
Student Data (Dual Enrollment Course & Student Achievement Data)	 High school credits earned in middle school Total number of advanced-level courses, inclusive of dual enrollment courses Total number of credits earned via advanced-level courses, inclusive of dual enrollment courses Total number of dual enrollment courses, exclusive of other advanced-level courses Total number of dual enrollment credits earned, exclusive of other advanced-level courses Dual enrollment courses offered at GHS Students overall GPA (as of the date of the research study) Students overall class ranking (as of the date of the research study)

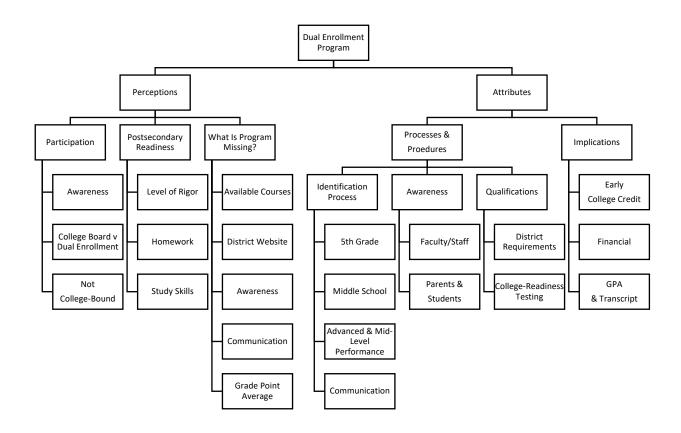
Appendix G

Codes & Themes of Social Capital



Appendix H

Codes & Themes of Dual Enrollment Program



Appendix I

Institutional Review Board Approval



Institutional Review Boards

APPROVAL OF SUBMISSION

April 15, 2020

Michael Contreras mrcontreras2@uh.edu

Dear Michael Contreras:

On April 13, 2020, the IRB reviewed the following submission:

Type of Review:	Initial Study	
Title of Study:	A Case Study Examining the Inclusivity of First-	
	Generation Students in A Dual Enrollment Program	
Investigator:		
IRB ID:	STUDY00002210	
Funding/ Proposed	Name: Unfunded	
Funding:		
Award ID:		
Award Title:		
IND, IDE, or HDE:	None	
Documents Reviewed:	Administrators_ Interview Questions.pdf, Category:	
	Study tools (ex: surveys, interview/focus group	
	questions, data collection forms, etc.);	
	Michael Contrareas Addendum.pdf, Category:	
	Letters of Cooperation / Permission;	
	Student Focus Group Questions.pdf, Category:	
	Study tools (ex: surveys, interview/focus group	
	questions, data collection forms, etc.);	
	HRP-502b - Students (3) (1).pdf, Category: Consent	
	Form;	
	Letter to Parents - (2).pdf, Category: Recruitment	
	Materials;	
	HRP-503 Protocol (4) (1) (2).pdf, Category: IRB	
	Protocol;	
	Email Letter to Admin - (2).pdf, Category:	
	Recruitment Materials;	
	HRP-502b - Multi-Gen Students (3) (1).pdf,	
	Category: Consent Form;	
	CHILD ASSENT (3).pdf, Category: Consent Form;	
	HRP-502e - Admin Consent (3) (2).pdf, Category:	
	Consent Form;	
	• 2019-20 CFISD-DIA Research Application AC.pdf,	

Appendix I (Continued)

Institutional Review Board Approval



	Category: Letters of Cooperation / Permission;
Review Category:	Expedited
Committee Name:	Noncommittee review
IRB Coordinator:	Maria Martinez

The IRB approved the study on April 15, 2020; recruitment and procedures detailed within the approved protocol may now be initiated.

As this study was approved under an exempt or expedited process, recently revised regulatory requirements do not require the submission of annual continuing review documentation. However, it is critical that the following submissions are made to the IRB to ensure continued compliance:

- Modifications to the protocol prior to initiating any changes (for example, the addition of study personnel, updated recruitment materials, change in study design, requests for additional subjects)
- Reportable New Information/Unanticipated Problems Involving Risks to Subjects or Others
- Study Closure

Unless a waiver has been granted by the IRB, use the stamped consent form approved by the IRB to document consent. The approved version may be downloaded from the documents tab

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system.

Sincerely,

Research Integrity and Oversight (RIO) Office University of Houston, Division of Research 713 743 9204 cphs@central.uh.edu http://www.uh.edu/research/compliance/irb-cphs/