DUAL ENROLLMENT FOR LOW-INCOME STUDENTS:
EXPLORING STUDENT PERCEPTIONS

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Abstract

Most educators are keenly aware that a high socioeconomic status (SES) equates to better academic preparation than a low SES and high SES students are more likely to attain a college degree. One strategy for closing the higher education equity gap is to provide college-level courses to students while in high school through dual enrollment programs. These programs offer the opportunity for high school students to earn high school and college credit for courses taken at the high school, on a college campus, or online. Dual enrollment programs are an ideal way for students who have limited economic resources and have the ability to be successful in early college programs, to begin to work on their college degrees while still in high school. In most cases, these programs are free to the students, which saves students from potential college debt after matriculating to college. The researcher conducted a qualitative study that sought to gain an understanding of the experience of low-income students who participated in the dual enrollment program in Ohio and then matriculated to the community college that was associated with their dual enrollment participation. The study was guided by the overarching question, “What is the experience of low-income college students who participate in a dual enrollment program prior to matriculating to college?” This question was further defined by answering the following sub-questions: (1) As college students, what are the students’ perceptions of their past experience as a dually enrolled high school student?; (2) How do the students perceive their transition to college in terms of their access to information and social supports as a result of participation in the dual enrollment program?; and (3) How do the students perceive their preparation for college academic success in terms of college readiness as a result of their participation in the dual enrollment program? The theoretical framework for this study was centered on Social Capital Theory and also utilized Conley’s college readiness model as a
conceptual framework for evaluating college readiness. As this study sought to understand the lived experiences of the participants, data were collected and analyzed using an interpretive phenomenological methodology. The findings from the study indicate that many of the low-income students underutilized the dual enrollment program, which limited the impact of the dual enrollment program on their social capital development and their overall college readiness. Reasons for the limited participation in the program adds to the literature that details common barriers to participation for low-income students. Policy implications and best practices for policy design are discussed in relation to the barriers identified in the study.

*Keywords:* Dual enrollment, underrepresented students, socioeconomic status, low-income
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Dedication

This work is dedicated first to my husband Greg, who has been a constant support over the past several years as I pursued my graduate degrees. Greg has shown incredible patience and unwavering support. He was always available to our children when I was busy reading, writing, or researching, which seemed to be every available moment outside of my already demanding work commitments. I cannot thank my husband enough for allowing me the space to pursue this endeavor and for his encouragement and belief in me. I love you, Greg, and look forward to another thirty years of marriage and adventure.

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Chapter One: Introduction to the Study

Educators and policymakers agree on the need to close the achievement gap for low-income students, yet educational attainment rates for low socioeconomic status (SES) students still lag behind their counterparts. An (2013a) notes that 26% of college students from the bottom quartile of the income distribution attained a degree by the age of 25, compared to 59% of college students from the top quartile of the income distribution. Many studies have shown the benefit of dual enrollment programs in addressing college success; however, studies indicate that low-SES students are less likely to participate in coursework that prepares them for college than their high-SES counterparts (An, 2013a). Given the SES differences in dual enrollment participation and the potential benefit of these programs for college success, there is a great need to expand the reach of dual enrollment programs to a wider range of students.

The purpose of this study was to explore how low-income students made sense of their experience in participating in a dual enrollment program and their subsequent transition to college. The transition to college was generally defined as the successful enrollment at a community college after participating in a dual enrollment program while in high school. The knowledge generated from this study can inform state policy, as well as secondary and postsecondary practice. The study utilized interpretative phenomenological analysis to qualitatively explore the research problem.

This chapter begins with a brief overview of the research on dual enrollment programs to provide context and background for the study. The rationale and significance are discussed next, with additional focus on low-income students. The theoretical framework is introduced and serves as a lens for the study and it is explicitly tied to the conceptual framework. Lastly, the
problem statement, purpose statement, and research question are presented to focus and ground the study.

**Context and Background**

Legislators and educators agree on the goal to increase persistence and college completion rates for all students. President Obama issued the Race to the Top challenge, which allocated $4.35 billion to encourage states to implement reforms that lead to increased college success rates (U.S. Department of Education, 2009). More recently, the Every Student Succeeds Act (ESSA) was signed by President Obama to address the weaknesses of No Child Left Behind (U.S. Department of Education, 2015). Among several initiatives, ESSA encourages the use of dual enrollment programs as a strategy to raise the rigor of high school coursework and to better prepare students for college. Dual enrollment programs give academically prepared high school students an opportunity to enroll in college coursework; bridge the gap between secondary and postsecondary education; and improve college success after students matriculate to college (An, 2013b; Brophy & Johnson, 2007; Hoffman, Vargas, & Santos, 2008; Jones, 2014).

Dual enrollment programs offer the opportunity for high school students to earn high school and college credit. The courses can be taken at the high school, on a college campus, or online. It has been common practice to restrict dual enrollment programs to students who have the highest levels of academic ability, which tend to be students of higher SES. Programs are now being redesigned to reach a wider range of students. Dual enrollment programs are an ideal way for students, who have the ability to be successful in early college programs, to begin to work on their college degrees while still in high school. However, low-income students are less likely to be able to afford to pay tuition, so it is important for legislators to consider funding strategies for dual enrollment programs.
According to the *Education Commission of the States – 50 State Comparison* (2016), there are multiple ways that states fund dual enrollment tuition: student/parent responsibility, school districts/postsecondary institutions pay, or state appropriations. In Ohio, the dual enrollment statute requires the Ohio Department of Education to pay the tuition costs from the school districts’ subsidy, which means school districts pay the cost of the tuition and textbooks (Ohio Revised Code 3365.07, 2015). According to the Education Commission of the States, Ohio and Tennessee are examples of states that have removed the barrier of tuition cost for students wishing to participate in a dual enrollment program, which is particularly beneficial for low-income families.

There are numerous studies on the benefit of dual enrollment programs (Allen & Dadgar, 2012; An, 2013b; D’Amico, Morgan, Robertson, & Rivers, 2013; Hoffman, Vargas, & Santos, 2009; Jones, 2014; Klopfenstein, 2012). Jones (2014) investigated the impact of dual enrollment participation on college persistence in a quantitative study of a community college and a research university. An (2013b) also conducted a quantitative study to examine the impact of dual enrollment participation, with an emphasis on low-SES students. Both Jones (2014) and An (2013b) found that dual enrollment participation had a significant positive impact on college GPA. Additionally, Jones (2014) found a three percent variance in first semester persistence rates and over 11% by the end of the first year for students at the research university, who had participated in dual enrollment compared to those who had not. Hoffman, Vargas, and Santos (2009) found higher persistence rates and dual enrollees earned 15.1 more college credit hours than non-participants did three years after high school completion.

Hoffman et al., (2009) cites that well-designed dual enrollment programs have many advantages. These programs increase the number of college ready underrepresented students by
providing insight to high school students about the knowledge and skills needed to be successful in college. From a financial standpoint, they decrease the cost of a college education by providing free or reduced cost coursework while students are in high school. Lastly, they provide a framework for collaboration between secondary and postsecondary institutions that can improve the high school to college transition for students. Studies show there are definite advantages to students who participate in dual enrollment programs. Research concludes that dual enrollment participation improved college GPA, persistence and degree attainment and eases the transition for high school students entering college (An, 2013; Brophy & Johnson, 2007; Hoffman, Vargas, Santos, & 2008; Jones, 2014).

Further, An (2013b) found that the coursework students take in high school is more important than high school grades for college success. Studies show the positive correlation between pre-college preparation and college enrollment and degree attainment. According to research, dual enrollees are 12% more likely to enroll in college within seven months of high school graduation and they complete an associate’s degree at 61% higher rates than non-dual enrollment participants (Swanson, 2008 as cited by An, 2013b). However, the benefits are not solely academic. Dual enrollment students also tend to have higher expectations for academic success and have better critical-thinking skills (An, 2013a). Given the many benefits of dual enrollment participation, these programs are an ideal way to improve college access for low-income students. Therefore, this study sought to examine dual enrollment participation for low-income students.

**Rationale and Significance**

The purpose for this study was the researcher’s interest in discovering ways to improve college access for low-income students through participation in a dual enrollment program.
Numerous studies examine the overall benefit of dual enrollment programs, but many of these studies focus on higher achieving students. Much less research exists that examines the effects of early college experiences for low-income students, who may be average or low-achieving students. To gain a more complete understanding of dual enrollment participation, it is also necessary to examine the student’s experience transitioning to college after high school graduation. Given the focus on education reform efforts, which encourages early college credit for middle and high school students, empirical research is needed to help direct implementation efforts and inform policy for dual enrollment programs. State policymakers and secondary and post-secondary education leaders must consider the needs of low-income students when creating and implementing dual enrollment programs.

It is no surprise that a high socioeconomic status (SES) equates to better academic preparation than a low-SES; neither is it unexpected that high-SES students are more likely to attain a college degree. This fact is obvious to researchers, policymakers and education leaders, who are proposing strategies to raise the educational attainment rates for underrepresented students. Many researchers believe that participation in dual enrollment programs reduces the socioeconomic gaps in academic performance (An, 2013a; An, 2013b; Roach, Vargas, & David, 2015; Roderick, Nagaoka, & Coca, 2009). An (2013a) points out a 33% gap in college attainment rates when comparing degree attainment for students from the bottom quartile of the income distribution to those from the top quartile. Additionally, 36% of first-generation college students are highly qualified for admission to a 4-year institution, compared to 64% of high school graduates with at least one parent who attended college (An, 2013a). Increasing the reach of dual enrollment programs to include first-generation and lower income students can help bridge the gap in the college attainment rate for this group of students.
There are workforce development and economic benefits for increasing the educational access and success for students, especially for underrepresented populations. Researchers have found evidence that dual enrollment participation enhances workforce quality in economically depressed areas since college persistence is positively impacted by dual enrollment participation (D'Amico, Morgan, Robertson, & Rivers, 2013). Legislators and business owners are aware that a better-educated and trained workforce has a positive impact on society. Participation in dual enrollment programs can lead to a more workforce ready population.

Policymakers and educators must address the barriers to participation in dual enrollment programs by underrepresented students in order to more fully realize the benefits of the program. Some researchers have focused on improving the collaboration between K-12 and postsecondary institutions (Hoffman, Vargas, & Santos, 2009; Howley, Howley, Howley, & Duncan, 2013; Kim, 2012). Other researchers focus on issues of access due to teacher credentialing and lack of transportation in underprivileged high schools (Hughes, 2010; Pretlow & Wathington, 2013). Lastly, this research adds to the discussion of college readiness skill building and shows the importance of focusing on academic and non-academic preparation for students (Conley, 2008; Karp, 2014; Reid & Moore, 2008). Administrators for K-12 and college, as well as policymakers, would benefit from understanding the barriers that exist for underrepresented student participation in dual enrollment programs.

Increasing the educational attainment rates for a community has a positive impact on individuals personally and the society as a whole. Low-income and first-generation students are traditionally less likely to access college and most likely to drop out before completion (An, 2013a; Hoffman, Vargas, & Santos, 2008). This research suggests practical recommendations for teachers, high school and college administrators, counselors, and postsecondary educators for
increasing participation in dual enrollment programs for underrepresented students. It also recommends policy changes that can be made by legislators and policymakers to address barriers for low-income students.

There is also a need to explore the relationships that exist between secondary and postsecondary institutions and their potential for building social capital for dually enrolled students. The research on school-based social capital reinforces the importance of institutional mediators such as teachers, counselors, and college advisors in assisting students with negotiating the barriers that exist to transitioning to postsecondary education (Healy, 2004; Kim, 2012; Stephan, 2013). Two of the most important benefits of high levels of social capital are access to information channels and social supports (Vorhaus, 2014).

This study contributes insight into the experiences of low-income students who have participated in a dual enrollment program in high school and have matriculated to a community college. Additionally, it contributes to the body of knowledge on college access for underrepresented youth. The results of the study can provide valuable insights for high school administrators, college partners, and state lawmakers. It also provides guidance for high school and college intermediaries on the relationship between social support and college readiness from the students’ perspective. The next section of this chapter will include a description and discussion of Social Capital Theory, which served as the theoretical lens for this study.

**Theoretical Framework**

The theoretical framework that undergirds this study is Social Capital Theory. Vorhaus (2014) broadly refers to social capital as the social networks that can lead to the achievement of mutual goals. Social capital is often offered as a variable for explaining educational outcomes
tied to academic attainment, drop-out rates and cognitive development. The concept of social capital places value on the relationships that provide support and assistance for underrepresented college students. This study uses Social Capital Theory to examine the value of creating academic and social supports to improve college readiness and the transition to a postsecondary environment for dual enrollment students. Students from underrepresented populations particularly need additional supports in order to navigate the college process before, during, and after matriculation to higher education. Dual enrollment programs can provide this added support for students prior to their transition to college.

**Historical Foundation of the Framework**

Social Capital Theory’s roots are found in the sociology discipline, but it has been extended to explain phenomena in social sciences, including education. Two of the most influential writers in the field of social capital, from an education standpoint, are James Coleman and Pierre Bourdieu (Wall, Ferrazzi, & Schryer, 1998). These writers provide an individualized conceptualization of social capital, which had previously only been viewed from a community standpoint. Coleman (1988) and Bordieu (1986) believed that social capital exists between individuals and could be studied on an individual level. Coleman’s focus was on a functional use of social capital. He identified three functions of social capital having to do with social control, family support, and networks outside the family (Narayan & Cassidy, 2001; Smith, Beaulieu, & Seraphine, 1995). Bourdieu also viewed social capital from a functional standpoint, but more so as a social asset that should be acquired for the good of the individual and the benefit of the group (Vorhaus, 2014).
Elements of Social Capital

Coleman (1988) asserted that there are three properties inherent within social capital. The first consists of obligations, trustworthiness, and expectations. These three tenets are defined by the belief that relationships are based on trust, which creates mutual obligations and expectations for individuals within the relationship. These obligations and expectations, which are inherent in relationships, can be accumulated over time to create capital to be used for future services or information. Secondly, information channels represent the potential for the acquisition of information that resides in social relations. This information may not be available to the individual otherwise. Lastly, norms represent the rules that govern a group or community and provide guidance for appropriate behavior.

![Diagram of the elements of social capital]

Figure 1. Visual representation of the elements of social capital

Each of the properties of social capital are potential elements for an effective dual enrollment program. Students need relationships, built on trust, which can frame their interactions with high school counselors and college advisors. As mediators, counselors and advisors can act as information channels and provide insights to students regarding the norms for the college environment. This study examined whether these elements inherently exist in the dual
enrollment program and how these networks affect the students’ transition to college and overall college readiness.

**Critics of Social Capital Theory**

Both Coleman’s and Bordieu’s writings have been challenged. Other researchers suggest that the functions of social capital should include not only social networks and structures, but should also examine the role of class, ethnicity, culture, and gender. Some researchers believe that these attributes can create an unequal capacity to convert potential capital into an effective resource (Vorhaus, 2014). Despite the introduction of additional variables, Coleman and Bordieu created the basis for many subsequent researchers to apply social capital to retention and student success in higher education.

**Rationale**

In addition to cognitive and non-cognitive skills, underrepresented students can benefit from developing social capital. The concept of social capital places value on the relationships that provide support and assistance for low-SES, first-generation, and minority college students. According to researchers Hoffman, Vargas, and Santos (2008), these students tend to struggle to access support on college campuses and have a propensity to drop out of postsecondary institutions at higher rates than their middle and upper-income peers who have college educated parents. Only 42% of low-income students who graduate from high school prepared for college go on to earn a degree, compared to 73% similarly prepared middle and upper-income high school graduates (Hoffman, Vargas, & Santos, 2008). Providing social support helps fill the social capital deficit for underrepresented students. For the underrepresented students who are fortunate enough to navigate the admissions process successfully, college campuses can prove
challenging as well. Building social capital through relationships provides encouragement and support to help students manage their new environment. As students develop social networks in college, they become more connected to college life and less likely to drop out (Moschetti & Hudley, 2015; Sommerfeld & Bowen, 2013; Wilcox, Winn, & Fyvie-Gauld, 2005).

**Application to the Study**

Social Capital Theory provides a framework for understanding how social supports and social networks impact college readiness and the transition to postsecondary for low-income students. The core elements of the framework, social support and information channels, are reflected in the sub-questions that are foundational to the research problem. Moreover, the framework’s emphasis on an individualized conceptualization of social capital makes the use of a qualitative research method an appropriate choice for this study. In-depth interviews allowed the researcher to gain insights to the phenomenon through direct interaction with the participants (Creswell, 2013). The perceptions of the participants were explored to provide insight into the experience of low-income students who participated in the dual enrollment program and later matriculated to college. Overall, the findings of this study provide insight to improve the experience and success of this student population, which supports the goals and desires of educators and policymakers.

This study sought to explore how dual enrollment students perceived their sources of social capital and how social networks affected their college preparedness. Social Capital Theory has a significant role in encouraging educators to consider purposely creating opportunities for students to build social capital through peer and professional networks within dual enrollment programs. Therefore, Social Capital Theory is relevant to this research study
and the examination of the role of dual enrollment programs for student access and success for low-income students.

**Conceptual Framework**

In addition to using Social Capital Theory as a theoretical framework for this study, David Conley’s college readiness model was utilized as a conceptual framework for evaluating college readiness. Conley (2008) defines college readiness as “the level of preparation a student needs in order to enroll and succeed, without remediation, in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program” (p.4). By this standard, the college-ready student needs an understanding of the academic expectations, as well as the college culture and norms. Success in college requires skill sets and strategies that are beyond those developed in high school.

**College Readiness**

Though there are various aspects regarding college readiness, this research focused on Conley’s college readiness model and the role of social capital in preparing students for college success. Conley has been a leader in developing a more comprehensive approach to measuring college readiness. An (2013a) noted that low-SES parents are less likely to be involved in educational decisions and college preparation, which increases the need for the social networks that provide information and support to these students. The concept of social capital highlights this aspect of college readiness. The following sections examines overall college readiness measures, followed by a more in-depth look at the role of social capital as it relates to college readiness.
Measures of College Readiness

According to studies, many students begin postsecondary unprepared for the academic demands and expectations (Conley, 2008; Kanny, 2014; Karp, 2012; Reid & Moore, 2008). Most often, postsecondary institutions rely on standardized tests and high school GPAs to predict college success. Conley (2007) points out that many postsecondary institutions depend on three primary metrics for determining college readiness: high school GPA, courses taken, and college entrance and placement exams. However, Strayhorn (2014), noted that these traditional measures of college readiness generally only account for approximately 25% of the variance in educational outcomes, which leaves over 70% of the variance to nonacademic measures of readiness. Other researchers agree with Strayhorn’s position and note that the traditional indicators do not always provide a complete portrayal of a student’s ability to succeed in college (Conley, 2008; Roderick, Nagaoka, & Coca, 2009; Sommerfeld, 2011; Wiley, Wyatt, & Camara, 2010).

Researchers have discovered that the disparity that exists between the rates of acceptance, attendance, and completion by students who have been traditionally underrepresented in comparison to the more traditional college-going population is linked to the reliance on cognitive factors (standardized test scores, high school rank, and high school GPA) in the admissions process. These factors have proven to be less accurate for assessing non-traditional college students’ readiness for college (Conley, 2008; Roderick, Nagaoka, & Coca, 2009; Sommerfeld, 2011; Wiley, Wyatt, & Camara, 2010). This fact requires that school systems, policymakers, and researchers identify a measureable set of skills and attributes that students need in order to be successful in college. In doing so, educators can be more purposeful in incorporating skill-
building activities across the curriculum. In preparing students for success in college, the focus should be on building academic and non-academic skills, as well as overall college knowledge.

Conley’s college readiness model expands upon the traditional measures and includes four factors: key cognitive strategies, key content knowledge, academic behaviors, and contextual skills and knowledge.

Figure 2. Facets of College Readiness. Source: Conley, 2008

Figure 2 provides a visual representation of Conley’s college readiness model. The model is multifaceted and incorporates factors that are found inside and outside the classroom, both academic and non-academic skills. The four concentric circles indicate that each aspect of college readiness interacts with the others. The first two components can be broadly defined as academic skills, while the second two components are sometimes categorized as non-academic skills. These four components are discussed in detail in the following sections.

Key Cognitive Strategies. Key cognitive strategies represent the knowledge needed to meet the academic intellectual demands of college. Many students begin postsecondary unprepared for the academic demands and expectations (Conley, 2008; Kanny, 2014; Karp, 2012; Reid & Moore, 2008). College is very different from high school. The pace is quicker
and the college instructor expects students to think deeply, analyze complex problems, and communicate ideas clearly. Cognitive skills enable students to learn academic content, which is foundational for college success. Conley (2008) describes several cognitive strategies that contribute to college readiness: problem solving, research, reasoning, interpretation, and precision. Students must be able to solve routine and non-routine problems, as well as simple and complex issues. These strategies are directly related to other aspects of college readiness, such as the student’s academic knowledge and skills.

**Academic Knowledge and Skills.** Roderick et al. (2009) combines cognitive strategies with academic knowledge and skills as indicators of college readiness. Conley (2008) points to six core subject areas: English, math, science, social studies, world languages, and arts. However, core academic skills are distinct from content knowledge in subject areas. For example, English standards may include skills such as writing, research, oral communication, and thinking skills. These skills are not necessarily specific to English, but can be utilized across the curriculum. A similar example can be found in the difference between teaching algebra by memorizing equations or by engaging students to solve problems with logic and analytic thinking skills. Research suggests the biggest difference between high school and college classes is the expectation and requirement for students to use academic skills (Conley, 2008; Roderick et al., 2009).

**Academic Behaviors (Non-Academic Skills).** Students need to acquire and master certain behaviors that support college success. These behaviors are also referred to as non-academic skills as they go beyond content knowledge and include time management, stress management, note-taking skills, communication skills, and study skills (Sommerfeld, 2011). These skills allow a student to navigate through a college course independently, which requires
problem-solving and coping skills to help students meet the academic demands of college (Roderick et al., 2009). Strayhorn (2014) noted that studies by Byrd and Macdonald (2005) and Reid and Moore (2008) have shown that first-generation, minority, and/or urban students may lack these skills. Byrd and Macdonald (2005) conducted a phenomenological study at a small urban university and reported that underrepresented students felt unprepared for college in these areas, despite knowing how critical these skills were to their success.

**Contextual Skills (College Knowledge).** Additionally, college knowledge, which Conley includes in the concept of contextual skills and awareness, includes the knowledge needed to navigate the college process (Conley, 2008). This concept includes the information students need to successfully apply to college, gain financial aid, and successfully matriculate to college. Roderick, Nagaoka, and Coca’s (2009) study provides evidence that a lack of college knowledge partially accounts for the disparity of college success for low-income and minority students in urban high schools. Students need to understand how to apply for college, how to gain financial aid, and how the college system works. This facet of college readiness is particularly challenging for students from underrepresented populations, who are less likely to have the support network to help them navigate the college process. These students are more likely to struggle to acclimate to the college community. They may become alienated, experience loneliness, and leave college prematurely (Byrd & Macdonald, 2005; Strayhorn, 2014). Dual enrollment programs can be an effective strategy for addressing this issue by improving a student’s college knowledge while still in high school (Ganzert, 2014; Karp, 2012; Martin, 2013; Reid & Moore, 2008).
College Readiness and Social Capital

Within the research on student success is a growing body of literature focusing on the role of social capital and college readiness for underrepresented students (Moschetti & Hudley, 2015; Soria & Stebleton, 2013). Research has shown that a student can use relationships to access resources and information that otherwise may not be available to them in their pursuit of postsecondary access. For low-SES students who participate in a dual enrollment program, it is important to examine the impact of both the social supports provided within the context of the dual enrollment program and the impact the program has on overall college readiness. While educational supports are important for overcoming the barriers to college access, it is also critical to provide the social support and information needed to navigate the transition from high school to college (Hoffman, Vargas, & Santos, 2008).

An effectively designed dual enrollment program has the potential to positively influence both social capital development and college readiness. When considering the elements of social capital (relationships, information channels, norms), a connection can be made to the elements of college readiness (academic skills, non-academic skills, college knowledge). Sommerfeld and Bowen (2013) note that social capital in higher education includes pragmatic knowledge, such as how a college schedule works and how to find resources on campus. Additionally, social capital includes time management skills, as well as understanding how to speak to professors. Conley (2008) refers to these skills as conceptual skills, or college knowledge, in his college readiness model. Access to college support and information is often embedded within the social networks of students. These social networks or relationships are the foundation of Social Capital Theory and have an impact on overall college readiness for low-SES students.
Several researchers have conducted studies on the role of social capital as an important variable in understanding student success and academic achievement in both the high school and college environments (Folk, 2015; Sommerfeld & Bowen, 2013; Soria & Stebleton, 2013). Particularly for underrepresented students, social capital can serve as an important contributor to how these students acquire the information and knowledge that will increase overall college readiness (Moschetti & Hudley, 2015; Sommerfeld & Bowen, 2013). Social Capital Theory and the college readiness model are useful frameworks for understanding the experience of low-income students who participated in a dual enrollment program and have subsequently transitioned to college. The relationship between social capital and college readiness is interconnected and both can be a result of participation in a well-designed dual enrollment program. This relationship is depicted visually in the following diagram:

![Social Capital and College Readiness Diagram](image)

**Figure 3. Social Capital and College Readiness**

**Research Problem and Research Question**

Dual enrollment programs are a strategy for reducing the educational attainment gap between high and low-SES students, by creating opportunities to earn free college credit while in
high school. However, researchers have noted that it was common practice to restrict dual enrollment programs to students who had the highest levels of academic ability, which tended to also be students of higher SES. The research provides a strong argument, based on data, for increasing the reach of dual enrollment programs. Literature supports the notion that dual enrollment programs should expand beyond the highest achieving high school students, to those with mid-range GPAs, which is more inclusive of lower income students (An, 2013a; An 2013b; Hoffman, Vargas, & Santos, 2008).

Aside from the disparity in academic preparation, researchers have identified additional barriers to dual enrollment participation for low-SES, first-generation, and minority students. Some states, such as Oklahoma, have developed strategies and interventions to improve engagement in dual enrollment programs for underrepresented populations (Roach, Vargas, & David, 2015). Policymakers should be at the forefront of examining ways to close the achievement gap for these students and participation in early college programs are one possible solution (Roderick, Nagaoka, & Coca, 2009).

Existing studies focus mainly on the environmental barriers to participation in dual enrollment programs. There is very little information that addresses the success of these students from their perspective. This study utilized interpretive phenomenological analysis (IPA) to capture the voices of students and extract the themes related to their experiences. Using a qualitative research method, students can provide information on their experiences and perceptions regarding their participation in a dual enrollment program and their subsequent transition to college. By considering external barriers, in combination with student experiences and perceptions, a more comprehensive view of the issues and possible solutions to the problems can be achieved.
The researcher explored the participants’ perceptions in the three distinct experiences: (1) participation in the dual enrollment program while in high school; (2) the process of transitioning to college; and (3) the participant’s perception of their first year in college in terms of their college readiness. The participants’ experiences were explored through the lens of Social Capital Theory. By developing social capital, dual enrollment programs have the potential to positively affect a student’s transition to college and college readiness, thereby improving his/her overall success as a college student.

This IPA study utilized in-depth interviews with low-income students at a community college in Ohio and was guided by the following overarching question:

What is the experience of low-income college students who participate in a dual enrollment program prior to matriculating to college?

There are also sub-questions that further defined the focus of the study. These questions were:

- As college students, what are the students’ perceptions of their past experience as a dually enrolled high school student?
- How do the students perceive their transition to college in terms of their access to information and social supports as a result of participation in the dual enrollment program?
- How do the students perceive their preparation for college academic success in terms of college readiness as a result of their participation in the dual enrollment program?

**Definitions of Key Terminology**

A number of terms are used throughout this study that warrant definitions.
**Advanced Placement** – refers to advanced-level courses that give students the option to earn college credit, but require students to pass a standardized test.

**College Readiness** – For the purposes of this study, college readiness is based on David Conley’s (2007) research, which includes both cognitive and non-cognitive skills. By this standard, the college-ready student needs an understanding of the academic expectations, as well as the college culture and norms.

**Developmental Education** – Refers to preparatory/pre-college courses that may be required for students who are not academically prepared for college-level courses.

**Dual Enrollment** – Refers to high school students taking college courses while they are still enrolled in a secondary school (i.e., a dual enrollment student), or to the programs that allow high school students to take college-level courses (i.e., a dual enrollment program).

**First-Generation College Student** – Refers to a student whose parent(s) have not completed a bachelor’s degree.

**K-12** – Refers to the grades kindergarten through the 12th grade.

**Low-income** – Federal Pell Grants are awarded based on the financial need of a student, which is a factor of the cost to attend an institution and the expected family contribution. If the student is receiving a Pell Grant, the student will be considered low-income for the purposes of this study.

**Postsecondary** – Educational institutions that are subsequent to high school education.

**Secondary** – Refers to the high school years of school.
**Underrepresented** – refers to students who are disproportionately unrepresented in higher education, which typically includes minorities, low-income students, and first-generation students.

**Chapter Summary**

Despite over twenty years of high school reform efforts, there is still a significant gap in access and retention for underrepresented students. The purpose of this study was to investigate how low-income students who participated in a dual enrollment program described their experiences and how those experiences contributed to their college readiness and transition to college. This chapter included the definition of terms relevant to the study, introduced the theoretical perspective, and identified the research questions that guided the inquiry. Social Capital Theory was discussed as the theoretical framework for understanding how students’ networks and relationships contributed to their college readiness and their transition to college. David Conley’s college readiness model was examined as the conceptual framework for understanding the overall college readiness of the participants in the study. The students’ voices concerning strategies for effective participation in dual enrollment programs are not prevalent in the literature, and thus are considered an essential component of this qualitative study.
Chapter Two: Literature Review

With the state and federal focus on increasing the college success rate for all students, educators and policymakers must address the achievement gap that exists for underrepresented students, which includes low-SES students in addition to minority and first-generation students. In most cases, a high socioeconomic status (SES) equates to better academic preparation, which results in higher college attainment rates compared to students with a low-SES. In order to address this issue, researchers, policymakers and education leaders are proposing strategies to raise the educational attainment rates for underrepresented students. One such strategy for raising the success rate for these students is to provide college-level courses while in high school. Participation in an effectively structured dual enrollment program is a strategy to increase college success for students from underrepresented populations.

The focus of this study was to examine the experience of low-income students who participated in a dual enrollment program in high school and later matriculated to a postsecondary institution. Numerous studies examine the benefit of dual enrollment programs, but this study narrows the focus to explore both the advantages and barriers that exist for low-income students. This literature review examines three distinct, yet overlapping themes related to the research problem. The review explores dual enrollment participation for underrepresented students; social capital development; and the state laws and secondary and postsecondary policies that govern dual enrollment programs.

**Dual Enrollment for Underrepresented Students**

This section examines research that considers the academic concerns for low-SES students. The advantages of dual enrollment programs for this population are also discussed, along with the barriers to participation that exist.
Academic Concerns for Low-SES Students

Researchers have established the relation between SES and academic achievement. According to researchers Hoffman, Vargas, and Santos (2008), students from middle- and upper-income families are five times more likely to earn a college degree than those from low-income households. Data show that only 22 percent of low-income students are academically prepared for college and only 42 percent of those prepared actually go on to earn a degree. In contrast, 54 percent of middle to upper-income students are prepared for college and 73 percent of this group will earn a degree (Goldberger, 2007 as cited by Hoffman, Vargas, & Santos, 2008). These gaps will persist, and possibly worsen, as college costs increase and need-based financial aid decreases.

An (2013a) points out the various reasons why students of low-SES have less advantage than those of mid- to high-SES. One main reason is the difference in parental involvement. Low-SES parents tend to exert less influence and have fewer resources for preparing their children for college. Therefore, less low-SES students participate in dual enrollment programs and many do not take courses that prepare them for the rigor of college coursework. Traditionally, only the most academically prepared students, who also have the most parental support, are encouraged to participate in dual enrollment programs.

Impact of Dual Enrollment Programs

The Education Commission report (Zinth, 2014) offers insight into the dual enrollment trends. The report found the number of U.S. public high schools offering dual enrollment programs is growing. Eighty-two percent of all high schools offered a program in 2011-2012. The research and data from the report also show that dual enrollment programs improve college
completion rates, especially for minority and low-income students. However, with the exception of Massachusetts, minority and low-income students tend to be underrepresented in statewide dual enrollment programs and according to the data, Illinois, Ohio, and Washington show white and more affluent students are overrepresented in dual enrollment programs (Zinth, 2014).

An (2013a) found that first-generation college students who participated in dual enrollment were more likely to attain a college degree than similar non-participants. He also found evidence that first-generation students were more likely to benefit from dual enrollment participation than students who had a college educated parent. An (2013a) found a positive correlation between dual enrollment and college degree attainment for first-generation students whose parents attended college but did not attain a bachelor’s degree, but the relation between dual enrollment participation and degree attainment was insignificant for students with a college educated parent.

Additionally, studies have shown that low-income students and those with the lowest high school GPAs benefit from dual enrollment participation to a greater extent than their peers (Hoffman, Vargas, & Santos, 2009; An, 2013a). Taylor (2015) found that students of color were 26% more likely to enroll in college after participating in a dual enrollment program and were 14% more likely to complete college than students of color who did not participate in a dual enrollment program. Similarly, he also found that low-income students were 30% more likely to enroll in college and 16% more likely to complete college if they participated in dual enrollment compared to low-income students who did not participate. Hoffman, et al. (2009) also noted that low-income students seemed to benefit more in terms of greater college credit accumulation than their higher-income peers. Though studies point to the advantages of dual enrollment participation for underrepresented students, there are significant barriers to participation for this
group of students. To maximize the potential benefit of dual enrollment opportunities, it is critical to remove barriers and increase participation in early college programs for a wider range of students.

**Barriers to Participation**

Roach, Vargas, and David (2015) examined the many barriers that limit participation in dual enrollment programs for low socioeconomic, first-generation, and minority students in Oklahoma. The researchers found that policy, financial, and transportation barriers were the major limiting factors. From a policy standpoint, though many states support dual enrollment programs as a means to increase college enrollment and completion, some have policies that create barriers for low-income, first-generation, and minority students. For example, many states require high school GPAs that favor the highest achieving students (Howley, Howley, Howley, & Duncan, 2013). However, Karp (2012) and Howley, et al. (2013) indicate that mid-academic level students can also be successful in college-level coursework. Howley, et al. (2013) point out that the discussion regarding dual enrollment programs “has shifted from academic excellence to academic equity” (p.80). GPA requirements that exclude capable students are a barrier for dual enrollment participation and need to be reevaluated.

Roach et al. (2014) also addressed the financial and transportation barriers that negatively impact low-income students. From a financial standpoint, low-income students may not be able to afford the tuition, fees, and textbooks required to participate in dual enrollment. Ward and Vargas (2012) suggest that secondary and postsecondary institutions should work out cost-share agreements. Both Zinth (2015) and Ward and Vargas (2012) suggest that state policy should incorporate incentives in the postsecondary funding formula to serve underrepresented students. Postsecondary institutions would then have a financial incentive to eliminate tuition and fee
barriers for underrepresented students. Additionally, since these students do not typically have their own transportation to travel to a college campus, efforts have to be made to offer the coursework at the high school or offer bus transportation to the college. Roach et al. (2015) noted that the community college in Oklahoma addressed this issue by agreeing to offer courses at the high school locations as long as the level of rigor was maintained. The Roach, Vargas, and David (2015) study found that underrepresented students are capable of early college success, but too often they experience barriers to participation in dual enrollment opportunities. Policymakers and educators must incorporate best practices to increase dual enrollment participation for underrepresented students.

Summary

The literature underscores the equity gap regarding college access and success for postsecondary opportunities (An, 2013a; An, 2013b; Pretlow & Wathington, 2013; Taylor, 2015). The SES disparities in academic preparation and educational attainment highlight the need for interventions that address the issues. Dual enrollment programs have a proven positive impact on the success rates of underrepresented students; however, the barrier to participation must be addressed. These programs must reach a wider range of students than what has been traditionally practiced. Financial and transportation barriers must also be addressed in order to increase the number of students who have the means to participate. Additionally, programs have to build in social capital development to ensure that students are academically and socially ready for the college experience.
Social Capital Development

Social capital is often offered as a variable for explaining educational outcomes tied to academic attainment, dropout rates and cognitive development (Stephan, 2013; Vorhaus, 2014; Moschetti & Hudley, 2015; Sommerfeld & Bowen, 2013). The concept of social capital places value on the relationships that provide support and assistance for underrepresented college students. First-generation status has been found to be the strongest predictor of whether a student will drop out before their second year (Moschetti & Hudley, 2015) and low-SES or minority students often have limited information about college costs, admissions procedures, and academic programs (Stephan, 2013). While middle-class students may be able to take college knowledge and parental involvement for granted, low-SES students, who may not have a parent who attended college, often do not have access to the same level of information and support. These students may lack the social networks to access college information, assistance, emotional support, and social norms that can impact whether a student enrolls in college.

According to researchers, lower levels of social capital help to explain why low-SES students enroll in college at lower rates (Stephan, 2013; Vorhaus, 2014; Moschetti & Hudley, 2015; Sommerfeld & Bowen, 2013). These students may have difficulty in accessing information and support when transitioning to college because they lack the social capital that would create a network in their new environment. However, students can develop social capital while still in high school, as well as during their transition to college. Researchers have pointed to the critical role of high school counselors, college advisors, and other mentors and coaches in providing support for underrepresented students who are transitioning to postsecondary (Kim, 2012; Medvide & Blustein, 2010; Stephan, 2013; Sommerfeld & Bowen, 2013). The roles of the
high school and the community college in developing social capital are discussed in the following sections.

**Role of the high school.** Providing social support helps fill the social capital deficit for underrepresented students and should be provided before the student matriculates to college. High school personnel can serve as a critical resource of college information for students (Kim, 2012). Unfortunately, low-income students are underserved by high school counselors (Stephan, 2013; Folk, 2015; Sommerfeld & Bowen, 2013). According to a 2014 whitehouse.gov report, high schools serving predominantly low-income and minority students have counselor ratios twice the national average – 1,000 students per counselor compared to 470 students per counselor nationally (“Increasing college opportunity for low-income students: Promising models and a call to action,” 2014). Stephan (2013) noted that the standard model of high school counseling limits the type of student reached for college counseling because it is dependent on counselors responding to student requests with one-on-one assistance. Underrepresented students may not request assistance and the availability of counselors may also be limited in high schools that serve greater numbers of low-income students. Stephen (2013) notes that typical counselors rarely provide the detailed assistance needed by low-SES students, who need more help than their middle-class counterparts.

Other researchers noted the importance of decreasing the counselor to student ratio. The Simmons Memorial Foundation has a focus on increasing the number of high school counselors to the American School Counselor Association’s recommendation of 250:1 (Folk, 2015). Simmons noted that students from underrepresented populations may not enroll in college, despite their academic competence. He attributed the problem to the students’ social capital deficit that was in part due to the lack of support from high school counselors. As a result, the
Simmons Foundation works with community organizations, educational institutions, and state agencies to provide mentoring, college consulting, scholarships, and standardized test preparation (Folk, 2015). Non-profit organizations, such as the Simmons Foundation, are another avenue for creating social supports for underrepresented students who have the ability and desire to attend college, but may lack support from high school personnel and family members.

Similarly, the study of a Chicago program by researcher Jennifer Stephen (2013) suggests that institutions should supplement the role of high school counselors in order to improve educational attainment for low-income students. According to the study, Chicago public high schools started a program in the fall of 2004 that provided college coaches to fulfill the role of counseling students to prepare for college. These coaches provide information and support to students, thereby creating social capital for the students. The result was an increase in enrollment in college as a result of the role of the college coaches (Stephen, 2013). Sommerfeld and Bowen (2013) also studied the Trinity Education for Excellence Program (TEEP), which prepares urban Boston youth for college beginning in middle school, many of whom are low-income students. The goal of the program is to create social capital for the students early on by attempting to integrate social capital development into the programming through mentorship, support, and connections with college admissions personnel (Sommerfeld & Bowen, 2013). These programs give students early access to adults who can be relied upon for college-related information and support. The TEEP program also noted an improvement in college enrollment outcomes for the students they served, as a result of the added support from the additional mentors and counselors (Sommerfeld & Bowen, 2013).
Role of the community college. Community colleges should examine their role in creating social capital for students before and after a student enrolls at the college. Community colleges have seen an increase in the number of students in the last ten years, particularly for low-income students. The Community College Research Center website (n.d.), reported an Education Longitudinal Study (ELS: 2002-06) showing that 44% of low-income students attend community colleges as their first college after high school. In contrast, only 15% of high-income students enroll in community colleges initially. Community colleges are often the choice for low-income students because they typically have lower tuition and have open admissions policies (Ma & Baum, 2016). Community colleges should, therefore, be particularly mindful to create support systems that meet the needs of low-income students.

Moschetti and Hudley (2015) examined the experience of low-income, first-generation community college students. As it relates to social capital, they found that community college students face challenges that can inhibit their access to information and support. For example, Moschetti and Hudley (2015) point out that 62% of all community college students enrolled in fall 2008 were part-time, largely due to their need to create an income. Students who work, in addition to pursuing a degree, found they lacked opportunities to interact with peers and community college staff and faculty. The study highlighted the need for community colleges to assist these students in acclimating to college while introducing academic, financial, and social support networks around the campus to help ease their transition into their new environment. The authors suggest creating programs that target this specific population to create social capital through support networks. According to the research, community colleges should engage these students immediately to enhance the likelihood of academic success and positive social integration (Moschetti & Hudley, 2015). Through dual enrollment programs, community
colleges should engage students as early as possible in order to better prepare them for the
transition to postsecondary education.

Summary

Students vary in their level of college readiness, which can have a dramatic impact on
their transition to college and their subsequent success. The purposeful development of social
capital includes creating meaningful relationships that provide support and information to low-
SES students. Students need to know how to navigate the college process and can benefit from
the social capital that results from relationships with mediators, such as high school counselors
and teachers and college advisors. Low-income students need supports more than students with
a higher SES because underrepresented student groups depend on these social networks to
provide information and assistance that parents may be unable to provide (Stephan, 2013;
Vorhaus, 2014; Moschetti & Hudley, 2015; Sommerfeld & Bowen, 2013).

The work of high school counselors should include providing college information to
students while they are still in high school (Kim, 2012; Stephan, 2013). Dual enrollment
programming is one key strategy for preparing low-income students for the transition to college,
both academically and socially (Ganzert, 2014; Karp, 2012; Martin, 2013; Reid & Moore, 2008).
Since many low-income students choose community colleges for postsecondary, community
colleges should purposely incorporate social capital development into programs to support
success for low-income students (Moschetti & Hudley, 2015). Additionally, educators and
policymakers can support dual enrollment participation for underrepresented students through
effective laws and policies.
State Law and Secondary and Postsecondary Policies

This section first contextualizes dual enrollment programs within the overall national and state completion agenda. The researcher then narrows the focus to the role of state policy in creating effective dual enrollment programs. Lastly, this chapter examines effective policy design principles and program components that should be considered by policymakers and educators.

Dual Enrollment and the Completion Agenda

Karp (2014) suggests that dual enrollment programs should be placed in the context of the national and state college completion agendas in order to raise the status from a high school program to a policy reform focus. College completion rates are indeed at the forefront of recent national and state level reforms. The Obama administration postsecondary reform agenda had been aggressive in ensuring that postsecondary institutions focus on college completion. However, states must focus on access as a component of college completion. Tennessee leads the way with access initiatives such as the Tennessee Promise, which offers a free community college education to students (Carruthers & Fox, 2016). The Tennessee Promise is a part of a comprehensive completion campaign to get 55 percent of Tennesseans a college degree or certificate by 2025 (http://driveto55.org/).

Karp (2012) likens the college completion process to a pipeline, which begins in high school and ends with college degree completion. Students must first gain academic skills and graduate successfully from high school. Then they have to enter college, persist, and graduate. However, the fragmentation between high school and postsecondary causes leakage in the pipeline, which especially negatively impacts underrepresented students. For example, according to 2014 statistics found on the National Center for Education Statistics website
while 81% of upper-income high school graduates successfully enter college the following fall, only 52% of low-income students do so. According to the website, the 29% gap between high- and low-income students has not changed measurably since the corresponding gap in 1990. According to the website, similar gaps exist between White and Black or Hispanic students.

Karp (2012) believes dual enrollment programs can address the leakage in the pipeline because dual enrollment addresses every transition point in the pipeline from high school through college completion. In the past, many of the reforms that were aimed at improving college completion rates were concentrated on academic content, but not enough focus has been given to the gap between the high school and college sectors. For example, many states focus on the content standards necessary for college success (Hoffman, Vargas, & Santos, 2009; Karp, 2015); however, changing the academic requirements does not ensure that both sectors work closely together on college completion. However, dual enrollment programs bridge the gap between high schools and colleges and force collaboration for the benefit of students. As a result, data indicate that dual enrollees are 12% more likely to enroll in college within seven months of high school graduation and they complete and associates degree at 61% higher rates than non-dual enrollment participants (Swanson, 2008 as cited by An, 2013). Research concludes that dual enrollment participation improved college GPA, persistence and degree attainment and eases the transition for high school students entering college (An, 2013; Brophy & Johnson, 2007; Hoffman, Vargas, Santos, 2008; Jones, 2014). Dual enrollment students become more academically and socially prepared for college while they are still in high school, which increases their overall success.
Positioning dual enrollment programs as a strategy to improve the educational pipeline and overall educational structure encourages policymakers and educators to allocate resources to these programs. Dual enrollment programs should be effectively structured to help underrepresented students navigate the pathway to college completion. Roach, Vargas, and David (2014) point out that low-income students benefit when high schools and colleges work together to provide access to dual enrollment programs. Kanny (2014) points out that dual enrollment programs must be implemented thoughtfully, with the intent to provide support and guidance for underrepresented students. Secondary and postsecondary institutions must work together to ensure the successful transition to college from high school, which is prerequisite to the completion of a college degree.

**Role of State Policy**

Researchers Taylor, Borden, and Park (2015) note that dual enrollment programs were historically created through an agreement between a local high school and a community college, without clear state policy guidelines or directions. However, as dual enrollment programs have grown, so have the state policies that regulate the programs. Thus, dual enrollment programs are often constrained by the policies set forth by the state (Taylor et al., 2015). State dual enrollment policy can serve to support participation of underrepresented students or it can hinder both participation and support for these students.

McLendon and Perna (2014) and Pretlow and Patterson (2015) make the point that state policy can play a central role in raising the education attainment rate and for closing the gaps in attainment across groups. Though the federal government has ambitious goals, including increasing access for low-income students, the actual responsibility for achieving these goals lies primarily with state governments. Secondary and postsecondary institutions are required to
adhere to the laws and policies for dual enrollment programs that are created at the state level, which vary from state to state (Karp, 2014; Taylor et al., 2015). Underrepresented groups are still performing poorly in college preparation, participation and completion, which indicates that current public policies are not working. There is a need for a better understanding of the relationship between state policy and college success for students, especially for low-income, first-generation, and minority students.

Pretlow and Patterson (2015) compared dual enrollment policies for Ohio and Virginia. Differences include how the programs function in high schools, what age students can begin to participate in dual enrollment opportunities, and how the programs are funded. The authors recommend that states should have clear policies that can be found in one location or document. They also suggest that dual enrollment policy should be distinct from standard postsecondary policies in order to avoid confusion for secondary personnel, such as high school counselors. Overall, Ohio exemplified issues with clarity and cooperation more so than Virginia (Pretlow & Patterson, 2015), which may be attributed to the fact that Ohio’s program is more recently created and will likely undergo revisions.

Many states have legislation that govern dual enrollment programs. Jobs for the Future (JFF) analyzed the state-level policies of all fifty states that govern dual enrollment programs. According to the report, written by Ward and Vargas (2012), forty-seven states have rules and regulations that govern dual enrollment programs; however, only a few have established mechanisms to ensure all students have access to these programs. Ward and Vargas (2012) identified the six design principles that characterize the most effective dual enrollment policies: provide equal access and eligibility; offer high-quality course options; coordinate academic and social support systems; ensure adequate funding; establish transparent data systems to monitor
quality and outcomes; and build a system for accountability. These design principles are described in the following section.

**State Policy Design Principles**

Ward and Vargas (2012) detailed design principles that state and policymakers can utilize when creating or modifying the policies that govern dual enrollment programs. The first three components deal with access, course quality, and course development. First, programs should provide equal access and consistent eligibility requirements. Students should be able to enroll in college coursework as soon as they are determined to be eligible by various means of assessment. Secondly, programs should offer high quality courses, with the same rigor of college courses offered in a traditional college setting. Ensuring the quality of the courses supports the notion that the college credit for the courses should be transferable to all public postsecondary institutions. The third design principle focuses on the relationship between K-12 and higher education institutions. Both Ward and Vargas (2012) and Hoffman et al. (2008) state that successful dual enrollment programs should require a formalized structure for collaboration between secondary and postsecondary partners. For example, there should be a formal agreement and a person serving as liaison between the high school and the college (Ward & Vargas, 2012). Hoffman et al. (2008) suggest using a joint decision-making body to design, monitor, and collect data about the program. Such formal structures ensure coordination of support services to assist students who may need added assistance, such as low-income students.

The final three design principles involve funding and student data. Funding should be a major design consideration for dual enrollment programs. Ward and Vargas (2012) assert that funding principles should ensure that there is no cost to students and there should be no financial harm done to the secondary and/or postsecondary institution. Funding policies should encourage
cooperation between secondary and postsecondary sectors and institutions. Additionally, in order to track the impact of dual enrollment programs, states should collect data across the K-12 system and into postsecondary institution. The state should develop a mechanism to analyze student data in order to monitor student progress and to ensure quality of programming. Lastly, schools and postsecondary institutions should share data with the public to ensure accountability for student success. Parents and students should have ready access to the data regarding dual enrollment programs in their school districts and across the state.

All of the suggested design principles should be considered by policymakers and educators in order to create an effective dual enrollment program. Other researchers offer similar suggestions for best practices related to the state policies that govern dual enrollment programs. The following section continues with effective policy design components.

State Policy Design Components

In addition to the six policy design principles in the JFF report, the Education Commission of the States (ECS) created a policy analyses that identified thirteen state-level policy components that may increase student participation and success in dual enrollment programs (Zinth, 2014). The thirteen components fall under four broad categories: access, finance, ensuring course quality and transferability of credit.

Access. Dual enrollment programs should be created to ensure underrepresented students will participate. Zinth (2014) noted that Massachusetts data show low-income and minority students are well-represented in the state’s dual enrollment program, however, other states do not compare well. For example, in the fall and spring of 2013, 78% of Ohio’s dually enrolled students were White, while only 7% were Black and 2.6% were Hispanic (Zinth, 2014). Zinth
(2014) suggests six design components to increase the likelihood that underrepresented students will participate in dual enrollment: (1) all eligible students should be able to participate; (2) eligibility requirements should be based on the demonstration of ability; (3) the number of courses students can take should not be overly restrictive; (4) students should earn both secondary and postsecondary credit for completed approved courses; (5) students and parents should receive information; and (6) counseling and advising should be available to students and parents throughout the program. Ohio’s newly revised dual enrollment program has made changes to remove access barriers. The state policy now includes a provision that student participation be based solely on the college’s placement standards, consistent with all college students (Zinth, 2014).

**Finance.** Zinth (2014) suggest that dual enrollment programs should be designed to lessen the financial barriers for students, school districts, and colleges. Zinth (2014) further details the two financial design components: (1) tuition costs should not be the responsibility of students and (2) school districts and postsecondary institutions should be fully funded or reimbursed for participating students. Obviously, programs that require students to pay tuition will limit the ability for low-income students to participate. Likewise, school districts and colleges may have limited funds available to support tuition and other fees. Again, low-income students are the most at risk of non-participation when school districts and colleges are unable to financially support dual enrollment programs.

**Course quality.** Zinth (2014) suggests that dual enrollment programs should maintain consistent academic rigor by utilizing four design components: (1) courses taught at the high school should maintain the same rigor as those taught at the college; (2) high school instructors should have the same credential requirements as college faculty; (3)
should report on student participation and outcomes; and (4) programs should undergo internal and external evaluation. According to Zinth (2014), only 30 of the 47 states that have state-level dual enrollment programs require reporting. Their report recommends that programs include data related to student demographics, course/high school completion, postsecondary enrollment and postsecondary readiness, transferability of credit, and persistence and success. These components are not necessarily aimed at increasing access and success for underrepresented students, however, they ensure quality programming, which benefits all students.

**Transferability of credit.** Zinth (2014) suggests that dual enrollment credit should be treated equitably and recommends one design component to address this issue – public postsecondary institutions should be required to accept dual credit as transfer credit as long as quality has been ensured.

**Summary of State Policy Design Principles and Components**

As can be seem in the descriptions of both the JFF principles (Ward & Vargas, 2012) and the ECS state level policy components (Zinth, 2014), there is a great deal of overlap in the policy design principles suggested to improve the overall quality of dual enrollment programs. Access, funding, and quality are the key components of both models for addressing the needs of underrepresented students. The ECS report found that access for underrepresented students can be hindered if the policy does not regulate participation requirements, as was the case in Ohio. School districts in Ohio were allowed to create rules for program participation, which were not consistent with traditional college student requirements for participation. As a result, there was more than a 70% gap in participation rates between White students compared to Blacks and Hispanics (Zinth, 2014). State policy should dictate access and equity for dual enrollment programs in order to close the achievement gap for these students.
In examining both models, funding is potentially the biggest barrier to low-income student participation in dual enrollment programs. Both the JFF and ECS models strongly suggest that students should not be financially responsible for tuition related to dual enrollment coursework. Zinth (2015) wrote an additional policy analysis for the Education Commission of the States that further examines this program design component. The report explored ways to reduce or eliminate tuition and other costs for dually enrolled students. The report also examined each state’s funding formula, the benefits and drawbacks to each approach, each program’s outcomes, and the political considerations for each state’s funding plan. The major findings in the report include the need for dual enrollment policies to eliminate financial barriers to participation, which is especially critical for addressing participation for low-income students (Zinth, 2015). States that remove the tuition liability from students see larger proportions of minority and low-income students participating in dual enrollment programs. The report suggested that in order to remove the financial responsibility from families, state policy must establish adequate funding streams that remain consistent (Zinth, 2015).

Struhl, (2013) also prepared a policy brief for JFF that examined how performance-based funding can be used to encourage collaboration between high schools and colleges and universities, particularly in dual enrollment options. The author notes that incentives for colleges to work with high schools could increase the chances that more students, especially low-income students, participate in dual enrollment programs, resulting in increased college preparedness. Currently, Indiana, Louisiana, and Tennessee provide performance-based funding for dual enrollment programs (Ward & Vargas, 2012). Each of these states use performance-based funding as an incentive for college success in varying ways, including incentives for offering
dual credit courses in the high schools and on college campuses. Extra funding may also be available for serving underrepresented students in dual enrollment programs.

The overall quality and rigor of the programs is also an important factor to consider and is discussed in both models. The Higher Learning Commission (HLC) released a report on dual credit policies in all 50 states (“Dual credit in U.S. higher education: A study of state policy and quality assurance practices,” 2013). The report addressed the intersection of state-level policy and quality assurance. The results showed that, in many states, quality was not a large enough focus. Attention must be paid to ensuring quality of course content and delivery by qualified instructors. It is not only important to focus on access for underrepresented students, but programs must ensure the college experience is authentic in order to prepare students for college success.

Lowe (2010) prepared a report published by the National Alliance of Concurrent Enrollment Partnerships (NACEP), a national organization that encourages collaborations between secondary and postsecondary institutions to increase dual enrollment. This report also focused on the systems needed to ensure institutions align their practices with quality standards. The author makes the point that dual enrollment opportunities have grown, but cautions that merely growing the numbers of students participating does not achieve the policy goal of academic achievement for students. States are adopting quality standards for these programs, but these standards have varied from state to state. The foundational goal of NACEP is to require that college courses offered to high school students be of the same quality and rigor as the courses offered to college students, regardless of their location, delivery method, or instructor. Both models suggest that dual enrollment policies should require quality control measures and there should be mechanisms for evaluation at the secondary and postsecondary levels.
Implications for Community Colleges

Consistent with the community college access mission, data show that 98% of public-two-year institutions offer dual credit courses (Taylor et al., 2015). While the data might suggest that access is a priority at community colleges, the study conducted by Taylor et al. (2015) revealed that student eligibility requirements can hinder participation in dual enrollment programs for underrepresented students. These restrictions are intended to ensure quality, but they are not always grounded in research. Karp (2012) and Howley et al. (2013) indicate that mid-academic level students can be successful in college-level coursework. Eligibility requirements that exclude capable students are a barrier for dual enrollment participation and need to be reevaluated by community colleges, which are frequently the postsecondary choice for low-income students.

Community colleges also must ensure that state policy addresses credit transferability. Statewide transfer policies should ensure that credits transfer between community colleges and four-year institutions, but some states leave transfer to the discretion of the receiving institution (Taylor et al., 2015). Studies conducted by Sponsler, Pingel, and Anderson (2015) and Hunt and Carroll (2006) also focus on transfer and articulation as a policy concern for community colleges. These studies showed that four-year public and private institutions sometimes were biased against transferring in dual credit. When credits do not transfer seamlessly, students and parents receive a message that dual credit courses are not comparable quality, which can discourage participation. Community colleges have a critical role in ensuring that underrepresented students have access to college coursework. However, educational and legislative policymakers have to ensure that the credits are transferable to institutions where students may choose to complete degrees beyond their associate’s degree.
Summary

Dual enrollment programs should be placed in the context of the national and state college completion agendas in order to ensure policymakers allocate resources to the effort (Karp, 2015). Dual enrollment programs play a central role in raising the education attainment rate and for closing the gaps in attainment across groups, but state policy must address the barriers to dual enrollment participation for all underrepresented students. Dual enrollment programs should adhere to program design principles that characterize the most effective dual enrollment policies and the program components should support participation and access for underrepresented students. As can be seen in the descriptions of both the JFF policy design principles (Ward & Vargas, 2012) and the ECS state level policy components (Zinth, 2014), access, funding, and quality are the key components for addressing the needs of underrepresented students. Lastly, community colleges have a critical role in ensuring access and policymakers have to regulate the transferability of credit. These policy design components are all important to supporting dual enrollment participation for underrepresented students.

Chapter Summary

This literature review provides the prevailing scholarship in three areas relevant to the study of dual enrollment for underrepresented students: dual enrollment participation for underrepresented students; social capital development; and the state laws and secondary and postsecondary policies that govern dual enrollment programs. The interconnectedness of these three bodies of literature provides the context for exploring the perspectives and experiences of low-income students who participated in dual enrollment programs and have matriculated to a community college campus.
Overarching themes emerged regarding the role of dual enrollment programs in closing the educational achievement gaps that exist for underrepresented student groups. These programs are proven to contribute to access and success for students by improving college readiness skills and increasing social capital. However, barriers exist for participation by the students with the highest need for the programs. Legislators and educators must work together to eliminate barriers and encourage collaboration between the secondary and postsecondary education sectors. State laws and secondary and postsecondary policy reform must be a focus in order to increase the success rate for the most at risk student populations.
Chapter Three: Research Design

This Interpretive Phenomenological Analysis (IPA) study explored how low-income students made sense of their experience in participating in a dual enrollment program and their subsequent transition to college. The following chapter describes the study’s research design and provides support and explanation for the researcher’s methodological choices. The chapter begins with a thorough explanation of the research approach and ends with a detailed account of how the study was conducted – including a discussion of ethical considerations, trustworthiness, the researcher’s positionality, and potential limitations.

**Research Question**

The central question for this study is: What is the experience of low-income college students who participated in a dual enrollment program prior to matriculating to college? The sub-questions that further define the focus of the study are:

- As college students, what are the students’ perceptions of their past experience as a dually enrolled high school student?

- How do the students perceive their transition to college in terms of their access to information and social supports as a result of participation in the dual enrollment program?

- How do the students perceive their preparation for college academic success in terms of college readiness as a result of their participation in the dual enrollment program?

The overarching question and the sub-questions were designed to bring attention and focus to the students’ perceptions of their dual enrollment experience and their subsequent transition to college. Particular attention was given to the participants’ perceptions of how effective their
dual enrollment experience was in facilitating their transition to college and preparing them to succeed academically and socially in their postsecondary environment. The participants’ perceptions were explored using a qualitative approach.

**Qualitative Research Approach**

Qualitative research deals with words and stories and answers the how and what questions (Butin, 2010). As Creswell (2013) points out, qualitative research focuses on exploring a problem, rather than explaining it. In doing so, the focus is placed on the participants’ experiences. Merriam (1998) further explains the characteristics of qualitative research as placing the focus on the participants’ perspective; collecting data through the use of fieldwork; and using an inductive research strategy to produce a report that is rich in descriptions. She continues to say that the researchers who conduct qualitative studies “…seek to discover and understand a phenomenon, a process, or the perspectives and worldviews of the people involved” (p.11). Therefore, qualitative studies have the potential to reveal meaning within the participants’ lived experiences and to connect their world to the actual practices within a phenomenon.

The focus of this study was to explore the issues that potentially hinder participation in dual enrollment programs by low-income students. By using a qualitative approach, the researcher hoped to gain an understanding of how students experienced and overcame the unique barriers that exist for this student population. This research can provide guidance for policymakers, educators, and community members to develop strategies for eliminating barriers and providing supports that will contribute to success in early college experiences for underrepresented student populations.
Research Paradigm

This study most aligns with the constructivism-interpretivism paradigm. This approach acknowledges the existence of multiple realities and seeks to provide understanding through dialogue between the researcher and the participant (Ponterotto, 2005). In this case, truth does not exist, it is constructed as a result of interaction. Utilizing this format, the researcher is an active participant and seeks to interpret information based on a cooperative relationship with the subjects of the research (Creswell, 2013). This method of inquiry focuses on people instead of measureable data. Conclusions are subjective, as they are based upon observations of behavior and interpretations of language.

Secondarily, this work was influenced by critical theory. As is the case with interpretivism, a critical perspective utilizes a construction of reality, however it further creates a link to power and dominance (Butin, 2010). The critical approach exposes power issues and seeks solutions to address the concerns (Ponterotto, 2005). Congruent with an interpretivism perspective and a critical influence, this study sought to hear the voice of underrepresented students and to advocate for change. The goal is to improve the opportunity for low-income students to succeed academically and socially in a postsecondary environment through the evaluation of existing dual enrollment policies and practices.

Methodology

IPA focuses on an examining how individuals make sense of their life experiences (Smith, 2004). Larkin, Eatough, and Osborn (2011) state that the IPA approach can show how important a person’s perspectives and relationships are on their experiences. By using an IPA approach in the research design of this study, there was greater opportunity to understand how low-income students were impacted by their culture and societal values and beliefs. The three
main theoretical underpinnings of IPA are discussed below: phenomenology, hermeneutics, and ideography.

**Phenomenology.** Because IPA has its roots in phenomenology, it necessary to first examine the historical aspects of phenomenology. Phenomenology can be traced to a philosophy that originated with Husserl, who focused on the study of things as they appear in order to understand human consciousness and experience (Dowling, 2007; Oxley, 2016). Husserl devised phenomenological reduction, which excluded interpretation from understanding an individual’s life experience. His belief and practice was to study a phenomenon void of any cultural context. Thus, preconceptions are uncovered, only to be reduced or bracketed (Dowling, 2007; Larkin, Eatough, & Osborn, 2011). Heidegger and Merlau-Ponty agreed with Husserl in some areas, but disagreed with Husserl’s view on the role of interpretation. Instead, Heidegger and Merlau-Ponty advocated for the use of hermeneutics as a research method, which included the interpretation of lived experiences. While Husserl and his followers would maintain that phenomenological research is pure description, Heidegger and Merlau-Ponty believed that interpretation allows the researcher to go more deeply and to share more fully in the human experience of the participant (Dowling, 2007; Larkin, Eatough, & Osborn, 2011).

**Hermeneutics.** IPA followed the work of Heidegger and Merlau-Ponty with an emphasis on hermeneutics, which makes the shift away from description to the interpretation of a phenomenon (Oxley, 2016). A hermeneutic approach recognizes that the researcher’s views of the world and experiences are intertwined with the way the researcher will interpret the participant’s experiences. The researcher must actively reflect on their own pre-existing knowledge and preconceptions in order to be aware of how it may influence the interpretation and analysis of the data.
The two seminal theorists associated with IPA are Jonathan Smith and Michael Larkin (Larkin, Eatough, & Osborn; Smith, 2004). IPA uses an approach that is dedicated to understanding the first-person (participant) from the third-person (researcher) position through extensive inquiry and analysis. Heidegger also influenced IPA in his view regarding the critical nature of context. The findings of an IPA study should be clearly situated in the cultural and historical context of the interview participant, with acknowledgement of any researcher bias or prejudice (Larkin, Eatough, & Osborn, 2011; Larkin, Watts, & Clifton, 2006). IPA research seeks to understand how people make sense of events, relationships, and processes in the context of their world. IPA explores how the participant makes sense of lived experiences, while also recognizing the researcher’s role for making sense of the participant’s sense making (Smith, 2004). The researcher’s interpretation may illuminate an aspect of the participant’s experience that the participant does not or cannot explicitly share. This process involves a double hermeneutic, which is distinct from the past phenomenological approaches (Larkin, Eatough, & Osborn, 2011; Oxley, 2016; Smith, 2004).

**Ideography.** Ideography is concerned with focusing on the individual’s particular details (Oxley, 2016). IPA focuses on small samples of participants, with no attempt to generalize findings more widely. Typically, each participant’s experiences are examined independently, followed by a cross-case examination of what is common and distinct amongst the cases (Oxley, 2016). The IPA researcher is tasked with producing a narrative that preserves the intricacies of an individual case, while highlighting the themes that run across multiple accounts. Smith (2004) argues that each case has its own value and generalization should not be the goal. IPA research illuminates the ways in which experiences are both individualized and collective.
In line with the IPA approach described by Oxley (2016), the researcher conducted one-on-one semi-structured interviews with each of the seven participants that lasted approximately 40-60 minutes. The semi-structured nature of the interviews allowed for commonality across the interviews in terms of their experiences in the three phases explored in the study, but it also allowed flexibility to explore the uniqueness of each participant’s experience. The interviews were transcribed verbatim and then the transcripts were read multiple times with the goal of identifying both the common and distinct experiences of the participants. Patterns were identified for the student’s perceptions and experiences in the three key areas of this study: (1) dual enrollment participation in high school; (2) transition to college; and (3) first year of college.

**Rationale for IPA**

IPA research is dedicated to understanding how participants attribute meaning to their lived experiences by capturing and interpreting their personal accounts (Smith & Eatough, 2007; Smith et al., 2009). The participant’s story is told by the researcher, who seeks to get as close to the participant’s view as possible. IPA research aims to go further than a description of an experience, to interpretation of the experience. The IPA researcher approaches the data with two goals in mind – to understand and describe the participant’s world and to focus on the participant’s experience of a specific event, process, or relationship (Larkin, Watts, & Clifton, 2006). The IPA researcher is offering an interpretive account of what it means for the participant to have the experience within their particular context. The data analysis process should be as reflexive as possible and the researcher should consider issues such as power in the research relationship. These issues should be recognized and acknowledged in the research study (Wagstaff & Williams, 2014).
In alignment with IPA methodology, this study was an exploration of the experience of low-income students who participated in a dual enrollment program and later matriculated to college. The researcher’s goal was to understand and describe the participant’s experience and perceptions in three main areas: (1) participation in the dual enrollment program while in high school; (2) the process of transitioning to college, which includes the social supports and information channels accessed by the student; and (3) that student’s perception of his or her academic success and college readiness. The students had valuable insights to share about their experiences in high school and college, which yielded a robust body of evidence to be analyzed and presented. IPA research provides a method for highlighting the voices and perspectives of the research participants. The researcher’s goal was to use the students’ words and descriptions to call attention to the student experience and to advocate for improved policies and practices.

Research Site and Participants

This section includes a description of the site chosen for the study and the common characteristics of the research participants. The demographic information includes the desired age, gender, and ethnic background of the students and there is a description of the sampling process used to determine the participant group. The sample number is explained, along with a rationale.

Research Site

The research site for this study is a community college in Ohio, referred to by the pseudonym – Ohio Community College. The college serves a diverse student body, as reflected by the following 2014 website statistics: the average age is 28; 73% are part-time; 15% are high
school students; 74% receive some form of financial aid; and 45% enroll in at least one developmental education course.

The above statistics reflect that the college serves traditional and non-traditional students and many of them are low-income students as indicated by the high percentage of students receiving some form of financial aid. The Community College Research Center website (n.d.), reported an Education Longitudinal Study (ELS: 2002-06) showing that 44% of low-income students attend community colleges as their first college after high school, compared to 15% for high SES students. Community colleges are often the choice for low-income students because they typically have lower tuition and have open admissions policies.

Also, as noted by the demographic statistics, the college serves high school students. These students are participating in the dual enrollment program, and are therefore considered both high school and college students. There have been recent legislative changes that have influenced the demographics of the students participating in the dual enrollment program. Beginning with the 2015-2016 academic year, the state totally overhauled the dual enrollment program for high school students (https://www.ohiohighered.org/ccp/about). The 3.0 GPA requirement was removed; however, students must meet the same admissions standards as other college students attending the institution (Ohio Revised Code 3365.03, 2015). Even though students have to pass a placement test, the removal of the GPA requirement has broadened the ability to reach beyond the highest achieving students to encompass students who are prepared for college-level work, but may not be the top performing students in the high school. Recently released statewide data indicate that approximately 30% of the students who participated in dual enrollment programs in the 2015-2016 school year had less than a 3.0 (T. Walsh, personal communication, September 22, 2016). Students from the mid to low-socioeconomic range, who
may not have a 3.0 or better, now have an opportunity to participate. The recent changes in the dual enrollment program may have possibly enhanced the sample size of low-income students for this research study.

**Participant Description**

Because an IPA approach requires extensive data collection and analysis of each participant, the sample size is usually small. Smith (2004) suggests that many IPA studies have sample sizes of 5-10. IPA research does not seek to create a representative sample. In this respect, IPA differs from other methodologies that seeks to establish claims for the broader population. Instead, IPA researchers utilize purposive sampling of homogenous participants who have expertise with the phenomenon (Wagstaff & Williams, 2014). Brocki and Wearden (2006) note that the commonly small sample size for IPA studies can provide a sufficient perspective when given adequate contextualization. Detailed and rich data were taken from a small sample size in order for the data to be adequately situated, described, and interpreted. For the purposes of this study, the sample size was seven students.

**Sample characteristics.** The sample consisted of students who were considered low-income, which, for the purposes of this study, has been defined as receiving a federal Pell Grant to pay for all or some of the college tuition and fees. The students had also been enrolled in at least one course that was considered a dual enrollment, college-level course while in high school. The pool was also made up of students from the 2016 high school graduating class because the state of Ohio did a major overhaul of the dual enrollment program beginning with the 2015-2016 school year. This group would have a unique perspective on the new program. Additionally, they were all in their first year of college and enrolled in classes at the time of the study. The participants were of a traditional undergraduate college-age, 18-19 years old.
Sampling procedures. Participants were recruited using purposeful sampling, which entails selecting participants who are able to speak to and inform the research question and who have all experienced a particular phenomenon (Creswell, 2013). In this study, the phenomenon is participation in Ohio Community College’s dual enrollment program and the subsequent matriculation to the college. The following steps were used to recruit the participants:

1. Upon university and local IRB approval, the researcher requested a list of students from the Institutional Research department that matched the criteria listed above in the sample characteristics section. The list was received within a week of the request and it contained forty-four students that matched the requested criteria. The list included demographic information to ensure a mixed racial and gender sample would be achieved. The following academic data was also included: GPA, credits attempted, credits completed, and academic major. The list also contained contact information for each student.

2. An initial email (see Appendix A) was sent to all the identified students. The email introduced the study and briefly described the purpose of the study. Students were offered a $20 gift certificate as incentive to participate in the study. Students were asked to respond directly to the researcher if they were interested in participating. Ten appointments from the 2016 cohort were made within a week of sending the recruitment email. Of the ten students who agreed to participate, seven showed up for their interviews, which met the goal of 5-7 participants. A mixed racial and gender sample was achieved in order to build a robust portrait of student experiences.

3. Over the next two weeks, the researcher met with each student who agreed to a meeting for an initial interview. The purpose of the meeting was to describe the study
in greater detail and answer any questions related to the study. At that time, the informed consent form (see Appendix B) was explained and collected by the researcher. The initial meeting was also a time for the researcher to establish a rapport with the participant and to establish the one-on-one interview date, time, and location. Each participant also participated in a 40-60-minute interview, which is described later in the Data Collection section.

**Procedures**

IPA, as a research methodology, influenced all aspects of the research design for this study. The overall research question explored the process of meaning-making for the research participants and the data collection and analysis procedures followed standard IPA protocol. The data collection and analysis procedures are described in the following sub-sections.

**Data Collection**

Data can be collected for IPA studies in a variety of ways, including diaries, focus groups, and interviews. This study utilized individual semi-structured interviews for collecting the primary data for the study. Semi-structured interviews are an ideal method for collecting data because they offer structure for the researcher, but they also allow the participant to lead the researcher into other areas based upon their account of their experiences (Oxley, 2016). The researcher utilized an interview guide (see Appendix C) to help direct the interview process. As seen on the interview guide, there were twenty questions, which were divided into six sections. The three main sections focused on the experiences that are examined closely in this study: High School Dual Enrollment Experience, Transition to College Experience, and First Year of College Experience. The researcher also asked background questions and discussed the participants’
final thoughts about their experiences in an effort to establish rapport and to get to know each participant on a more personal level. The researcher also explored future plans with each participant, which may become possible areas of research for future studies related to dual enrollment participation.

The interview questions for this study were structured enough to ensure the researcher gathered the data relevant to the research questions, yet flexible enough to explore unanticipated topics or themes that emerged during the interview process. As Seidman (2006) pointed out, “We interview in order to come to know the experience of the participants through their stories” (p.119). The researcher was sensitive to allowing students the opportunity to share their lived experiences as they related to the research topic. Gentle probing questions were used to help clarify responses and to lead to greater depth of understanding. There was one round of interviews with each participant and all the interviews were recorded after receiving permission from each participant. Two digital recording devices were used, with one serving as a backup in case the primary device malfunctioned.

Additionally, the Institutional Research department of the college provided academic data for each participant. The information included total credits attempted, total credits completed, GPA, and academic major. The researcher used this information to make field notes to compare the participants’ responses to the interview questions regarding their first year as college students to the academic data provided by the college. Field notes also documented the data, time, and location of each interview and any notable thought or feeling that was displayed during the interview.

Lastly, as suggested by researchers (Larkin, Eatough, & Osborn, 2011; Oxley, 2016; Smith, 2004), the semi-structured interviews were transcribed verbatim. The researcher utilized
a transcription service for time savings. The researcher received the transcripts within 24 hours of submitting the recordings. The researcher then contacted each participant by email to provide the interview transcript and the details of the interview (date, time, location). The participants were given an opportunity to respond in writing to request a meeting to discuss the transcript (Creswell, 2013). None of the seven participants requested a meeting to discuss the transcript of their interview.

Data Analysis

The interview transcripts were subjected to systematic processes of reflection, identification, description, clarification, interpretation, and contextualization (Smith, 2004). The first stage of analysis involved reading and re-reading the interview transcripts (Oxley, 2016; Smith, 2004). During this initial step, the researcher also listened to the recording of the interview to become reacquainted with the participant. The intent was for the researcher to remain open to new insights and to become completely absorbed in the data, beginning to understand the perceptions and experiences of each participant. As suggested by Larkin et al. (2011), the researcher maintained field notes to document the process and any feelings or reflections regarding the process. The researcher took the time to sit and reflect upon the interaction following each interview, which is a direct link to the hermeneutic aspect of the IPA methodology. It also prompted the researcher to reflect on any personal feelings or biases that may have influenced the interview (Oxley, 2016). These reflective thoughts were also captured in the field notes.

The next step was the data coding process. The coding for this study was done by hand, using color-coded markers to separate material and quotes. In contrast to thematic analysis, IPA analysis begins with exploring the content and language used by the participant, before
identifying themes (Oxley, 2016). The researcher made exploratory comments, noting the content and flow of the interview. The first-level of descriptive coding focused on the participants’ objects of concern and the experiential claims made by the participants (Larkin, Eatough, & Osborn, 2011; Smith, 2004).

The researcher highlighted phrases on the transcript and wrote code words and phrases in the margins of each transcript to describe each of the phrases. The code words and phrases were descriptive of both the content and language of the participant, as well as the researcher’s perceptions of the participant’s feelings. This step involved paying close attention to how the participant used language, considering the elements of speech, such as pauses, volume, inflection, and other non-verbals. Smith (2011) notes that most IPA studies involve the detailed analytic treatment of each participant’s interview data before the identification of patterns and themes across the cases. The code words and phrases, along with the highlighted phrases on the transcript, were then copied to a spreadsheet for further analysis and ease of grouping. Examples of the codes were, “did not feel like college”, “guidance counselor did not help”, “did not have information about dual enrollment program”, “academic struggles”, “confused”, etc.

The researcher’s next step was to begin to group the first-level codes on the spreadsheet. The researcher initially evaluated the codes for each participant separately and grouped them by similar patterns. This required searching for patterns, overlap, and connections from the notes taken during the interview, in combination with the codes identified using the transcripts. The researcher created second-level codes from grouping similar codes into a theme. This step was repeated for each participant. The researcher then determined the significant themes for each participant individually and recorded these emergent themes on the spreadsheet.
Finally, once all the interviews were analyzed individually, the final step was to look for connections across the emergent themes (Oxley, 2016; Smith 2011). The researcher searched for the shared experiences of the participants and recorded the overarching themes represented in the interviews. The themes were identified and connected to the following three phases of the student experience: (1) High School Dual Enrollment Experience, (2) Transition to College Experience, and (3) First Year of College Experience. These phases are tied directly to the three sub-questions for the study. In the first phase of the participants’ experience, the emergent themes were: Courses at the High School vs. College Campus, Lack of Information, and Lack of Motivation. The emergent themes in the second phase of the participants’ experience were: Parental Influence, High School Staff Support, and College Staff Support. Lastly, the emergent themes in the final phase of the participant’s experience were: Math is a Challenge and High School Expectations vs. College Expectations. The findings related to the themes in these three areas are used to answer the sub-questions and the overarching research question.

**Ethical Considerations**

All the participants were treated in accordance with ethical research principles and guidelines as established by the Institutional Review Board (IRB). The researcher submitted all the necessary information about the research to the IRB, including the goals, significance, methods, and participant information (Creswell, 2013). The researcher did not contact participants or attempt to collect data until written approval had been received by the IRB of the university and the local IRB. The researcher reviewed the study’s purpose, scope, and potential risks and benefits with each participant prior to requesting and acquiring the informed consent form (see Appendix B). Participants were informed multiple times that participation was voluntary and that they had the opportunity to withdraw from the study at any time.
Although there were no apparent risks for participating in this study, the researcher adhered to standard practices in order to maintain confidentiality. Each participant was assigned a pseudonym for themselves and anyone they may have mentioned by name during the interview. The college was also assigned a pseudonym. The researcher maintained a password-protected file that documents the participants’ actual names and their pseudonyms. All audio files and written documents were stored electronically on the researcher’s computer and stored in a cloud-based data storage program. Passwords and other security features were put in place to ensure confidentiality was maintained. All physical documents (field notes, consent forms, etc.) related to the project were stored in a locked cabinet owned by the researcher. Per Creswell’s (2013) recommendation, a master list of data sources (interview transcripts and academic information) has been developed and maintained in order to easily retrieve data to support the study.

Lastly, the researcher made every effort to establish a safe and non-critical environment for the participants in order to reduce possible barriers. The researcher spent time getting to know the participant and answering any questions prior to the interview. The researcher also shared information about the purpose of the study and about her role at the college. Special attention was given to building trust and rapport and to reducing any perceived power imbalances that could hinder honest and open communication. Qualitative research depends heavily on the researcher’s ability to conduct effective interviews that require sensitivity, openness and honesty (Creswell, 2013).

Trustworthiness

Qualitative research differs from quantitative research in both its subjective nature and in its approach to validity. Quantitative research depends on reliability of external data, while
trustworthiness is the focus for qualitative research (Creswell, 2013). In order to maximize the trustworthiness of this study, the researcher utilized numerous validation strategies, such as member checking, triangulation of data, and the use of an external reviewer (Creswell, 2013). These methods are also in line with Shento’s, (2004) four criteria for determining trustworthiness, such as credibility, dependability, confirmability, and transferability. The first three components are discussed in the following sections and transferability is described in the Limitations section of this chapter.

Credibility. One method for increasing credibility is the use of triangulation. Shento (2004) suggest using other data sources to verify particular details that have been supplied by the participants. For this study, diverse data sources were collected and utilized. The majority of data were gathered during the in-depth interviews, but additional data were collected from the Institutional Research department of the college (GPA, credits attempted, credits earned, academic major, demographic information). The academic data were used to compare the participants’ perceptions of their academic success/failure in their first year of college to their actual academic records. When considering all the data sources, the participants’ perceptions of their academic results were found to be consistent with information provided from the Institutional Research department.

The use of peer scrutiny is also a method for enhancing credibility discussed by Shento (2004). The researcher enlisted an external reviewer to evaluate the researcher’s conclusions and identify any potential inconsistencies that warranted further consideration. The external reviewer was encouraged to ask questions about methods, meaning and interpretation and to comment on the data. The external reviewer also identified possible areas of bias for the researcher to consider. The perspective of the external reviewer challenged the conclusions made by the
researcher, which had the potential to be inhibited by the researcher’s biases and attachment to
the research study.

Shento (2004) also suggests using reflective commentary as a method to enhance the
credibility of the study’s findings. As suggested by Creswell (2013), the researcher utilized both
self-reflection and field notes to contribute to the validation of the research. The researcher
recorded impressions after each individual interview session, noting the emotions of each
participant when it appeared to be significant to the experiences described by the participant.
The researcher used the participants’ emotions and perceived feelings as a component of the
interpretive process.

Lastly, Shento (2004) suggests using member checking for the purpose of ensuring
credibility. Member checking in this study involved sharing the transcripts with the participants
so he/she could have the opportunity to make corrections, provide additional information, or
clarify any of the statements made during the interview. The participants were sent the
transcripts by email with instructions to reply back if there were any questions or to request a
meeting to discuss the transcript. There were no corrections and no requests to meet as a result
of the member checking process.

**Dependability.** The aspect of dependability involves the use of techniques that would
create similar results when repeated if a researcher uses the same context and the same methods
and participants (Shento, 2004). In order to address this component of trustworthiness, the
researcher has provided a detailed description of the research design and implementation
process. A rich description of the research site and the participants were provided to add context
to the study. Demographic data was included, which details the age, gender, and ethnic
background of the students, which can be used for comparison purposes for any repeat studies.
Also, there is a description of the sampling process used to determine the participant group. The data collection process describes what was done in the field and the description of the analysis process reflects a procedure common to all IPA studies. Thus, the researcher has provided adequate details for other researchers who might wish to duplicate this study.

**Confirmability.** Shento (2004) notes that researchers must ensure that the findings of the study are the result of the experiences of the participants, rather than the preferences of the researcher. To this end, the researcher describes her positionality and potential bias in the following section. As Shento (2004) suggests, the researcher admits to predispositions based upon her role as an administrator at a community college. Though the researcher was influenced by her exposure to various sources of information, she considered the input of external reviewers to minimize the impact of her own biases and positionality when making the recommendations related to her findings.

**Potential Research Bias**

Understanding one’s own attitudes and influences helps to minimize the reliability and validity of a proposed study (Briscoe, 2005). As this study examined the experience of low-income students, it was important to understand and acknowledge the researcher’s biases and perceptions. Both from a personal and professional standpoint, the researcher has great interest and perhaps a bias for increasing college access and success for underrepresented student groups. The researcher’s interest in this topic was grounded first in her personal identification as a minority, first generation college graduate. As such, the researcher was personally familiar with the challenges of navigating the unfamiliar postsecondary environment.

Additionally, the researcher was influenced greatly by her role as an administrator at a community college. In her role as the Vice President of Student Affairs, she is responsible for
the success of the college’s dual enrollment program and is intimately involved in overseeing and evaluating the dual enrollment practices at the college. In the researcher’s role, she is very aware of the policies that govern the dual enrollment program. She has been involved in state level meetings and conferences related to the dual enrollment program and has also talked with local school district leaders regarding the program. The researcher’s interpretation of the findings from the study was influenced by her exposure to various sources of information, in addition to the interview data collected from the participants.

Machi and McEvoy (2012) point out the positives and negatives associated with researcher bias. Personal experience and attachment to a particular issue can provide the dedication needed to adequately research a topic; however, it can also cause the researcher to draw inaccurate conclusions (Machi & McEvoy, 2012). In this particular study, the researcher’s life experience should not be viewed as a hindrance, but rather a means to connect. The researcher is indeed sympathetic toward underrepresented populations, resulting in a high degree of sensitivity to the research topic. As Briscoe (2005) noted, though a researcher’s demographic positioning may be a cause for suspicion, it should not be an automatic assumption of inaccurate representation.

As also noted by the authors, researchers cannot completely eliminate bias, but they must be aware of its potential to impact their research. Behar (1996) explained the importance of understanding one's self and using that knowledge to connect with the experiences of others. The researcher hoped to expand her knowledge of the topic and committed to be open to perspectives that she may not have considered in order to accurately represent the research results.
Limitations

There are three key limitations to this study. The first limitation relates to the transferability of the findings. Shento (2004) notes that transferability is concerned with whether the findings of a study can be applied to a wider population. Participants for the study were recruited from one community college in the state of Ohio. While the study’s findings are not transferable nationally, there are twenty-three state community colleges in Ohio (http://ohiocommunitycolleges.org/benefits-of-an-associates-degree/). Each of the community colleges are governed by the Ohio Department of Higher Education (ODHE). As such, the community colleges are required to follow the dual enrollment policies established by the state. Therefore, the students at community colleges in Ohio would experience the dual enrollment program in very similar ways. However, the students were from one geographic region, which could impact their experiences and perceptions. Researchers or readers, who want to determine if this study’s findings are transferable to other community colleges in the state, can use the description of the setting found in the Research Site section of this chapter. The rich description of the site serves to add context to the findings and help determine the transferability of the findings from the study.

Closely related to transferability is generalizability. Using a small sample size from one community college lessens the generalizability of the findings; however the study was intended to be exploratory, rather than generalizable. The small sample size allowed for a more in-depth data collection process, which enhanced the researcher’s understanding of the issues identified by the participants.

Additionally, by interviewing only students, there was not an opportunity to triangulate the data with teachers, college faculty, and other key stakeholders. Incorporating the views of
others could have enhanced the findings and increased the validity of the study; however, the
focus was to examine the experiences and perceptions of the students. Future research studies
could be utilized to triangulate the rich data collected from the student perspectives found in this
study with the experiences and perceptions of other stakeholders.

Finally, students may have varied in their comfort level in discussing their current
challenges with college, as well as in their ability to reflect on their past high school experiences.
The researcher took time with each participant to establish a rapport and to minimize any
discomfort prior to the interview. Though the depth of the interview data varied, it did not
hinder the ability of the researcher to identify common themes.

Chapter Summary

This study explored the experiences and perceptions of low-income students who
participated in a dual enrollment program and later matriculated to a community college. This
chapter outlined the methodology, beginning with a description of the IPA methodology that was
utilized to give voice to the participants’ experiences and to make sense of their perceptions. The
characteristics of the sample and the sampling procedures are described in order to add context to
the participants’ interview data. The data collection sections described the interviews, which
generated the data for the study. An explanation of the data coding process was also discussed.
All aspects of the research approach were described – including ethical considerations,
trustworthiness, the researcher’s positionality, and the potential limitations of the study. The
thorough explanation of the research methodology lends credibility to the subsequent findings of
the study.
Chapter Four: Research Findings

This IPA study examined how low-income students who participated in a dual enrollment program described their experiences and how those experiences affected their transition to college and their college readiness. The research uncovered and analyzed specific experiences from students who were enrolled in the dual enrollment program at Ohio Community College and subsequently transitioned to the college. This chapter describes the participants and presents the rich data that was derived from the participants’ personal perspectives of their experiences.

The central question for this study was, “What is the experience of low-income college students who participated in a dual enrollment program prior to matriculating to college? The research questions that further guide the study are:”

1. As college students, what are the students’ perceptions of their past experience as a dually enrolled high school student?
2. How do the students perceive their transition to college in terms of their access to information and social supports as a result of participation in the dual enrollment program?
3. How do the students perceive their preparation for college academic success in terms of college readiness as a result of their participation in the dual enrollment program?

This chapter includes a description of all the participants and presents the data that contributed to a richer understanding of the participants’ experiences in three phases: (1) High School Dual Enrollment Experience, (2) Transition to College Experience, and (3) First Year of College Experience. The data collected for phase one, two, and three address the first, second, and third research questions. The emergent themes are explored in each of the three phases of the participants’ experiences and presented as a response to the research sub-questions.
Participant Introductions

A purposeful sample of participants was chosen for the study. The sample consisted of students who were considered low-income, which, for the purposes of this study, has been defined as receiving a federal Pell Grant to pay for all or some of the college tuition and fees. The students had also been enrolled in at least one course that was considered a dual enrollment, college-level course while in high school. All the participants were from the 2016 high school graduating class, from varying high schools and the career center, and they were all in their first year at Ohio Community College and enrolled in classes at the time of the study. In order to gain a contextual understanding of the findings, a brief introduction of each participant is presented below.

Brittany. Brittany is an 18-year old Black female. She lives with her single-parent mom, who once attended the community college where Brittany is attending. Brittany decided to attend the college because she is a self-proclaimed “mama’s girl” and she did not want to leave her mom yet. She lives within a few miles of the campus and enjoys the convenience of attending a local community college. In addition to being a student, she also works to support herself. Though she is a Pell grant recipient, she also took out loans for additional assistance. She did not do well in her first semester, but she feels she is more focused in the current semester and hopes to have better results. She is working on a general transfer degree and plans to transfer to a four-year institution in Ohio after completing her associates degree. She is bright and friendly and is self-motivated to do well. Unfortunately, she is at risk of losing her federal aid if she does not improve her GPA, which would be devastating to her ability to continue at the college.
Denise. Denise is a 19-year old Black female. She shared that as an athlete, she always knew she would go to college. She says her mom attended college and her dad is attending college now. Denise also works and says she is looking for a second job. She is a Pell grant recipient and took out a loan as well. She failed one of her courses in the fall semester, but feels she is doing well overall. She came to the community college specifically to play basketball. She currently plays basketball for the college and hopes to play for a four-year institution outside the state when she completes her associates degree. She is uncertain about her career goals, but would like to work in the healthcare field.

Christopher. Christopher is an 18-year old Black male. He is very bright, but seems to lack motivation and direction. He admitted that he could have done better in high school and he was not sure if he wanted to attend college. He decided late to go to college because his parents encouraged him to try it. His dad recently graduated from the same community college that Christopher is now attending. Christopher works on campus as a work-study, in addition to being a Pell grant recipient and taking out a federal loan. He is doing well, but is not sure if he wants to pursue a bachelor’s degree. He does not know what he wants to do in life, so he may decide to work before continuing his education. He says his family is moving to Florida next year, so he will only be attending the college for one year. He is bright, but seemingly has not found direction yet.

Sue. Sue is a 19-year old Asian female. She says she has not decided what she wants to do yet, but she is planning to transfer to a four-year institution in Ohio to continue her education. Sue had the experience of taking two dual enrollment courses during her senior year – one on the college campus and one online. She expressed how difficult the classes were and that she was not successful. She is also unique in that she did not start college in the fall semester. She
travelled for a few months and just started at the community college in January. She feels she is doing well and her dual enrollment experience prepared her well for college. She also has a job to help support herself, in addition to being a Pell and federal loan recipient. Sue is an advocate for students being better informed about the dual enrollment program.

**Jennifer.** Jennifer is a 19-year old White female. She attended the career technical center during her junior and senior years of high school. She received her cosmetology license while in high school and now works 30-35 hours a week as a hair stylist, in addition to being a full-time student. Jennifer moved out of her home as a senior in high school and has lived independently since that time. She took two dual enrollment courses on the college campus and shared her unique experience of feeling “out of place” because she was so much younger than all the students in one of her courses. She wanted to share her experience in hopes of making improvements for other students. In addition to receiving a Pell grant, Jennifer also received academic scholarships from the college’s Foundation. She is an excellent student and has already fulfilled all the academic prerequisites to get in the nursing program.

**Isaac.** Isaac is an 18-year old White male. He attended a rural high school and took two dual enrollment courses in the high school during his senior year. Isaac shared that he felt he had an authentic college experience while taking the two courses and credits his teacher for making the courses challenging, which prepared him well for being a college student. His parents both attended a church-affiliated college and he comes from a long family history of church pastors. Although his family expected him to do the same, he has chosen to pursue his education to become a social worker, which he feels is similar to being a pastor. He currently works two jobs to supplement the Pell grant he received. He regrets not taking more dual enrollment courses
while in high school, which he now realizes would have saved him time and money. He plans to obtain a bachelor’s degree and is already thinking about a graduate degree.

Tammy. Tammy is an 18-year old Black female. She is very confident in her academic skills. She was bored in a traditional high school, so she decided to transfer to a career center during her junior and senior years to gain a marketable skill. She took graphic arts courses and is now pursuing an associate’s degree in Graphic Design at the community college. She is not sure whether she will go directly to work or pursue a bachelor’s degree in the future. Her only dual enrollment course was a college success course at the career center. She knew about the opportunity to take college courses on the college campus, but she had no transportation to get to the campus. She expressed that she definitely would have taken full advantage of the dual enrollment program if transportation was not a barrier. She received a Pell grant and works as a work-study to pay her college expenses.

In order to ensure a robust portrait of student experiences, a mixed racial and gender sample was sought and achieved. Participants also had a variety of high school experiences – public, private, traditional high schools, and career centers. The table below shows the diversity of the participant sample.

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>GENDER</th>
<th>ETHNICITY</th>
<th>HIGH SCHOOL/ CAREER CENTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRITTANY</td>
<td>F</td>
<td>Black</td>
<td>Career Center</td>
</tr>
<tr>
<td>DENISE</td>
<td>F</td>
<td>Black</td>
<td>Public High School</td>
</tr>
<tr>
<td>CHRISTOPHER</td>
<td>M</td>
<td>Black</td>
<td>Private High School</td>
</tr>
<tr>
<td>SUE</td>
<td>F</td>
<td>Asian</td>
<td>Public High School</td>
</tr>
<tr>
<td>JENNIFER</td>
<td>F</td>
<td>White</td>
<td>Career Center</td>
</tr>
<tr>
<td>ISAAC</td>
<td>M</td>
<td>White</td>
<td>Public High School</td>
</tr>
<tr>
<td>TAMMY</td>
<td>F</td>
<td>Black</td>
<td>Career Center</td>
</tr>
</tbody>
</table>

Table 1. Represents the primary characteristics delineating the study participants
Eight themes were identified across the three research sub-questions. In the first phase of the participants’ experience, the emergent themes were: Courses at the High School vs. College Campus, Lack of Information, and Lack of Motivation. All three of these themes were present across all participants, with one exception - a lack of motivation was mentioned by six out of seven participants. The emergent themes in the second phase of the participants’ experience were: Parental Influence, High School Staff Support, and College Staff Support. All the participants discussed the influence their parents had on their college decisions. Six out of seven participants discussed the support from high school staff members and college staff members. Lastly, the emergent themes in the final phase of the participant’s experience were: Math is a Challenge and High School Expectations vs. College Expectations. Five of the seven participants discussed their challenges with math and six out of seven participants described the difference in the high school expectations compared to their college experiences with college-level expectations. A summary of these themes by participant is presented below in Table 2.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Brittany</th>
<th>Denise</th>
<th>Christopher</th>
<th>Sue</th>
<th>Jennifer</th>
<th>Isaac</th>
<th>Tammy</th>
</tr>
</thead>
<tbody>
<tr>
<td>As College Students, What Are The Students’ Perceptions Of Their Past Experience As A Dually Enrolled High School Student?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses at the High School vs. College Campus</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Lack of information</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Lack of motivation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>How Do The Students Perceive Their Transition To College In Terms Of Their Access To Information And Social Supports As A Result Of Participation In The Dual Enrollment Program?</td>
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<td></td>
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<tr>
<td>Parental Influence</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>High school staff support</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>College staff support</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>How Do The Students Perceive Their Preparation For College Academic Success In Terms Of College Readiness As A Result Of Their Participation In The Dual Enrollment Program?</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Math is a Challenge</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>High School Expectations vs. College Expectations</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 2. The participants’ comments on each theme
Presentation of Findings

Brocki and Wearden, (2006) suggest that verbatim extracts from participant interview data is central to an IPA approach and should be included liberally in the presentation of the findings. Larkin, Watts, and Clifton (2006) describe how an IPA approach presents an overtly interpretative analysis of the data, not just a description of the data collected. The interpretative analysis allows the researcher an opportunity to present the data in a more speculative fashion. The researcher presents what it means for the participants to have expressed their feelings and concerns in a particular situation. In doing so, the researcher engages in the double hermeneutic approach – described as trying to make sense of the participant trying to makes of their experience (Larkin, Eatough, & Osborn, 2011; Oxley, 2016; Smith, 2004).

Accordingly, data extracts and interpretive commentary are presented in this chapter in order to show both convergent and divergent themes and so the reader can see the breadth and depth of each theme. Data from multiple participants demonstrated both patterns of similarity among participants and the uniqueness of each individual experience. Thus, the narrative for each theme provides an analysis of how the participants manifested the same theme in different ways (Oxley, 2016; Smith 2011). The themes are organized by the research sub-questions and reflect the participants’ experiences, beginning with their participation in the dual enrollment program and ending with their first semester as college students.

As College Students, What Are The Students’ Perceptions Of Their Past Experience As A Dually Enrolled High School Student?

Participants were asked to describe their past experience as high school students in the dual enrollment program. The participants identified whether they took courses at their high school or on the college campus and discussed their experiences in each of these two situations.
The participants also shared their challenges with participating in the dual enrollment program. The three themes that emerged during this phase of their experience were: Course at the High School vs. College Campus, Lack of Information, and Lack of Motivation. These participants’ experiences with these themes are discussed below.

Courses at the high school vs. college campus. When participants were asked to describe their high school experience as a dual enrollment student, they described taking the dual enrollment courses at their high school or on the college campus. Most participants took classes in their high school, taught by high school teachers. Others had an experience with taking their courses on the college campus, which could include an online course taught by college faculty. Some took one course, while others took two courses. Some were not fully aware that they were in a course that would yield college credit and had very little understanding of the dual enrollment program. Others knew of the dual enrollment program, but were not motivated to take full advantage of the opportunity or faced some other barrier to participation. The descriptions below outline the common experiences of the participants, as well as their unique perspectives. The two sub-themes are High School Courses and College Campus Courses.

High school courses. Of the seven participants, five students took their dual enrollment course (or courses) at their high school, with a high school teacher. Though this is certainly a convenience for students, when the participants were asked if the dual enrollment course they took at their high school felt like a college-level course, all but one student replied that it did not. It appeared from the student dialog that the students did not understand the significance or the purpose of the dual enrollment course they were taking in the high school. According to most of the participants, the college course felt like any other course they were taking at the time, even though they were receiving college credit for the course. The participants knew the courses
would yield college credit, but there was no expectation or understanding that the course was actually intended to prepare them for the challenge of taking courses in college.

Though the participants largely expressed that the courses did not feel like a college course, Brittany and Denise noted that the pace of the dual enrollment classes was a bit quicker than their other courses. When asked to compare the courses to their current college courses, they readily acknowledged that the courses were not as difficult as the courses they are now taking as undergraduate college students. Both participants were able to better understand the difference in rigor and expectations of a college-level course because of their current experiences as college students.

Christopher, who took a dual enrollment English class in his senior year of high school, did not notice any difference in pace or challenge for his dual enrollment course. He stated, “All the English courses I took in high school kind of felt that way. I didn't really notice a difference.” Christopher also mentioned that English was one of his favorite subjects, which could have contributed to why he did not experience an increase in difficulty between the dual enrollment English class and the other high school level courses he had taken in the past.

Tammy took a College Success course in the high school, which also gave her college credit for the community college’s First Year Experience course. Tammy shared that she wanted to take dual enrollment courses on the college campus, but she lacked transportation. As far as she knew, there were no other college courses available to her at the career center where she attended high school. She took the course at the advice of her high school counselor so that she would not have two study halls in her senior year. She found the course to be helpful, especially when she went through the transition process to the college and had to register herself for
classes. However, Tammy did not feel the experience helped her from an academic standpoint, nor did she have any expectation that the course was intended for that purpose.

Isaac was the only student that felt like the dual enrollment courses he took at the high school were equally as difficult as the courses he is now taking as a college student. He took college English I and English II in his high school and attributes the quality and rigor of the course to the high school teacher, which he had for both classes. In his words, “She's one of the teachers that was very, very hard and that was her reputation then. I really did learn a lot from those classes.” Isaac went on to explain that he felt his high school English dual enrollment courses were more challenging than some of the general education classes he is now taking as a college student. When asked if he felt his dual enrollment experience helped prepare him well for the college courses he is now taking, he stated:

I do think so. She did expect a good amount from us, and in fact, I might even say more than my college courses now. A few of my gen ed classes here I didn't feel were as challenging as that one. That's mainly because I already knew all those skills because of the stuff that she taught me, writing papers and all of that stuff.

Isaac had great respect for the teacher that taught the dual enrollment English course in his high school and noted that he believed she also taught English at the area colleges. Isaac not only felt that he had an authentic college experience as far as the level of difficulty for the course, he also believed his high school course was more difficult than some of the courses he was now taking as a college student. In his opinion, his dual enrollment experience helped contribute to his current college success. Isaac’s experience was definitely unique in comparison to the other participants who did not feel that their dual enrollment course was particularly challenging or seemed like a college level course.
While discussing the participants experience at their respective high schools, it became very apparent that the dual enrollment courses in the high school did not create a college level experience for most of the participants. Other than Isaac, the participants did not feel their dual enrollment course prepared them academically for college courses as an undergraduate college student. Isaac’s experience highlighted the role of the teacher in ensuring the dual enrollment courses are appropriately challenging and have the same level of rigor as college level courses taught on the college campus.

**College campus courses.** Two of the participants, Sue and Jennifer, took dual enrollment courses on the college campus while they were high school students. They described their experiences differently because Sue took her courses at the smaller branch campus, while Jennifer took courses at the main campus. There seemingly were positives and negatives related to each experience, but they both agreed that their experiences gave them insight into what it would be like as a traditional college student.

During Sue’s senior year, she took an online psychology course and a math class at the branch campus. When asked to describe how it felt to take a course on a college campus she explained that because the campus was not large, she was not worried. She stated, “I like how simple it is here. It's just classrooms and a building, so it wasn't intimidating to me.” However, she also explained that she did not fully realize how challenging it would be to take courses on the college campus, while also finishing up her high school requirements at the high school. She explained, “I thought I could handle balancing those out but I didn't realize I’d have so much homework in that college algebra class and how much studying it really took. It was a really hard class for me.” Unfortunately, Sue did not do as well in the course and is now repeating it as
a college student. She says she is now much more prepared having taken it once while she was in high school.

Sue spoke positively of her experience with taking an online college course while she was in high school. Sue stated that “it was just kind of weird me not being in a classroom”, however, she went on to say, “Actually, I think it's really good. It's really flexible in your schedule. You can do it any time of the day.” Sue also shared that she experienced internet challenges at home, which sometimes made it difficult to get her homework in on time. However, Sue passed the class and received college credit from the community college.

Jennifer took two courses on the college’s main campus during her senior year at the career center. She found the experience to be a bit more intimidating than Sue’s experience on the smaller branch campus. Jennifer described her experience as follows:

At first, it was a little confusing, because I felt like a college student. They just kind of explained where everything was and what I needed to do, but there was really no one to tell me how to go about those things.

Although Jennifer found the initial process to be confusing, she was very positive about her classroom experience. She stated: “After we got everything all figured out in the beginning, everything else went very smoothly. The class itself went perfect.” Jennifer also shared the unique experience of feeling a bit odd about being a young high school student in one of her pre-nursing classes. She stated:

The Medical Terminology class was a little bit odd. I just felt a little out of place, because most of them had already been working either as an STNA [State Tested Nurses Aid] or
as an LPN [Licensed Practical Nurse], so they knew kind of the medical world and I had no idea.

Jennifer explained that she felt much more comfortable in her other class, English I, because she had another student in that class from her high school. However, her experience of feeling uncomfortable with being a young high school student in a class that is predominantly older can be a common experience, especially at a community college where the average age is higher than at a four-year institution.

In evaluating the descriptions given by Sue and Jennifer, it was obvious that they experienced their dual enrollment courses in a vastly different way than the participants who took their courses at the high school. Sue and Jennifer had a clearer understanding of the rigor and pace of a college course, compared to a high school course. Jennifer also noted the challenge of being in a classroom with students who were at different ages, all of whom were older than her and already had work experiences. Because Sue and Jennifer had an authentic college experience, they expressed that they were more confident in their ability to be successful in college and they knew what to expect as college students. They also noted that they already established relationships on the college campus, which helped them with the transition process.

Lack of information. Participants had varying degrees of participation in the dual enrollment program. Most took one or two courses in either their junior or senior years of high school. Participants were asked about the reasons for their level of participation in the dual enrollment program and their understanding of the program. None of the participants had a complete understanding of the opportunity to take courses at the high school and on the college campus. The lack of understanding of the full scope of the dual enrollment program seemed to be the greatest barrier to full participation in the program. Some participants had varying
degrees of knowledge regarding courses that were available in their high schools, but none of them knew the extent to which they could come to the college campus and take courses for free. When asked how they received information about the program, some students heard about it from their school counselor, some from their high school teachers, and others from fellow classmates.

Isaac expressed his lack of understanding, which he felt confident was common amongst most students:

I vaguely understood what was going on in my sophomore year and really started to understand it a little bit my junior year, and I really didn't fully, fully grasp it all until my senior year. I know that seems to be the case for a lot of others as well. I wish I would have known about it earlier.

The researcher asked each participant if they would have taken more dual enrollment courses if they had a more complete understanding that they could accumulate college credit at no cost to them. Most of them responded they would have taken more courses if they had a clearer understanding of the potential savings. In speaking with the participants, it became very clear that they either did not receive complete information or did not understand the information they received.

Christopher, Isaac, and Sue took responsibility for their lack of participation. For example, Christopher stated, “I knew some kids in my class who did, so that was definitely going on but I didn't pay too much attention to it.” Isaac also stated that he knew other students who were taking courses at the college, but he did not seek out additional information until he was preparing for his senior year. Sue shared that she was focused on getting Advanced Placement
(AP) credit through most of high school and did not talk to her high school counselor about other opportunities until she was preparing for her senior year.

Some of the participants discussed the lack of communication regarding the opportunity. Isaac suggested more one-on-one conversations would have helped him, as he shared, “I wish I would have had somebody come up to me and talk one on one, ‘These are the classes you can take. You can do dual enrollment and pay for your college.’” Tammy echoed the same sentiment in her comments when she stated:

There weren't a lot of people screaming, hey I was offered a College Credit Plus [dual enrollment] course, so I feel like they were ... either what was happening was, there were students who found out about it and either pressed for the information or only certain students were being offered the information.

Tammy’s comments indicated she felt that not every student had an equal opportunity to participate in the program. Brittany shared that she, and others in one of her college classes, discussed that they felt school districts purposely withheld information about the dual enrollment programs because the high schools were required to pay the college tuition and textbook fees. She went on to say, “I definitely, I feel that if the ability to come here for free, no charge, I think that if that was more public, more communicated better, I think people would take more advantage of the classes.” From a financial standpoint, Britany went on to explain:

I definitely would have looked into it because, I mean, I always thought that at first I didn't know how I was going to pay for college. So, if I had a notice that I could take some of these courses for free, less money that I would have to pay, I would definitely look into that for sure.
Other participants echoed the point that they had financial concerns regarding how to pay for their college education and the dual enrollment program could have helped reduce their college costs. Unfortunately, it was evident that the participants were only grasping the full potential of the program as they discussed it with the researcher. All the participants expressed regret after gaining a clearer understanding of the missed opportunity to reduce their college costs by increased participation in the dual enrollment program.

Christopher shared that the only reason he took the single dual enrollment course was because he heard about it at the end of his junior year from his favorite teacher.

There was an English teacher that I really liked, great guy. I thought he was going to be teaching that next year, too, so I went ahead and went for it with that English class and he talked to our class about dual enrollment for next year.

When asked if he would have taken a dual enrollment course, otherwise, he went on to explain the positive influence of teachers:

If it wasn't for him, probably not. And I always did pretty well in my English classes, so- teachers definitely have a good influence in getting students to take college-level courses.

It would seem that high school counselors should have had a significant role in disseminating dual enrollment information; however, Jennifer and Tammy were the only two participants that mentioned that their high school counselor encouraged them to participate in the program. Both Christopher and Isaac noted the important role of high school teachers in communicating about the program and for recruiting students to participate in the opportunity. College staff have very limited access to students until they express interest in the program, so the college was not a source of information initially for the participants. Participants definitely
expressed their belief that students are not receiving the information needed to make informed
decisions regarding how and when to participate in the dual enrollment program.

**Lack of motivation.** Some participants acknowledged that a degree of self-motivation is
necessary for both seeking out the information about the program and for taking full advantage
of the opportunity. Some participants shared that they did not take high school seriously and
some lacked the motivation to take the coursework that would have prepared them better for
college.

When asked about his experience with the single college course he took, Christopher
stated, “It was nice, but looking back on it, I wish I would have tried harder at it. I didn't really
apply myself like I should have. I still passed, but I definitely could have tried way harder at it.”
He went on to explain that he knew about the opportunities, but he simply did not want to work
hard. He shared:

I didn't want to have all that workload and the hard classes. I saw what some of the other
students in my class did because some did a lot of advanced courses and things like that
and I was like, "No. Not for me."

When Denise was asked why she only took one dual enrollment course when she was in
high school she replied, “I knew I could, yeah. I just didn't ’cause I just wanted to take one.”
She added that she wished she had taken high school more seriously, but she did not understand
that she was preparing for college when she was in high school.

Brittany also expressed regret for not working harder in high school when she shared, “I
think if I was challenged more, or I took advantage of the college courses in high school, then I
feel like I would feel a lot more prepared for college.” She went on to offer advice for current high school students. She advised:

Try to get yourself into harder classes. Challenge your mind a little bit, because it will definitely help you when you’re coming to college. I mean, even if you're not right where you're supposed to be for college, it'll definitely put you farther ahead than people who didn't challenge themselves.

Sue offered similar advice when she asked what she would say to high school students regarding the dual enrollment program. She stated, “I'd definitely tell them, if you have time to do two classes, then do two classes. Just one will honestly make you more familiar with the college setting and how it really works.” As a current college student, Sue can now look back and make a recommendation to students; however, she also acknowledged that high school students are generally not mature enough to understand the significance of the program. She showed great insight in the following comment:

Senior year or juniors, our maturity level ... we're not really that serious about school.

Doing a college class is definitely a little bit serious for us. I wouldn't say distracted, but we're just not really serious about school that much.

Sue’s comments regarding high school students’ maturity level and lack of motivation to take challenging courses were corroborated by other participants as well.

Jennifer was the only participant that expressed that she felt motivated to take college courses as a high school student. She noted that the quality of the high school and the encouragement of the of the counselor made a difference for her. In her words:
I have always been motivated in school. I've always enjoyed school, but then [the high school] has a lot of opportunities that showed me that you can go farther, you can do anything. Then, the counselor helping me actually start college classes early, I think it definitely all came together and just motivates me a lot.

Participants like Sue spoke about the general lack of motivation for high school students, while Christopher and Brittany were willing to own their personal lack of drive to take full advantage of the dual enrollment program while they were in high school. Jennifer was the only participant that expressed that she was fully motivated to challenge herself, which was also evidenced by the fact that she was the only participant who successfully passed all the dual enrollment courses she took on the college campus. Based on the experiences of the participants and their own observations, the participants largely felt that many high school students lack the maturity to understand the benefit of the dual enrollment program and the motivation to fully take advantage of the entire scope of the program.

**Summary.** Though every participant had the opportunity to take courses that could have yielded a significant amount of college credit at no cost to them, they only took one to two courses during their junior and/or senior years. Additionally, in almost every case, the dual enrollment courses in the high school were not perceived as college courses and, therefore, did not impact college preparedness for most of the participants. However, students who took courses on the college campus expressed that they felt more prepared for college as a result of their experience as a dual enrollment student. The greatest obstacle to participation in the dual enrollment program seemed to be a lack of information and understanding on the part of the participants, however, the participants also readily acknowledged that motivation and maturity levels of high school students are also a limiting factor.
How Do The Students Perceive Their Transition To College In Terms Of Their Access To Information And Social Supports As A Result Of Participation In The Dual Enrollment Program?

Participants were asked to describe their transition from high school to college and to discuss their sources for support and information. When participants were asked to describe the relationships that were key in helping them navigate the transition from a high school student taking a college course, to an undergraduate college student, they described three principle themes: Parental Influence, High School Staff Support, and College Staff Support. Participants described their experiences receiving support and information from these three key relationships below.

**Parental influence.** From a macro standpoint, all the participants spoke of a family relationship that influenced and/or supported their college decisions. In most cases, a parental figure had the most direct influence on the participant’s decision to attend the college. When asked why Brittany decided to attend the community college, she stated, “Well, I'm a mamma's girl. College is right around the corner, so that was an easy pick.” Brittany is obviously very close to her mother and was not ready to leave her to attend a college outside the immediate area. While other participants may have also felt an uneasiness about leaving home, Brittany was the only participant that expressed this sentiment directly.

When asked about whether the participant’s parents went to college, every participant stated that at least one parent attended college at one point, but many shared that their parents did not finish. Jennifer shared a particularly difficult story:
Well, my father actually passed away while he was in school, he was in college. My mother, she had started college. I was really young, but then she actually got in a car accident and had to have back surgery, and she never went back. I saw both of them start, but never got to see them finish.

It seemed that Jennifer was very much motivated to be successful in college based upon her parents’ inability to complete their college education. She was one of the most self-motivated participants in the study. She spoke of her high level of motivation, but it was also evidenced in her actions. She moved out on her own while still a high school student, but continued to do well academically. She was the only participant who successfully completed her dual enrollment courses on the college campus. After hearing her story about her parents, it is apparent that she was motivated by the difficulties she experienced as a result of her parents’ tragedies.

Tammy shared that her parents did not go to college immediately, but her dad later picked up a trade and her mom went to college after starting her career. She stated that she did not want to have that same experience so she purposely decided to go to college immediately following high school. In her words, “But, I knew I wanted to go immediately after high school because there really wasn't any job or any main thing that I wanted to go for after high school and college just seemed like the next logical thing.” Tammy made the connection between a college education and job opportunities, perhaps by seeing the struggles her parents had experienced as a result of not immediately pursuing their college education.

Other participants spoke about the influence of their parents on their decision-making. When asked who had the most influence on his college decision, Christopher stated:
My dad. Especially since he went here and he really liked it. At first, I wasn't even really sure if I wanted to go to college, like right after, because it's kind of split between people saying, "It's okay to take a year off and, like, work, and figure yourself out." Then there's the, "Go straight there because you don't want to lose that momentum." It's just like, "Go straight to college." And my dad was with me every step of the way.

Christopher was ambivalent about going to college, but his dad convinced him to go to college and supported him in the process. Because his dad had recently graduated from the community college, he was able to guide Christopher through the process step-by-step. His dad’s support was critical to Christopher’s transition to the college and remained a motivating factor for him to be successful.

Brittany also spoke of the influence of a parent in her decision to attend college. She shared her mom’s regrets and how her mom’s example impacted her decisions about college:

Definitely my mom, because the way she's always wanted to go to school, but she had her kids early. So, and her being a single parent doing it all on her own, she never got the chance, and she says it's like the biggest regret not being able to go to college. I don't want to like, you know, have that regret.

Like Jennifer, it seemed that Brittany wanted to succeed because her parent had not been able to complete her dream of completing a college degree. She also noted that her mom was a single parent, which indicated that Brittany might have experienced financial struggles due to her mom’s inability to complete her education. Brittany is very close to her mom and also motivated to be successful because of her mom’s struggles as a single parent. Though she did not have a
successful first semester, she is very hopeful to successfully complete what she has started at the community college.

Isaac mentioned that his parents both attended a church-affiliated college. Though he did not attend the college as his parents expected, he was still influenced by his parents. He shared his parents influence:

Yeah, I always thought I was going to go to a college. I grew up in a family full of pastors, actually. My dad, my grandpa, everybody in my family is part of this church. We have a small little college called [college name]. They really pressured me to want to do that for a while, be a pastor, but I decided something similar as far as helping out people, social work. So I knew I was going to go to college all the time but I didn’t necessarily know what college.

According to Isaac, his parents were supportive of his decision and continue to be a positive influence on him. He noted that they provide financial support, along with him receiving financial aid and working two jobs. Isaac’s parents provide support and guidance, even though Isaac did not follow the family tradition as his parents had hoped.

All the participants spoke of their parents influence with great sincerity. Their parents provided guidance and support and influenced their college decisions. Participants seemed to lean heavily on their family relationships during their transition to college. It was evident that each participant valued their parental relationships and depended on them for ongoing support during and after their transition to college.

**High school staff support.** High school counselors and teachers were also mentioned for their supportive role in the experiences of the study participants, though the support of
counselors was only minimally mentioned. Denise was the only participant who was positive about the help she received from her high school counselor. She stated, “I didn't know what I was doing so she just gave it to me step-by-step, what I was supposed to do and all that.”

Two participants mentioned taking a college prep class in their senior year of high school. When asked about how she received college-related information at her high school, Brittany stated:

There was a college, um, I think it was like a college prep class, where they basically helped you apply for college, and financial aid. But that was just about it. And that, even that, didn't answer everything. Because, for example, I thought I had it all covered and then I went to visit my school, and they were like, well, you still need this to cover this.

Brittany went further to explain that the college prep class was helpful, but she needed more help with the financial aid process. She thought she had submitted all the necessary paperwork, but the college required additional documentation that was not discussed in her high school prep class. Brittany received additional assistance from college staff members, who helped her complete the financial aid process.

Sue also said she took a college prep class in high school, which gave her an overview of the college admissions process, including the financial aid documents that she would need to complete. She also found the course to be helpful, but still needed guidance from the college staff when she began the enrollment process. Tammy did not have college prep class, but her career center had career days where students could visit colleges to gain a better understanding of the programs they may be interested in pursuing after high school. Tammy described her experience:
I visited [Ohio Community College]. At [the Career Center] they have what they call, Career Exploration Days. It's where they give students two days out of the year where they don't have to be at school because they want you to either go to do a college visit or work and volunteer in your study group.

Tammy explained that she visited the college and was able to look at the classrooms where she would take the Graphic Arts classes. She spoke to faculty members and had an opportunity to ask specific questions about the program and the classes she would be taking. She found the opportunity to visit the college while she was in high school to be extremely beneficial and helped her decide to attend the college after high school graduation.

Others spoke of their high school teachers as being a bigger influence on their college decisions. Christopher stated that his English teacher was a big influence on him and may have been the reason why English was his favorite subjects. Jennifer referred to her cosmetology teacher at the career center. She stated:

She was amazing. I've always done well in school, and she could see that. She always told me, "You have to go to college. You have to do this. You have to finish school." She definitely pushed me a lot to finish and to actually come back and go to college.

Tammy shared that her favorite teacher helped her get through the stress of some of her more difficult classes. She stated, “She was really helpful to me, not necessarily to hold my hand, but to help me take a breath and get through the problem that I needed to get through when it came to one class or the other.” Tammy’s teacher helped build her confidence to move from high school to college.
Isaac also discussed his view on the student’s relationship with their high school teachers and counselors. He stated:

The teachers know them personally after so long. They see them all the time and have a perfect chance to speak with them. And so I feel like the counselors should be there for when they want to seek more advice. I think it should be initiated by teachers talking to their class.

It seems that teachers are the most effective support for students while in high school and can provide support academically and emotionally for students who are preparing to transition to college. The participants spoke with great emotion about the assistance and encouragement of a teacher, while only one student briefly mentioned a school counselor. As Isaac noted, teachers have a more personal relationship with students, which puts them in a position to have a greater impact. College prep classes in the high schools were also a source of information for some students; however, the classes did not provide enough information and assistance for the students to complete the enrollment process.

**College staff support.** Students repeatedly mentioned the support and guidance that came from college advisors during the college enrollment process. Brittany spoke positively about her advisor and stated, “He helped clarify a lot of things for me. He made it more real. Yeah. He broke it down, helped me understand.” Brittany expressed that the process was somewhat confusing and overwhelming, but she was grateful for the help and assistance she received from the college advisor.
The same advisor helped Denise change her schedule, which she said was necessary to meet the academic requirements for an athlete. Denise described her support from the college advisor in detail:

I didn't know I had to have 12 hours in playing sports so I had ... I had a little bit, I had under that. So [the receptionist] sent us down to [the advisor] and he was like, "Oh no!", and he just kind of made me make my schedule all over again. And then, for this semester, he helped me get ahead too, like for next year. He helped me make that, like get my schedule together for that. So you got my classes for this, in order to go to that, and for me to transfer. He told me what I had to do and all that.

Denise shared that she had the added concern about taking the right courses to remain eligible as an athlete. The advisor was able to assist her in creating her schedule for her first semester in college and she returned to him for assistance to register for her second semester as well. Denise explained that the advisor was not only helping her take the right courses at the community college, but he had also started discussing her transfer options since she expressed that she wanted to also play basketball at a four-year institution while pursuing her bachelor’s degree. The college advisor was a major source of information and support for Denise.

Jennifer stated that she saw multiple advisors, but they were all helpful and gave her consistent information. She stated that,

They were all very able to pull up what was there, what I had done, what I needed to do, and they all could give me the same information. It's very reassuring that they all knew what they were doing.
Even though Jennifer had not established a relationship with an individual advisor, she felt confident in the information she received and had multiple positive interactions with the advising staff at the college.

Tammy also stated that the college advisor was a major source of information and support for her. When asked who provided the most assistance in the enrollment process, Tammy stated:

I would have to say the advisor because he helped me though the whole process. When it came to my financial aid, it was touch and go because mine got turned in so late because there was a piece of paperwork that needed to be resubmitted, so he helped me not only schedule for my classes, but he asked someone about the temporary loan.

As seen in Tammy’s statement, the advisors did not only help with academic information, they assisted students in completing their financial aid paperwork. Advisors were seen as the source for assistance in multiple facets of the enrollment process. Tammy also explained that she was out of the state and one of the advisors helped her register over the phone. She was very grateful for his guidance.

Sue shared her experience with working with the college advisor. When asked if she worked with a college advisor, she stated:

Yeah, definitely. I had to ask a bunch of questions, but there was an advisor I had to talk to and she went through it step by step, what I had to do. I forget her name, but she works here, too, at the front desk. She just told me how to do everything step by step.

When asked what helped her most with the process of transitioning to college, Sue said, “Probably just past experience of coming to [Ohio Community College] in high school. It just
kind of helped me get comfortable with college.” Since Sue took dual enrollment courses on the college campus, she had relationships at the college and she felt more comfortable with the enrollment process.

Isaac shared his frustration with the admissions process and stated that, “It was pretty overwhelming for me at first too. It seems like there's a lot of random names of organizations I've never seen before or heard before, and it was very convoluted at first.” Isaac was able to get assistance from his academic advisor, who eventually walked him thorough the process and helped him register for classes. Isaac’s experience was fairly common amongst the participants regarding their transition to college, but they all worked through the process successfully.

The role of the advisor appeared to be a significant relationship for the participants as they transitioned to college. The participants all expressed confidence in the guidance they received, even if they did not consistently see the same advisor each time. Advisors were seen as the principal point of contact for academic questions and overall support, which was critically important to these incoming first-year students.

**Summary.** Participants expressed that parents had the most influence on their college decisions. However, parents were not mentioned as a source of information regarding participation in the dual enrollment program and most were not involved in the college enrollment process following high school graduation. As high school students, high school counselors also provided limited information regarding the dual enrollment program and they were largely uninvolved in the transition to college for the participants. Teachers were mentioned as providing a level of support academically and emotionally as some of the participants were preparing to transition to college. After the participants enrolled at the community college, the role of the college advisor appeared to be a significant relationship that
provided both information and support. Advisors were key in assisting students with the enrollment process and getting them off to a good start as college students.

**How Do The Students Perceive Their Preparation For College Academic Success In Terms Of College Readiness As A Result Of Their Participation In The Dual Enrollment Program?**

The participants were asked about their perceptions regarding their preparedness for college, in both academic coursework and non-academic skills. From an academic standpoint, the researcher had a particular focus on the need for remediation in English and math. The researcher found that none of the seven participants were required to take developmental English as an undergraduate college student. Every participant successfully passed English I as a dual enrollment course or in their first semester in college. However, some of the participants were required to take developmental math, while others failed their first college-level math course.

The researcher also explored the non-academic preparation for the participants. The two themes that emerged in phase three of the participants’ experiences were: Math is a Challenge and High School Expectations vs. College Expectations.

**Math is a challenge.** Three of the seven participants were required to take at least one level of developmental math after becoming an undergraduate college student. Brittany started in the lowest level of developmental math and failed the course. She is retaking it in the current semester and feels more confident in her ability to pass the course. Brittany explained that she thought she was good in math in high school and was surprised at how difficult it was in college. She explained that she “breezed through” high school. When asked what happened in her first semester of college, Brittany explained:
I just couldn't get my head into the game, because I was so focused on my old ways, and it didn’t work. This term is going a lot better, I think, than last semester. It opened my eyes for what to expect more. It's going better this semester.

Denise also tested into the lowest level of developmental math. She passed the course and has now moved on to the second of three levels. Denise stated that she could have tried to retest and place in higher level math, but she was not confident in her math skills so she was satisfied with starting at the lowest level of developmental math and working toward college level math. She shared that she received passing grades in math in high school, but was still not confident in her ability to do college level math.

Christopher tested into the second level of developmental math initially, which he successfully passed in the fall term. He is currently registered for the last level of developmental math. Christopher was not surprised that he needed to be in developmental math. He stated, “Math has always been challenging for me. Never liked math, kind of hate it.”

Sue did not test into developmental math, but she failed her college algebra dual enrollment course and is now retaking it as an undergraduate college student. When comparing her past high school math courses to her experience with college-level math, Sue stated, “College algebra versus regular algebra in high school, we definitely have a lot more homework here.” Sue also mentioned that the pace was much faster for college algebra, compared to the high school math courses she took. Sue definitely struggled with the format of a college-level math course, as seen in her statement – “It was just kind of weird to have a two-hour math class. I'm just used to 40 minutes. It was definitely time-consuming.” Sue acknowledged that though she was not successful in the course the first time, she now feels more prepared for college-level work due to her previous experience.
Isaac also tested into college-level math, but failed his course in the fall semester. He took the course online and experienced some technical difficulties with trying to take math online. Isaac stated, “I did have good grades except for with my online math class because that was my first time I took an online class.” Isaac acknowledged that math was too difficult to take in an online format. He is planning to retake the course, in a traditional face-to-face classroom setting.

As a nursing major, Jennifer tested directly into college math. She completed Statistics I and II with an “A” and feels very confident about her math skills. She has always enjoyed math and did well in high school as well. Tammy tested into college-level math and also received an “A” in her Business Math course, which is what is required for her Graphics Arts degree. Both Jennifer and Tammy explained that they were very good students in high school and were confident in their math skills when they started college. They moved through their required college math course early in their academic programs, which was the exception for the participants in this study.

The students who were confident and did well in high school math did not have to take developmental math as undergraduate college students. However, some of the study participants struggled with college-level math, even though they did well in their other subjects. Only two of the seven participants successfully tested into college-level math and passed the courses. Math was a challenge for the participants and many began with developmental math due to their deficiencies.

**High school expectations vs. college expectations.** Students were asked to describe how their dual enrollment experience affected the following three areas of non-academic skills: study habits, time management, and critical thinking. The students readily made comparisons
between what the high school expected and what they have found to be college-level expectations during their first year in college. These differences are discussed below.

**Study habits.** Participants were asked to comment on their study habits in college, compared to their experiences in high school. Almost every participant shared that they did not study much, if at all, in high school. Christopher’s comments are reflective of the comments made by all the participants. He shared:

In high school I didn't really study at all, which is bad, and since being here, I've come to the realization that I actually have to study harder. In high school when you get a bad grade on a test, or a quiz, it was like, "Aw, I'll try harder the next one." But with here, it's more serious to me, I feel like. I feel worse if I get a bad grade on a test or quiz.

Sue also added the following comments about teacher expectations being vastly different than college professors. According to Sue, unlike in college, “In high school, you can turn in late work without teachers caring and the teachers will bug you about if you have your homework or not.”

Unfortunately, Brittany realized she had to change her habits after a very poor start in fall semester. She noted, “In high school they told you, you have to study harder, you have to study in different ways. But, it didn't really register until I was falling behind in courses. I had to pick up new study habits.” Brittany has found new ways to study, which includes being accountable to a peer or study group. She described her new approach by stating, “This semester, because my friend was kinda in the same boat as me last semester, kinda in the same boat now, we're definitely studying harder together. And, I like studying in groups, because, you know, helps you stay concentrated.”
The participants definitely found that they had to study more to be successful, some to varying degrees. While Tammy only found that she needed to make slight adjustments, Brittany had to change her approach completely. Both Christopher and Isaac noted that they study more because college success seems to be more important to them than high school grades did. It appears that the participants recognized the importance of being successful in college and have all made changes to support success as college students.

**Time management.** Every participant shared that they work 20-35 hours, in addition to their college responsibilities. Isaac has two jobs and Denise mentioned trying to find a second job now that basketball season has ended. Jennifer works up to 35 hours as a hair stylist. Christopher and Tammy work as work-study students at the college, which is an added convenience for students who need the income, but want the convenience of working on the college campus. Christopher stated:

> The good thing about the work-study is that we can do homework and work up there, so I started doing way more homework as I'm working. Funny thing is in FYE [First Year Experience] we went over time management. At the same time though, I still don't really manage my time all that well, or maybe as I should have.

Brittany admitted that she has trouble managing her time and struggles to balance work and school with her social life. She shared her frustration openly when she said:

> Time management is still kind of a problem. Kind of. I mean, because I know I'm good at going to work and I'm good at coming to school, but sometimes when I'm supposed to be doing school work, or work related things, I hang out with friends.
Sue, Denise, and Tammy compared their struggles with managing their time as working college students to their high school experience. They all agreed they had plenty of time in high school, now with work and school, they struggle with keeping up with everything. Tammy’s comments were along the same lines as the comparison made by Sue and Denise – “I have a lot less free time in college than I did in high school … I was ahead of the game a lot of time, so I had a lot of free time to just sit there and read. I now have to go to work.”

It was apparent that each of the participants realized they had to become better at managing their time as college students, especially since they held jobs as well. Tammy summed it up well. She said, “So, yeah, time management is definitely different in college.” The participants needed new skills to balance school, work, and sometimes their social lives. Most of them readily admitted they were not always successful in making the right choices when setting their priorities, and for Brittany, it resulted in poor grades for her first semester.

**Critical thinking.** The participants consistently commented that high school was a matter of memorization and regurgitation. The common sentiment about college was expressed in Tammy’s comment – “I feel like you have to make sure that you're retaining the information that you need rather than, I'll just memorize this really quick.” The participants demonstrated their understanding that college requires a deeper level of thought and analytical thinking. Isaac expressed his frustration with the obvious difference in critical thinking skills in high school compared to college and offered an explanation for the issue. He stated:

That's one of my biggest problems with high school and all, I think, with state testing, is that's what was happening, I think, it trains kids to just simply take information, regurgitate it right back and for a temporary amount of time, and then forget about it.
Jennifer also thoughtfully articulated her opinion by talking about the expectation in college that students will apply concepts and information. She said:

You need to be able to really comprehend the ideas in order to apply them to something else, which I feel is where those study habits need to come in. You need to be able to understand everything, where in high school, what they told you is what's on the test. In college, what they tell you is going to be applied to something on the test, so you really need to understand what they're saying and be able to apply it to real-life situations.

Similarly, Sue also talked about the application of concepts in her comments. She stated, “You've got to answer the question and then, you've got to really think about it. It's more than the textbook. It's your experiences too and how it would affect you, just stuff like that.”

The participants displayed a deep level of understanding regarding critical-thinking skills and the difference between college and high school. Each participant recognized the difference between the surface thinking they did in high school and the deeper level of understanding that was required of them as college students. There also seemed to be an appreciation for the challenge of applying knowledge, unlike what was their experience as high school students.

Overall, the participants clearly articulated the need to sharpen their non-academic skills as college students. Some admitted to not studying enough, others talked about wasting time, and they all knew they had to dig deeper when expressing ideas and concepts. Though most of the participants did not have these skills sets as high school students, they recognized the need to develop new skills as college students in order to be successful. Students like Jennifer, who had a more robust dual enrollment experience, were ahead of the others in developing these skills.
However, their overall awareness of the skills needed as college students was very apparent in their dialogue.

**Summary.** Though all the participants tested beyond developmental English, most all of them struggled with math. Math was a challenge for the participants and some began with developmental math due to their deficiencies. Most of the participants recognized the need to develop new skills in the areas of time management, study skills, and critical thinking in order to be successful as college students. Students who had a more rigorous dual enrollment experience, were ahead of the others in developing these skills.

**Chapter Summary**

The information presented in this chapter attempted to answer the overarching research question, “What is the experience of low-income college students who participated in a dual enrollment program prior to matriculating to college?” The narrative of the chapter made the lived experiences of low-income students explicit by describing their perceptions during their participation in the dual enrollment program and their subsequent transition to college as first year students. There were four major findings related to the overall experience of the participants. First, there were barriers that limited participation in the dual enrollment program. Due to a lack of information and a lack of communication, the participants only took one to two courses in their junior and/or senior years, despite having the opportunity to take a significant number of college-level courses at no cost to them. Secondly, most participants took their dual enrollment courses at their high school and the courses in the high school did not create an authentic college experience. Most of the participants who took their dual enrollment courses at the high school reported feeling their dual enrollment courses did not feel like college-level courses and some did not realize they were in a course that would yield college credit.
As a result of the first two findings, most of the participants did not create the social capital that could have improved their transition to college. Because of their underutilization of the dual enrollment program, the participants did not form meaningful relationships with stakeholders that could assist them with the transition to college, such as high school counselors and college advisors. Lastly, most of the participants did not perceive an increase in their college preparedness as a result of their participation in the dual enrollment program. Most of the participants struggled with math in their first year as college students. They also recognized the need to improve their skills in time management, study skills, and critical thinking in order to be successful in college.

The researcher spent time collecting rich data from each of the participants as they described their experiences with the dual enrollment program, their transition to college, and their first semester as college students. The data demonstrated patterns of similarity among participants, as well as the uniqueness of each experience. The researcher utilized various techniques to ensure the trustworthiness of the data collected from the participants. The researcher shared the interview transcripts with the participants to validate the accuracy of their words and intentions. The researcher also used external data sources to check the perceptions of the participants regarding their academic performance. Lastly, the researcher utilized external reviewers to check for any potential biases that may have influenced the researcher’s interpretations of the data. The results from the study are discussed further in the following chapter, along with recommendations for policy changes to improve outcomes for low-income students who participate in the dual enrollment program.
Chapter Five: Discussion and Implications for Practice

The purpose of this study was to investigate how low-income students who participated in Ohio’s dual enrollment program described their experiences and how those experiences contributed to their transition to college and their overall college readiness. Social Capital Theory provided the theoretical framework for understanding how students’ networks and relationships contributed to their transition to college. Conley’s (2012) college readiness model provided the conceptual framework to examine the impact of the dual enrollment program on the participants’ academic and non-academic skills.

The students’ voices concerning dual enrollment participation are not always prevalent in the literature, and thus an IPA study was chosen for this study. IPA research is dedicated to understanding how participants attribute meaning to their lived experiences by capturing and interpreting their personal accounts (Smith &Eatough, 2007; Smith et al., 2009). The researcher conducted in-depth interviews with seven students in their first year at a community college, following their participation in the college’s dual enrollment program. The researcher’s goal was to use the students’ words and descriptions to call attention to the student experience and to advocate for improved policies and practices.

The participants had valuable insights to share about their dual enrollment experiences in high school, their transition to college, and their perceptions of their first year of college. There were eight emergent themes that described the participants’ experiences: Courses at the High School vs. College Campus; Lack of Information; Lack of Motivation; Parental Influence; High School Staff Support; College Staff Support; Math is a Challenge; and High School Expectations vs. College Expectations. There were four findings associated with these eight themes: Barriers Exist for Low-SES Students; Dual Enrollment High School Courses Lack College Authenticity;
Students Lack Social Capital; and Students Lack College Readiness. The relationship between the findings and the themes are depicted in the table below.

<table>
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<th>Findings and Associated Themes</th>
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<tr>
<td><strong>Finding #1 - Barriers Exist for Low-SES Students</strong></td>
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<tr>
<td>Math is a Challenge</td>
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<td>High School Expectations vs. College Expectations</td>
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Table 3. The Findings and Associated Themes

The findings of this study and the associated themes are discussed in this chapter. The discussion is followed by policy implications and recommendations for making improvements related to the findings. The recommendations are intended to be utilized by state policymakers and educators in secondary and postsecondary institutions to improve the access and success of low-income students participating in Ohio’s dual enrollment program. Lastly, this chapter makes suggestions for future research related to dual enrollment programs and ends with the researcher’s overall conclusion regarding the research study.

**Discussion of Findings**

As a result of this study, there were two superordinate findings related to the overall experience of the participants and two sub-findings that are a direct result of the superordinate findings. The first major finding is that there are barriers that limit participation in the dual
enrollment program for low-income students. Due to these barriers, the participants greatly underutilized the program, taking only 1-2 courses in their junior and/or senior years in high school. The second major finding is that most dual enrollment courses in the high school do not create an authentic college experience. Most of the participants took their dual enrollment courses at their high school and stated that the courses felt like all their other high school courses. As a result of these two findings, both social capital development and college readiness were not positively impacted for most of the participants, which are the sub-findings for this study. The literature regarding social capital development and college readiness is discussed in relation to the findings.

**Barriers Exist for Low-SES Students**

Studies have shown that low-income students and those with the lowest high school GPAs benefit from dual enrollment participation to a greater extent than their peers (Hoffman, Vargas, & Santos, 2009; An, 2013a). Though studies point to the advantages of dual enrollment participation for underrepresented students, there are barriers to participation for this group of students. To maximize the potential benefit of dual enrollment opportunities for low-income students, it is critical to remove barriers and increase participation in these programs.

Roach, Vargas, and David (2015) examined the barriers that limit participation in dual enrollment programs for low socioeconomic, first-generation, and minority students. The researchers found that policy, financial, and transportation barriers were the most common issues for low-income student participation in a dual enrollment program. From a policy standpoint, high school GPA requirements can be an unnecessary barrier for student participation and the GPA policy tends to favor the highest achieving students (Howley, Howley, Howley, & Duncan, 2013). Karp (2012) and Howley, et al. (2013) indicate that mid-academic level students can also
be successful in college-level coursework; therefore, GPA requirements are an unnecessary barrier to participation. Roach et al. (2014) also addressed the financial and transportation barriers that negatively impact low-income students. From a financial standpoint, low-income students may not be able to afford the costs associated with dual enrollment participation. These costs include tuition, miscellaneous fees, and textbook costs. Low-income students also are more likely to go to a school that may not offer many dual enrollment courses in their high school and they may lack transportation to a college campus. The Roach, Vargas, and David (2015) study found that underrepresented students are capable of early college success, but too often they experience barriers to participation in dual enrollment opportunities.

In this study, the students faced barriers to participation that caused them to severely underutilize the dual enrollment program. Ohio’s dual enrollment program allows students to take courses at their high school, on the college campus, and online. These courses are free to the student and the student has the power to choose the location and the number of courses he/she desires to take, as long as the student meets the prerequisites for the course. On the positive side, Ohio does not have some of the common barriers to participation for low-income students. There is not a high school GPA requirement and there is no cost to the student who chooses to participate in the program. These are very beneficial aspects that support dual enrollment participation for low-income students. However, as the researcher explored the participants’ experiences with the dual enrollment program, the barriers to their participation became very evident. Most students lacked information, some lacked motivation, and one student lacked transportation.

**Lack of information.** The most widespread barrier to participation was the lack of available information regarding the dual enrollment opportunity. None of the seven participants
understood the full potential of the dual enrollment program. Some participants had general knowledge regarding courses that were available in their high schools, but none of them knew the extent to which they could come to the college campus and take courses at no cost to them. When asked how the students received information about the program, none of the participants spoke of receiving a formal communication about the dual enrollment opportunity. The participants mentioned conversations with a high school counselor and others mentioned their high school teacher as a source of information, but there was a clear lack of information and communication regarding the full scope of the program.

**Lack of motivation.** The participants also spoke of a lack of motivation as a barrier to participation in the dual enrollment program. Some participants shared that they did not take high school seriously and some lacked the motivation to take the coursework that would have prepared them for college. Ohio’s dual enrollment policy states that students are eligible to participate in the program in the 7th through 12th grades (Ohio Revised Code 3365.03, 2015; Ohio Revised Code 3365.033, 2015). However, based on the experiences of the participants and their observations of other high school students, their belief was that many high school students lack the maturity and the motivation to take full advantage of the dual enrollment program. The participants again expressed the sentiment that the message regarding the benefits of the program should be clearly communicated in order to increase the students’ motivation to participate in the program.

Lastly, one student stated that she did not have transportation to get to the college campus to take courses. She knew of the opportunity and was a motivated, high-achieving student, but she lacked the transportation to get to the campus. Unfortunately, the only dual enrollment course offered in her high school was a college readiness course. Though she said that course...
provided helpful information regarding how to be successful in college, she would have taken several college courses on the college campus if she had transportation to the college. She could have saved a considerable amount of time and money if she had the means to come to the campus to take courses; instead, she had to settle for taking a single course at her high school.

The participants in this study did not face some of the common financial and policy barriers that exist for low-income students that are discussed in the literature. The barriers identified in this study extends the discussion of potential barriers to include a lack of information and lack of motivation. These issues severely hampered the participants’ level of participation in the program. In addition to the low level of participation in the dual enrollment program, most students took their courses at their high school. Though taking courses at the high school provides a convenient option for students, the researcher found that the participants did not experience the same level of rigor and pace in their coursework that they would have experienced as students on the college campus. This lack of authenticity is discussed further in the following section.

**Dual Enrollment High School Courses Lack College Authenticity**

An (2013b) found that the coursework students take in high school is more important than high school grades for college success. Research also concludes that dual enrollment participation improves college GPA, persistence and degree attainment, and eases the transition for high school students entering college (An, 2013; Brophy & Johnson, 2007; Hoffman, Vargas, Santos, & 2008; Jones, 2014). However, dual enrollment courses must have college-level rigor and demand the same academic skills as any college-level course in order to positively influence college readiness for students.
Courses at the high school vs. college campus. In this study, when students were asked to describe their high school experience as a dual enrollment student, they described taking their dual enrollment courses at their high school or on the college campus. Five of the seven participants took their dual enrollment course (or courses) at their high school, with a high school teacher. When these participants were asked if the dual enrollment course they took at their high school felt like a college-level course, all but one student replied that it did not. For most of the students who took the dual enrollment course at their high school, the course felt like any other course they were taking at the time. Some of these students were not fully aware they were in a course that would yield both high school and college credit. There was only one student that felt strongly that the course he took at the high school was comparable to a college course. He explained that his teacher was exceptional and had experience teaching at area colleges. Overall, the dual enrollment courses taken in the high school were not perceived as college courses and the participants expressed that they did not necessarily feel more prepared for college as a result of their participation in the program.

Conversely, the two participants who took their courses on the college campus experienced their dual enrollment courses in a vastly different way than the participants who took their courses at the high school. The classes taken on the college campus and online were a mix of high school dual enrollment students and traditional college students. College faculty taught the courses and they did not distinguish between the high school students and other students. In doing so, the high school students had an authentic college experience, in contrast to most of the participants who took their dual enrollment courses at the high school. The participants who took their dual enrollment course on the college campus had a clearer
understanding of the rigor and pace of a college course, compared to the participants who took their dual enrollment course at the high school.

Kanny (2014) noted that early exposure to college courses allows students to begin to develop the necessary skills that support success in college. In doing so, she states that students are less likely to struggle in their first semester and they typically have greater persistence and completion rates compared to their peer with similar academic abilities. However, this study builds on previous studies that highlight the importance of ensuring that all dual enrollment courses are of college-level pace and rigor. Since the participants in this study only took one to two dual enrollment courses and most of these courses did not create an authentic college experience, the students did not reap the potential benefits associated with dual enrollment participation. Social capital development and college readiness skill building were not positively impacted for most of the participants. These two additional findings, along with the associated themes, are discussed in detail in the following sections.

**Students Lack Social Capital**

This study examined whether the participants’ participation in the dual enrollment program created social capital that would help them navigate the transition to college. Two of the most important benefits of high levels of social capital are access to information channels and social supports (Vorhaus, 2014). Students need relationships, built on trust, which can assist them with their transition from high school to college. The research on school-based social capital reinforces the importance of institutional mediators such as teachers, counselors, and college advisors in assisting students with negotiating the barriers that exist to transitioning to postsecondary education (Healy, 2004; Kim, 2012; Stephan, 2013). This study found that the three main sources of support and information were parents, high school staff members, and
Parental influence. According to the literature, low-SES parents tend to exert less influence and have fewer resources for preparing their children for college (An, 2013a). An (2013a) also noted that low-SES parents are less likely to be involved in educational decisions and college preparation. In contrast to much of the existing literature, every participant in this study mentioned that a parent or parents greatly influenced their decision to attend college. The participants’ accounts regarding the high level of parental influence suggest that parents of low-income students have a strong desire for their children to go to college and they were extremely supportive of them. In many cases, the participants spoke about the indirect influence their parents exerted on their transition to college. Every participant stated that at least one parent attended college at a point, but most were unable to complete a college degree for various reasons. Two of the participants were enrolled at the same community college that their parent had attended, but did not complete. Some participants spoke of their parents’ sense of regret, which motivated the participants to enroll in college, with the hope of completing their degree. Perhaps these students hoped to fulfill a dream that was unattained by their parent.

The participants seemed to lean heavily on a parent to provide support for their decision to attend college. Though parents influenced college decisions, most did not provide assistance with the enrollment process and were not seen as an information channels for their children’s preparation for college. Participants received a limited amount of information from high school teachers and counselors and, in some cases; the participants had a relationship with a college staff member, who provided information and support during the transition process.
**High school staff support.** As stated, Social Capital Theory points to the importance of mediators such as teachers, counselors, and college advisors in assisting students with the transition from high school to college. As mediators, counselors and advisors can act as information channels and provide insights to students regarding the norms for the college environment. Researchers have noted that high school counselors can serve as a critical resource for college information (Kim, 2012). Unfortunately, research also points out that low-income students are underserved by high school counselors due to the high student to counselor ratios in lower-income school districts. Folk (2015) attributed the social capital deficit for low-SES students to the lack of support from high school counselors and suggests that school districts should address the ratio issue.

The experience of the participants in this study supports the lack of involvement and direction provided by high school counselors. There were only two participants that mentioned that their high school counselor encouraged them to participate in the dual enrollment program and none of the participants spoke about high school counselors providing assistance with the college admissions process. It would seem that high school counselors would have a significant role; however, high school counselors often lack the time to provide the level of support needed by low-SES students.

**College staff support.** Though high school counselors seemed to be minimally involved in assisting with the participants’ transition to college, college advisors at the community college provided meaningful support during the transition and into the second term for the participants. However, their involvement occurred after the student began the enrollment process. The community college did not create a meaningful relationship or provide information regarding college preparation to parents or students, therefore the college did not positively affect
participation in the dual enrollment program. As noted, students from underrepresented populations particularly need additional supports in order to prepare for college and to navigate the college process before, during, and after matriculation to higher education.

According to many of the dual enrollment studies, the dual enrollment program create an opportunity for the participants to develop social capital that potentially creates a seamless transition to college. In this study, due to the participants’ low-level of participation in the program and because most students took their coursework at their high school, they did not develop the relationships that would have assisted with the transition process. High school and college personnel should have provided information and support regarding the steps to college enrollment – application, financial aid, registration, orientation, etc. Many of the students struggled through the process, despite their involvement in the dual enrollment program.

**Students Lack College Readiness**

According to studies, many students begin postsecondary unprepared for the academic demands and expectations of college (Conley, 2008; Kanny, 2014; Karp, 2012; Reid & Moore, 2008). Contreras (2011) and Strayhorn (2014) note that if a student takes a college-prep curriculum in high school, the student is less likely to be required to enroll in remedial courses in college. Advanced Placement (AP) and Honors courses are common examples of a college preparatory curriculum. However, Contreras (2011) notes that students from underrepresented backgrounds (low-income, first generation) are far less likely to enroll in AP classes in high school and far fewer take AP exams. However, dual enrollment programs can offer the same level of college preparation and are more accessible, with options to take the courses at the high school, on the college campus, or online. In addition, dual enrollment programs do not require
the high-stakes final exams that determine whether the student will receive college credit, as is the case with AP coursework. These exams do not favor success for underrepresented students.

David Conley (2008) defines college readiness as “the level of preparation a student needs in order to enroll and succeed, without remediation, in a credit-bearing general education course.” (p.4). Conley’s college readiness model considered both academic and non-academic skills needed to be successful in postsecondary. The participants’ perceptions of their academic and non-academic skill development as a result of their participation in the dual enrollment program are discussed below.

**Math is a challenge.** From an academic standpoint, math was the greatest challenge for the participants in this study. The participants largely expressed that they did not have the math skills necessary to test into college level math, while others failed their first college level math course. Some of the participants found themselves in various levels of remedial math courses, which is often a precursor for poor college completion (Brock, 2010). Remedial courses are costly both in the sense of increased financial outlay and increased time to completion. Remediation also has been proven to reduce the likelihood of a student graduating from college. Brock (2010) notes that 42 percent of freshman at community colleges enroll in at least one remedial reading, writing, or math course. Of these students, only 28 percent will attain a degree or certificate within eight and one-half years of entry (Brock, 2010). In line with the research, remedial math was a consistent issue for the participants in this study.

Some of the participants struggled with college level math. Only one student attempted college level math as a dual enrollment student and she failed the course. Two students took college level math in their first semester and one failed the course. Only two of the seven participants successfully tested into college level math and passed the courses. Math was
consistently problematic for many of the study participants, whether beginning in developmental math or in a college level course. It became very apparent that students did not build math skills early enough to prepare for college level math as high school students and they were still not ready as first-year college students. Math skill development should be a focus for an effective dual enrollment program in order for students to be college ready and to reduce remediation at the college level.

**High school expectations vs. college expectations.** Participants were asked to describe their non-academic skills. These skills go beyond content knowledge and include the skills needed for a student to navigate through a college course independently (Roderick et al., 2009). The participants noted major differences in expectations and experiences with study skills, critical thinking skills, and time management when comparing high school versus their first year of college experience. In the area of study habits, most noted that they spent little to no time studying for their high school courses; however, many of the participants found this was not the case in college. Similarly, the participants were very cognizant that college requires a deeper level of thinking than what they experienced in high school. Additionally, many of the participants noted their struggle to balance their time spent working at a job and the time spent on school commitments. They consistently expressed that they have much less time as college students, compared to when they were in high school and most admitted to mismanaging the time they had available for school work.

Though literature indicates the potential for dual enrollment programs to increase college readiness for participants, in this study, the lack of college readiness skills was a direct result of the barriers to participation that resulted in an underutilization of the program. Additionally, the lack of an authentic college experience for most of the students had a negative impact on college
readiness skill-building. The participants were not prepared for college math in particular and they had not developed the skill set to handle the demands of college life. As a result, students struggled with math and some were not successful in passing some of their courses in the first term of college. Unfortunately, one student had already jeopardized her financial aid because of her lack of success in multiple courses, which means she is at risk of losing her ability to continue if she does not raise her GPA and successfully complete her courses in the spring semester.

These findings indicate there are policies and practices that should be addressed by state policymakers and high school and college educators and administrators. Educators and legislators should make a joint effort to improve the dual enrollment experience for low-income students. Legislators should look at state policy, which governs Ohio’s dual enrollment program. Educators and administrators at the secondary and postsecondary levels should examine their practices to ensure they are supporting the most at-risk students. The following section examines the policy and practice implication as they relate to the findings of this study.

**Implications for Policy and Practice**

Though there is a federal focus on improving educational attainment rates, the responsibility for achieving these goals is primarily the responsibility of state government. McLendon and Perna (2014) and Pretlow and Patterson (2015) have stated that state policy can play a central role in raising the education attainment rate and for closing the gaps in attainment across groups. Researchers also note that secondary and postsecondary institutions must adhere to the laws and policies for dual enrollment programs that are created at the state level (Karp, 2014; Taylor et al., 2015).
As noted in the review of the literature, both a Jobs for the Future (JFF) report, written by Ward and Vargas (2012) and an Education Commission of the States (ECS) policy analysis, written by Zinth (2014), point to the importance of four critical dual enrollment policy components: access, course quality, funding, and transferability of credit. The first two policy components directly relate to the findings from this study and are therefore discussed in greater detail below. The final two components, funding and transferability of credit, are suggested as a focus for a future research study.

**Access**

Dual enrollment programs should be created to ensure underrepresented students have equal access to the program. Zinth (2014) suggested six policy design components that increase the likelihood that students will participate in dual enrollment programs. In considering the findings of this study, two of the access design components appear to be problematic for the Ohio dual enrollment program: (1) students and parents should receive information and (2) counseling and advising should be available to students and parents throughout the program. As stated previously, the lack of available information to students and parents seemingly limited the participation for the participants of this study, creating an access barrier for low-income students in particular.

The dual enrollment policy in Ohio gives the responsibility for sharing the dual enrollment opportunity to the school districts. The Ohio Revised Code related to the dual enrollment program states clearly that secondary schools should provide information and counseling for families every year, prior to the program’s enrollment period (Ohio Revised Code 3365.04, 2015). The lack of information was a repeated theme in the participants’ dialog, which
consistently pointed to the poor dissemination of information and inadequate communication regarding the full scope of the dual enrollment opportunity as a barrier to participation.

Secondly, several participants also mentioned that high school counselors did not provide encouragement or advisement regarding participation in the dual enrollment program. Though the state policy does require that each dual enrollment participant have a college advisor (Ohio Revised Code, 3365.05, 2015), the college advisor only becomes involved with the student after he/she applies to the college as a part of the dual enrollment program. Prior to that, it is the responsibility of the high school to communicate with the students. Though the state policy clearly states that school districts should provide information to families and college advisors should provide information and support to students in the program, the practices are clearly not always in line with the policy.

Course Quality

The overall quality and rigor of dual enrollment programs are critical factors when considering how effectively programs prepare participants for success in college. According to the Higher Learning Commission (HLC) report on dual credit policies in all 50 states (“Dual credit in U.S. higher education: A study of state policy and quality assurance practices,” 2013), quality is not a large enough focus in the state policies that govern dual enrollment programs. From a practical standpoint, Zinth (2014) suggests that dual enrollment programs should maintain consistent academic rigor by ensuring that courses taught at the high school should maintain the same rigor as those taught at the college and that high school instructors should have the same credential requirements as college faculty.
In a report published by the National Alliance of Concurrent Enrollment Partnerships (NACEP), Lowe (2010) makes the point that dual enrollment opportunities have grown, but growth does not achieve the policy goal of academic achievement for students. The foundational goal of NACEP is to require that college courses offered to high school students be of the same quality and rigor as the courses offered to college students, regardless of their location, delivery method, or instructor. The models for effective policy design suggest that dual enrollment policies should require quality control measures and there should be mechanisms for evaluation at the secondary and postsecondary levels.

According to Ohio’s dual enrollment policy, the dual enrollment courses should be the same as the courses offered in the college’s catalog of courses (Ohio Revised Code 3365.12). Though this rule exists, most of the participants’ perceptions were that the courses in the high school were not college-level courses. The curriculum and expected outcomes may not have been aligned with the college course, which resulted in a less rigorous experience for the participants. In some cases, the course may be the same as the college course; but it may be offered at a slower pace than the same course on the college campus. Most all high school courses are offered over the course of an entire school year, while courses offered on the college campus are offered on a 16-week semester basis. Both the rigor and the pace of dual enrollment courses should be considered in order to ensure an authentic college experience for dual enrollment students.

**Recommendations**

The following recommendations address the access and course policy components for dual enrollment programs. These recommendations are intended for state legislators and educators at secondary and postsecondary institutions that have students participating in the dual
enrollment program. The recommendations will particularly improve the participation of low-income students, which should also enhance college access and success for this population.

**Improve Communication to Parents and Students**

Access to information is a barrier for many low-SES students and is likely the reason why the participants in the study repeatedly mentioned they were unaware of the scope of the dual enrollment program. Given the parents’ influence on the students’ decision to attend college, parents of low-income students can also exert the same influence regarding preparation for college. The participants clearly articulated their lack of information regarding the dual enrollment program, which means parents likely were also uninformed. Parents need to be engaged and given the information regarding the dual enrollment program in time to prepare their children to fully participate in the program.

The Ohio Department of Education (ODE) and the Ohio Department of Higher Education (ODHE) should collaborate to market the program directly to families who have children in grades 7-12. Parents and students need to be made aware of the opportunity, without depending on the local school districts to deliver the message. Even if students lack the maturity to understand the potential cost savings, parents are more likely to understand the message regarding the financial savings that can be realized through participation in the dual enrollment program. Just as the parents were identified as having a significant influence on their children’s decision to attend college, well-informed parents can also encourage and support greater participation in the dual enrollment program. The messaging for the dual enrollment program should be clear regarding the potential time and money savings and the program should be promoted directly to parents and students, in addition to the information provided by school districts and colleges.
Provide Additional Support Programs

Researchers have noted that high school counselors can serve as a critical resource for college information (Kim, 2012). Unfortunately, research also points out that low-income students are underserved by high school counselors due to the high student to counselor ratios in lower-income school districts. Folk (2015) attributed the social capital deficit for low-SES students to the lack of support from high school counselors and suggests that school districts should address the ratio issue. Though increasing the number of high school counselors would be an ideal solution, many school districts that serve low-SES students have limited resources. However, high school teachers should also be utilized to provide guidance and support for students. Teachers have a relationship with students and have access to provide information and support to students.

Additionally, schools need to look at using outside resources to provide the social capital needed by many low-SES students. College advisors could be used as coaches to supplement counselors and to provide information and guidance in both the participation in the dual enrollment program and the transition to the college after high school graduation. Mentorship programs could utilize current college students to share information on college culture and norms and for building relationships with dual enrollment students prior to their matriculation to college. In a study conducted by Stephen (2013), a Chicago dual enrollment program provided college coaches to fill the role of high school counselors in advising students on how to prepare for college. These coaches provide information and support to students, thereby creating social capital for the students. The program realized an increase in college enrollment as a result of the role of the college coaches (Stephen, 2013).
Community and businesses organizations may also provide adults who could be relied upon for college-related information and support to both middle and high school students. Civic organizations are often looking for opportunities to work with at-risk students and dual enrollment programs can provide the structure for these organizations to make a positive impact on the lives of the families they seek to support. These are all examples of possible relationships or programs that high schools and colleges could create and utilize in order to build social capital and ensure that at-risk students have access to information and support before, during, and after their transition to college.

Dual enrollment programming is a key strategy for preparing low-income students for the transition to college, both academically and socially. Since many low-income students choose community colleges for postsecondary, community colleges should be particularly focused on integrating social capital development into the dual enrollment program to support success for low-income students. Social capital for low-income students can be developed with programming through mentorship, support, and early connections with the college staff and students. Relationship building and college related information sharing should begin while the student is still in middle school and should continue into high school and during the student’s transition to college.

**Provide Early Information and Support**

The participants did not participate in the dual enrollment program until their junior and/or senior years and they all took one to two courses. Counseling and advising should occur in middle school, otherwise students will not be prepared to take full advantage of the dual enrollment program. Middle school personnel, which includes counselors and teachers, should share information regarding the dual enrollment program with all students and parents, and in a
format that is clear and understandable. College advisors should also provide the necessary advising services that would assist families with understanding the college process and to help prepare the students for participation in the dual enrollment program.

Researchers Sommerfeld and Bowen (2013) studied a program that prepares urban Boston youth for college beginning in middle school, many of whom are low-income students. The program gave students early access to adults who can be relied upon for college-related information and support. The program noted an improvement in college enrollment outcomes for the students they served due to the added support from mentors and counselors (Sommerfeld & Bowen, 2013). Low-income students need to be on a college-ready track as early as possible and dual enrollment programs should ensure that early connections are made to provide academic support and information to these students and families.

Students also need to learn non-academic success strategies early on. The community college should require the First Year Experience course for all dual enrollment students in order to clarify college academic expectations and to build non-academic skills. The description of the college’s First Year Experience course was found on the college website. The course is intended to help students, “Demonstrate effective studying, note-taking, and test-taking techniques; apply critical thinking skills to coursework and college and career planning; and examine college culture and resources and personal skills and behaviors related to successful academic performance” (Community College website). This course can also be used to introduce college advisors to the dual enrollment participants. The college advisors should meet the students during the course and continue their relationship by meeting with the dual enrollment participants each term. College advisors should help students map their coursework from high
school and into the college and they should also connect students to college resources, such as tutoring and accessibility services.

**Improve the Alignment of High School Courses**

The dual enrollment program in Ohio needs to ensure the coursework has college-level rigor, regardless of whether it is offered in the high school or on the college campus. As noted in the review of the literature, many states have legislation that regulate dual enrollment programs. Jobs for the Future (JFF) analyzed the state-level policies of all fifty states that govern dual enrollment programs. In the JFF report, Ward and Vargas (2012) note that course rigor is an essential component of an effective dual enrollment program. They suggest that dual enrollment courses offered in a high school setting should have the same rigor as college courses offered in a traditional college setting. Additionally, the Education Commission of the States created a policy analyses, written by Zinth (2014), which also noted the importance of maintaining college level rigor for dual enrollment coursework taught at the high school.

As stated earlier, dual enrollment programs have the potential to improve students’ preparation for college in both academic and non-academic areas. However, the lack of math academic skills and the low levels of non-academic skills can be tied to the lack of a rigorous curriculum for courses offered in the high school. In order to maximize the potential for the dual enrollment program to prepare students for college, programs must ensure that the coursework is equally rigorous and offered at a college-level pace, whether offered in the high school or on the college campus. Improvements must be made to address the rigor and pace of high school dual enrollment courses.
College faculty and high school teachers should work together to ensure that the coursework has the same expected outcomes and the rigor is comparable in order to create a consistent experience for students. High school teachers may not fully understand what is expected in entry-level college courses and college faculty can assist high school teachers with preparing students appropriately for college. Though the state policy addresses course quality requirements, there needs to be specific requirements for course alignment processes and a mechanism to ensure professional development for high school teachers who teach college courses in the dual enrollment program.

Policies and practices need to be defined that will ensure that high school teachers and college faculty collaborate and engage in shared professional development around curriculum alignment and common assessment. College faculty should observe what is being taught in the high schools and high school teachers should observe college classrooms. The collaboration would result in much better alignment between secondary and postsecondary education and greatly enhance the benefit of dual enrollment programs. Community college faculty and administrators should have a close working relationship with their partnering secondary schools in order to support positive outcomes for students in the dual enrollment program. Dual enrollment courses should always have the look and feel of an authentic college course, whether taught in the high school or on the college campus. This can be achieved by addressing course quality clearly and definitively in both state policy and secondary and postsecondary practices.

**Summary of Policy Implications**

Beginning with the 2015-2016 academic year, the state of Ohio totally overhauled the dual enrollment program for high school students (https://www.ohiohighered.org/ccp/about). There were major policy changes made that have resulted in increased participation in the dual
enrollment program across the state, however, only 15 percent of the students were defined as economically disadvantaged based on the definition of being eligible for free and reduced priced lunch (Ohio Department of Higher Education, 2016). The state must continue to look at policies and practices that may inhibit participation for low-income students. In accordance with the findings of this study, attention should be paid to access barriers and course quality. These components have a particular impact on the experience of low-income students in dual enrollment programs.

Implications for Future Research

There are four areas of potential research that became obvious as a result of this study. First, an aspect that was not examined in this study is the experience of students who participated in the dual enrollment program, but did not enroll in college following their graduation from high school. There may be additional barriers that exist for these students that have not been identified because research predominantly looks at students who matriculate to college after participating in a dual enrollment program. Research involving students who do not matriculate to college could be used to further impact college access and success for underrepresented students.

Secondly, this study did not examine the experience of the students beyond their first year at the community college associated with their dual enrollment experience. One of the key policy components relates to the transferability of college credits for courses taken during dual enrollment participation. Zinth (2014) suggests that dual enrollment credit should be treated equitably and recommends that public postsecondary institutions should be required to accept dual credit as transfer credit as long as quality has been ensured. Many of the students expressed a desire to pursue a bachelor’s degree, which makes the transferability of credit an important
component of an effective dual enrollment program. The recently revised dual enrollment program in Ohio is currently too new to adequately evaluate transferability of credit, but it warrants further consideration.

Additionally, this study focused on the voice of the student, which was a much-needed addition to the existing literature related to dual enrollment participation. However, though the study emphasized the significant role of relationships and information channels as a component of a well-designed dual enrollment program, the study did not explore the perspectives of parents, teachers, counselors, school administrators and college faculty. As noted in the study, all of these relationships play an integral role in creating both social capital and college preparedness for students. It is important to hear the voices of these stakeholders and investigate how to improve their role in supporting success for underrepresented student populations who are participating in the dual enrollment program in Ohio.

Lastly, state policymakers should examine the potential impact of the funding model, which requires school districts to pay the tuition and fees for students who participate in the dual enrollment program (Ohio Revised Code 3365.07; 2015). Zinth (2014) suggests that school districts and postsecondary institutions should be fully funded or reimbursed for participating students. She notes that school districts and colleges may have limited funds available to support tuition and fees for dual enrollment participation. In the researcher’s role as a college administrator, she is aware that most community colleges in Ohio are offering significant discounts to the college tuition for dual enrollment students. However, school districts believe they are carrying too much of the burden for paying for the program, which potentially could hamper communication to students and parents regarding the dual enrollment program. Changing the funding model to eliminate the burden on school districts may allow for improved
information flow to students and parents, and thereby increase participation by students who may lack the social capital that would support strong information channels and social supports. Roach, Vargas, and David (2014) point out that low-income students benefit when high schools and colleges work together to provide access to dual enrollment programs. It is important for policymakers to consider whether the current funding model creates a barrier for low-income student participation in the dual enrollment program.

**Conclusion**

Ohio has identified the biggest challenge in the state as the inadequate supply of educated and highly skilled workers to meet the workforce needs in the state (65% Attainment Goal 2025, 2016). Ohio has a substantial shortage of working-age adults with the post-secondary-level credentials to fill current and future jobs. According to the report, 64 percent of Ohio jobs in 2020 will require a postsecondary education, yet only 43.2 percent of the working-age adult in Ohio have a postsecondary credential. According to the report, if the state does not increase college access and success at levels that exceed the current rate, the economic impact on the state could be devastating. Accordingly, the Ohio Department of Higher Education has set a very aggressive goal – “65 percent of Ohioans, ages 25-64, will have a degree, certificate or other postsecondary workforce credential of value in the workplace by 2025” (65% Attainment Goal 2025, 2016, p. 3). This means Ohio will need to produce 1.7 million more adults with a postsecondary credential by the year 2025, which is indeed an aggressive goal that will require focused attention and additional resources to support students who may not typically seek a postsecondary credential. As research has proven, there are workforce development and economic benefits for increasing the educational access and success for students, especially for underrepresented populations (D'Amico, Morgan, Robertson, & Rivers, 2013). Developing an
educational and workforce pipeline, using a well-designed dual enrollment program, can help facilitate increased college access and completion for low-income students.

The information presented in this study attempted to answer the question, “What is the experience of low-income college students who participate in a dual enrollment program prior to matriculating to college? The study made the lived experiences of low-income students explicit by describing their experiences as they relate to their dual enrollment participation. Three progressive stages of the student experience were analyzed. The stages described in the study included the participants high school dual enrollment experience, their transition to college experience, and each participant’s first year of college experience. Areas of concern were identified, based upon the participants’ dialog related to each of these three areas. Policy implications were then identified that are particular to the state of Ohio’s dual enrollment program.

The findings of the study indicated that the barriers to participation in the dual enrollment program caused an underutilization of the program by the participants. Low participation could be attributed to the limited information made available to students and their parents. Information about the dual enrollment program may have been hampered by the high ratio of students to high school counselors in school districts, particularly in predominantly low-income districts. Alternative information channels need to be established in order to encourage dual enrollment participation for students who may have limited access to information. Lastly, there is a need to examine course quality and ensure that courses are rigorous regardless of the location of the course. The dual enrollment program should ensure that students increase their academic and non-academic skills by providing authentic college experiences.
While Ohio has made great strides in improving the statewide dual enrollment program, attention to the concerns raised in this study will serve to improve the access and success of all underrepresented student groups. The results of this study indicate that legislators and educators should continue their commitment to create an effective dual enrollment program that facilitates participation for students with low socioeconomic status. Increasing college success for this group of students will positively affect workforce development efforts for the entire state and support the educational attainment goals set by the Ohio Department of Higher Education and supported by the Governor. In turn, the quality of life will be improved for the citizens of the state and society as a whole.
Subject Line: Request for Participation

Dear (Student Name),

My name is Theresa Felder and I work at Clark State Community College. I am also a student in the Doctor of Education program at Northeastern University. I am currently conducting a study for my doctoral thesis and I would like you to be a participant.

I am researching the experience of students who are now receiving a Pell Grant and also participated in the dual enrollment program while in high school. My goal is to raise awareness of the student experience and to strengthen the support services for dual enrollment students while in high school and after transitioning to college.

If you choose to participate in this study, I will be interviewing you about your experiences. The expected time commitment is less than two hours over the course of two interactions. We will meet once so I can provide you with more detail on the study and then a second meeting for a one-on-one interview. I will also follow our interview with an email, which will provide the interview transcript and a summary of the interview. You will be given an opportunity to confirm or correct my interpretations by responding in writing or by requesting a meeting to discuss the transcript and summary. You will be offered a $20 gift card for participating in the study. Your participation is entirely voluntary.

If you are interested in volunteering to participate in the study, please email me back at felder.t@husky.neu.edu or call me at 937-545-5841 with a phone number and a good time to reach you. I would like to answer any questions you may have and set up our initial meeting time.

Thank you for considering participation in this study.

Sincerely,

Theresa B. Felder
Appendix B

Informed Consent Form
Northeastern University College of Professional Studies
Doctor of Education Program

Research Study: Dual Enrollment for Low-Income Students: Exploring College and Readiness and Student Perceptions
Principle Investigator (PI): Dr. Natalie Perry, Northeastern University
Student Researcher: Theresa Felder

Thank you for your interest in participating in my research study. The following information is provided in order to help you make an informed decision whether or not you would like to participate. If you have any questions, please do not hesitate to ask.

Purpose of the Study: The purpose of this study is to explore how Pell Grant recipients experience dual enrollment participation while in high school and their subsequent transition to college.

Procedure: You will be asked to participate in an interview which will take approximately one hour. The interview will be conducted during the spring semester on the college campus, or you may select a location that is convenient and comfortable for you. The interview will be conducted in person and will be audio recorded and transcribed into writing. During the interview, you will be asked a series of questions designed to allow you to share your experiences as a past dual enrollment student, and now as an undergraduate college student. All materials will be stored securely and your name will be omitted. A pseudonym will be used to identify your information.

Risks: The primary risk associated with this study is the possible discomfort you may feel in discussing your experience or your academic struggles. The researcher will respect your boundaries during the interview and allow you to skip any questions you do not wish to answer. The researcher will also suggest resources for seeking additional guidance relative to your concerns as needed.

Benefits: There will be no direct benefit to you for taking part in this study. However, the information gleaned from this study has practical implications for improving the experience of students who participate in the dual enrollment program. The knowledge generated from the study can be used to inform state policy, as well as secondary and postsecondary practice.

Confidentiality: Your confidentiality will be maintained at all times. Only the researchers will see the information about you. You will be assigned a pseudonym that will be used throughout the study to protect your identity. Any reports, presentations, or discussions associated with this study (i.e. doctoral thesis, journal articles, conference presentations) will utilize this pseudonym and will not include any personal information linked directly to you. Information about your age, gender, race, and field of study will be included to help others understand and interpret the research findings. Our interviews will be audio recorded and transcribed into writing. The
researcher will code the written transcript to identify patterns and themes within your interview and across interviews with other participants. All physical documents or files related to this study will be stored in a locked file cabinet. All electronic files will be stored in a password protected online file storage program and on an external data storage device. Only the researcher will have access to these storage mechanisms. All data will be retained for seven years and then destroyed.

**Voluntary Participation:** Your participation in this study is completely voluntary. You may decide not to participate and you may withdraw at any time. You are not obligated to answer all questions that are asked of you during interviews. You may indicate your desire to skip a question at any time. If you do not participate, there will be no repercussions at Clark State.

**Will I be paid for my participation?**
You will be offered a $20 gift card for your participation.

**Will it cost me anything to participate?**
You will be responsible for the cost of traveling to the interview site, but you can choose an interview site that is convenient and comfortable for you.

**If you have any questions regarding this research,** please contact Theresa Felder at (937) 545-5841 or via email at felder.t@husky.neu.edu or Dr. Natalie Perry who is overseeing my research at n.perry@neu.edu if you have any questions about this study.

**If you have questions about your rights as a participant,** you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University Boston, MA 02115. Telephone: 617-373-7570, email: irb@neu.edu. You may call anonymously if you wish.

**I agree to take part in this research.**

______________________________________________________________________________
Signature of the person agreeing to take part

Date

______________________________________________________________________________
Printed name of person above

Date

______________________________________________________________________________
Theresa Felder, Student Researcher

Date
Appendix C

Interview Guide
Northeastern University College of Professional Studies
Doctor of Education Program

Date:

Time:

Interviewee:

As we discussed in our first meeting, I will be asking a series of questions designed to allow you to share your experiences as a past dual enrollment student, and now as an undergraduate college student. There are no right or wrong answers, just share your thoughts with me. If I ask you a question that you do not want to answer, you do not have to do so. You simply have to say you prefer to skip the question. I would also suggest that you avoid sharing personal names during the interview. Instead, you may say, “my Advisor”, “my Instructor”, “my classmate”, etc.

Our interview will be audio recorded and transcribed into writing. I will provide you a copy of the transcription and you will have an opportunity to clarify any statements made or add additional information. Any questions? OK, let’s get started.

Background Questions
1. Which high school did you attend during your time as a dual enrolled student?
2. When did you become a traditional college student?

High School Experience
1. Describe your experience as a high school student taking college courses?
2. Did you take courses in the high school or on the college campus?
   a. If on the college campus, what was your experience with other students and faculty and staff?
   b. If at the high school, did you feel like you were taking college courses? Why or why not?
3. Who or what provided support for you as a high school student? At the high school? On the college campus?
4. Were there any challenges to your participation in the dual enrollment program?

Transition to College (Social Capital)
1. How would you describe your transition from a dual enrollment college student to a traditional college student (challenges/hurdles)?
2. Without using specific names, what positions/relationships helped you learn the college culture (i.e., Advisor, faculty member, classmate, etc.)?
3. How did you make the decision about what college you wanted to attend?
4. How did your dual enrollment experience help you with the admissions and enrollment processes?
5. How did your dual enrollment experience prepare you for applying for financial aid?
**College Readiness**
1. How prepared academically do you think you were to continue with your college education after high school?
   a. How well do you think you were prepared for math? English? science?
   b. Did you have to take any developmental courses when you enrolled in college?
   c. Compared to other students in your college courses, do you feel more or less prepared than them?
2. Describe your study habits (how are they different than when you studied in high school) and how did your dual enrollment experience impact your current study habits?
3. Describe your time management skills and were they impacted by your experience as a dual enrollment student?
4. Can you describe how confident you are in your ability to think critically and was that improved as a result of your dual enrollment experience?

**Future Plans**
1. Do you plan to pursue a bachelor’s degree after you complete your associates degree?
2. Do you feel your experience as a dual enrollment study impacted your decision to attend college? Did your dual enrollment experience impact your decision to pursue your bachelor’s degree?
3. Describe your confidence in pursuing your education beyond this college?

**Final Thoughts**
1. If you had to give advice to a dual enrollment student, what would you tell them?
2. What improvements/changes need to be made to the dual enrollment program to better prepare students for college, both socially and academically?
Appendix D

Interview Follow-Up Email
Northeastern College of Professional Studies
Doctor of Education Program

Subject Line: Interview Transcript and Summary

Dear (Student Name),

Thank you for sharing your experiences with me during the interview on (date). Please review the attached transcript and my summary of the interview. If you feel there are any inaccuracies or you would like to discuss the information, please respond to this email. I would be happy to talk further by phone or to meet in person. Any additional information will be recorded and added to the original transcript and/or summary.

If I do not receive a response from you by (date one week from email), the attached transcript and summary will be considered final. If you have any questions, please feel free to contact me at felder.t@husky.neu.edu or call me at 937-545-5841 with a phone number and a good time to reach you.

Thank you for again for participating in this study.

Sincerely,

Theresa B. Felder
References


Ohio Revised Code 3365.05 - College Credit Plus Program – Requirements for participants. (n.d.). Retrieved August 23, 2016, from [http://codes.ohio.gov/orc/3365.05v1](http://codes.ohio.gov/orc/3365.05v1)


http://doi.org/10.1002/cc.20129


http://doi.org/10.1080/10668926.2013.739513


http://doi.org/10.1002/cc.20130


