

## **ABSTRACT**

BATTLE, KARA ALEASE. The Experiences of Dual Enrollment Students on Completion of Baccalaureate Degrees in North Carolina. (Under the direction of Dr. Audrey J. Jaeger).

The purpose of this collaborative mixed methods study was twofold. The first purpose was to replicate a quantitative study completed by Fink and Jenkins (2017) that identified institutional partnerships between two- and four-year institutions that were effective in improving transfer success. The second purpose was to explore the experiences of dual enrollment students who successfully transferred to the four-year institution identified by Bartek (2020) and discover what experiences were most impactful to their successful navigation of the transfer process and their motivation to persist and move toward completing the degree. To meet the purpose, 20 university students who participated in dual enrollment programs in North Carolina and successfully transferred to a four-year institution within the University of North Carolina System were recruited to participate in this study. The intent of the interviews was to gain an understanding of participants' experience with dual enrollment and transferring to a university, as well as learn about participants' future goals post-graduation. This insight provided a comprehensive understanding of the factors that have supported the successes of these students. Six major themes emerged from the data analysis process: 1) the appeal of dual enrollment; 2) developing the skills needed to navigate college; 3) rigor of community college courses; 4) lack of information related to the transfer process; 5) continuing beyond the four-year degree; and 6) lack of diversity among participants.

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The Experiences of Dual Enrollment Students on Completion of Baccalaureate Degrees  
in North Carolina

by  
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## **DEDICATION**

This dissertation is dedicated to my dear mother, Patricia. She passed away before I began this journey, but I know she was with me every step of the way. My Mom was my biggest critic, fan, supporter, and my best friend. She always allowed me to explore and those explorations helped shape the person I am today. I miss her every day and I hope I have made you proud.

I also dedicate this dissertation to my friend Tahisha. Even at her lowest point, she was asking me about my degree and so excited to know I would be completing soon. One of the last things she said to me was, “How is the degree going? I can’t wait to see you finish and celebrate!” Tahisha – I did it! Thank you for believing in me and being my friend. I know you are watching with my Mom. It’s time to celebrate.

Finally, I dedicate this degree to all the Howells, Randolph’s, Manley’s, Battles, and Bemby’s that paved the way so I could have this opportunity.

## **BIOGRAPHY**

Kara Manley Battle received her bachelor's degree in Biology and her master's degree in teaching Biology from Norfolk State University. She has worked in education in a variety of capacities since 1995. She first began her career as a high school science teacher before becoming a coordinator for a math and science pre-college program. She then moved her talents to the community college system where she taught Biology. She currently serves as the dean of science, engineering, and math at Durham Tech Community College. After completing the Ed. D. in community college leadership, she plans to continue her work helping the underrepresented reach their educational goals and being an advocating voice for equity in higher education.

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## CHAPTER 1: INTRODUCTION

Community colleges serve several important roles for students in higher education, including as a pathway to a bachelor's degree, workforce certification, remediation, and personal development. Globalization, however, has altered the mission and changed the structure of community colleges (Levin, 2001), requiring them to move beyond the traditional mission of access to that of meeting competitive workplace training needs. Workforce expectations for many fields have increased to include baccalaureate degree requirements (Bemmel, Floyd, & Bryan, 2009; Gross & Goldhaber, 2009; Reindl, 2005), placing higher value on the degree and its importance in upward mobility in careers (Wang, 2009). In fact, the Lumina Foundation (2017) calculated that the nation would need 60% of working-age people to earn college degrees, workforce certificates, or other quality credentials by 2025 to meet social and economic demands. In providing students the means by which to obtain the required credentials for successful careers and gainful employment in the globalized workplace, community colleges have never been more critical.

North Carolina has strategically come together to form a nonprofit organization known as myFutureNC (2018). This is a statewide organization focused on educational attainment and is the result of cross-sector collaboration between North Carolina leaders in education, business, and government. The mission is to prepare North Carolina for the future by empowering individuals, strengthening communities, and ensuring our economic viability in a global economy. myFutureNC is working across sectors and in communities throughout the state to close gaps in postsecondary achievement; promote alignment between educational programming and business/industry needs; and ultimately improve the quality of educational opportunities for

all North Carolinians (2018). The goal is to help 2 million North Carolinians achieve high-quality postsecondary attainment by 2030.

While community colleges are the entry point for many students who aspire to attain a four-year degree, few transfer, and even fewer earn bachelor's degrees (Fink & Jenkins, 2017). Within six years of enrolling at a community college, only 33% of degree-seeking community college students who indicated they wanted to transfer to a four-year university did so within that six-year span (only 24% in North Carolina) and of those students who transferred, only 42% (40% in North Carolina) earned a bachelor's degree (Jenkins & Fink, 2016). Community colleges represent our society's belief that education is for all. More than 10 million students are enrolled in community colleges each year, representing half of the nation's undergraduates (Bailey, Jaggars, & Jenkins, 2015); however, the disparity between the number of students enrolled in community colleges and the number of students obtaining their desired degree leads to additional concerns in higher education regarding student persistence, completion, and transfer. If the new mission of the community college is to meet the demands of the competitive globalized workforce (Bemmel et al., 2009; Gross & Goldhaber, 2009; Reindle, 2005), the concerns regarding persistence, completion, and transfer simply must be addressed.

Eighty percent of community college students report an intention to transfer to a four-year institution to earn a bachelor's degree, but only 15 percent eventually complete the degree within six years (Xu, Ran, Fink, Jenkins, & Dundar, 2018). The National Center for Education Statistics (NCES; 2018) reported that only 13 percent of community college students graduated within two years of transfer. Within three years of transfer, approximately 22 percent of students graduated, and within four years of transfer, the rate stood at only 28 percent. When comparing this data to that gathered at four-year institutions, where 60 percent of students who began their



education at a four-year institution (native students), rather than a community college, earned a baccalaureate degree within six-years (NCES, 2018), the problem of persistence, completion, and successful transfer for community college students is glaringly evident. It seems considerable evidence indicates that beginning the pursuit of a baccalaureate degree at a community college results in a lower likelihood of completing the degree (Doyle, 2006; 2012; Jenkins and Fink, 2016; Laanan, 2003, Monaghan & Attewell, 2014); thus, there is an obvious and urgent need to further examine the root cause of this lack of persistence and completion and to identify ways to increase the success rate of community college students intent on transferring. Ellis (2013) called this low successful transfer rate from community college to university a “national issue,” noting the result was a loss of skill and talent within our communities (p. 74). While community colleges have historically served many functions for the people in their communities, a core function has always been to help students more easily and successfully transfer to four-year institutions (Lederman, 2012); yet, in recent decades, community colleges have not been particularly successful in achieving that transfer mission (Gross & Goldhaber, 2009).

The pathway to the bachelor’s degree appears to be fraught with barriers for students who begin their educational goals at the community college. These barriers include: 1) the lack of transfer information readily available and accessible to students (De la Torre, 2007; Ellis, 2013; Hagedorn, Cypers, & Lester, 2008); 2) four-year institutions not accepting community college credits (Doyle, 2006; Monaghan & Attewell, 2014); and 3) troublesome transitions for students entering the baccalaureate institution (Gilroy, 2005; Laanan, 2007; Laanan & Hernandez, 2011; Napoli & Wortman, 1998; Pappano, 2006; Townsend & Wilson, 2006). Community colleges and four-year institutions both contribute to these barriers to transfer and overcoming them will

require both sets of institutions to change how they serve students and how each system collaborates with the other.

The transfer process for students is quite complex. Credit transfer sometimes appears arbitrary, while transfer admission requirements differ from institution to institution, and articulation agreements are inconsistent (Handel, 2013). Transfer students often have different needs than native students, thus necessitating further exploration of the transfer phenomenon, as well as new strategies designed to support students in the transfer pipeline. *The Transfer Playbook: Essential Practices for Two-Year and Four-Year Colleges* suggested three strategies and essential practices for improving transfer for community college students: 1) make transfer student success a priority; 2) create clear programmatic pathways with aligned high-quality instruction; and 3) provide tailored transfer student advising (Wyner, Deane, Jenkins, & Fink, 2016). More transfer students earning bachelor's degrees is essential for the gainful employment of individuals and for a more highly educated and productive populous. Since improving the transfer experiences of students is so mutually beneficial, it seems logical to develop strategies that focus on that end.

Institutional partnerships have been the foundation of transfer student success efforts for many years (Handel, 2011). Whether they include efforts to build strong, community-based programs; increase collaboration among institutions to improve transfer pathways; or find ways to award degrees through reverse transfer of credit, partnerships continue to play a critical role in helping transfer students complete their educational goals (Shapiro, Dunder, Wakhunga, Yuan, & Harrell, 2015). Statewide partnerships represent the next step in that foundation and may significantly impact transfer student success (Fink & Jenkins, 2017). Through these statewide partnerships, transfer students experience guided pathways that support their movement from one

institution to another while helping them maintain momentum for degree completion (Bailey et al., 2015). These state-level partnerships can also impact legislative policy that can benefit all students and help institutions better serve their student populations (Handel & Williams, 2012).

One such partnership designed to improve the postsecondary success rates of students is dual enrollment (DE) programs, which allow high school students the opportunity to enroll in college-level courses for credit that can be applied simultaneously toward their high school and college degree requirements (Bailey, Hughes, & Karp, 2002; Pretlow & Washington, 2014). DE, also referred to as concurrent enrollment, has been a part of higher education since the 1970s and allows students to enroll in college courses while still enrolled in high school (Hebert, 2001). The catalyst behind this concept was a report by the Carnegie Commission that viewed DE as a means of expediting the achievement of a bachelor's degree after graduating from high school (Hebert, 2001; Hunt & Carroll, 2006). Other benefits for students are early access to studying on a college campus, accumulation of college credits while in high school, and exposure to challenging courses (An, 2015).

DE is one of several high school-to-college transition programs that provides students with academic pathways intended to support access and success (Bragg, Kim, & Barnett, 2006). It has become a popular method of preparing students for college, but access to it has often been limited to high-achieving students (An, 2012). However, around the start of the 21<sup>st</sup> century, high schools and colleges began to take steps toward increasing access to DE opportunities to all students, especially underserved students who have historically found college inaccessible due to barriers to entry or lack of college readiness (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007). DE programs offer several benefits, such as reduced education costs, increased persistence rates, and college completion (Ganzert, 2014). For these reasons, DE will most likely continue to

increase in popularity and application. However, research of DE practice and policies must continue to assure that the needs of an increasingly diverse student population are met (Ganzert, 2014) and that access to DE is not limited only to those students who are high achieving. Several studies have shown a high correlation between higher education, cultural and family values, and economic growth, yet only one-quarter of the U.S. adult population has at least a bachelor's degree. This stark statistic demonstrates the need to improve the proportion of adults who hold bachelor's degrees, and more research into DE programs may be able to assist community colleges and four-year institutions in realizing this goal.

### **Purpose of the Study and Research Questions**

The purpose of this collaborative mixed methods study was twofold. The first purpose was to replicate a quantitative study completed by Fink and Jenkins (2017) that identified institutional partnerships between two- and four-year institutions that were effective in improving transfer student success. I worked with two doctoral students, Carrie Bartek and Ashley Swing, in carrying out this research. Bartek conducted the quantitative phase of the study and identified three pairs of successful partnerships between community colleges and four-year institutions in the State of North Carolina. The second purpose of this study was to explore the experiences of two populations of students who transferred to the four-year institutions identified by Bartek (2020). Ashley Swing and I led this qualitative phase. While Swing focused on the experiences of students who were Pell Grant eligible at these institutions, I focused on the experiences of students who participated in DE programs and successfully transferred to a four-year institution to discover what experiences most impacted their successful navigation of the transfer process and their motivation to persist and complete their four-year degree.

The decision to select students who were currently enrolled at a four-year institution, rather than students who already completed their four-year degree was based on these students currently experiencing the phenomenon I was to focus on. My intention was to gather information related to students' positive and negative experiences that led to their transfer to a four-year institution, not to their completion of the four-year degree. By interviewing students currently enrolled at the four-year institution, these transfer experiences were fresher and more immediate for them, with less likelihood of these experiences being marred by time or absorbed by other experiences. It is these transfer-specific experiences that could lead institutions and policymakers to implement changes to policies and procedures that could better support transfer students as they persist toward graduation. Garnering a better understanding of the transfer student experience benefits both the two- and four-year institutions, as transfer students need support on both ends of transfer. Therefore, all participants in the study were current degree-seeking students at a North Carolina public four-year institution who also participated in a DE program at or through one of North Carolina's 58 community colleges. The following research questions were explored through this study:

1. What are the transfer-specific experiences of students who participate in DE programs?
2. What are the motives of enrollment for students to enroll in DE programs?
3. What specific aspects of their DE program participation most influenced students' motivation to persist?

The results of this qualitative study will contribute to the understanding of the experiences of DE community college transfer students. Further, this study may encourage future studies designed to further investigate the needs of specific populations of students in their pursuit of bachelor's degrees. Additionally, the findings have the potential to contribute to more

students successfully navigating the transfer pathway and earning baccalaureate degrees, thus positively impacting individuals, the global workforce, and society at large.

### **Background of the Study**

A problem this nation faces is college degree completion and the impact that can have on the quality of life of those in the general populous and on the nation's ability to be globally competitive. Higher education in the U.S. is deemed necessary for high school graduates to access rewarding careers. In 2010, Burkum, Habley, McClanahan, and Valiga predicted that, within a decade, 90% of all jobs would require skill levels beyond those gained in high school. Burkum et al.'s prediction has now become a reality in 2019. For students to attain skills needed beyond high school, it is now more important than ever they persist in their pursuit of a college degree. Ben Bernanke, chairman of the Federal Reserve Board, addressed this same issue of retention when he spoke to the Harvard graduating class of 2008, stating, "The best way to improve economic opportunity and to reduce inequality is to increase the educational attainment and skills of American workers" (Bowen, Chingos, & McPherson, 2009, p. 1). According to the Council on Competitiveness (2007), only U.S. households headed by a college graduate saw their incomes rise over the past 20 years. In 2016, the median earnings of young adults with a bachelor's degree was \$50,000, while the median was \$38,000 for those with an associate degree, \$31,800 for those with a high school diploma or its equivalent, and \$23,400 for those who did not earn a high school diploma or its equivalent (NCES, 2018). The income disparity between those who complete a four-year degree and those who do not is significant, and that income gap is only growing larger.

The benefits of a college degree were also addressed in *Education Pays*, a report published by The College Board (2016), which focused on the monetary and non-monetary

benefits of higher education for individuals and society. The report utilized U.S. Census Bureau and Internal Revenue Service data from 2015 in proposing a positive correlation between higher levels of education and higher earnings for all racial/ethnic groups, as well as for men and women. The data indicated that higher levels of education led to higher earnings and higher tax revenues for federal, state, and local governments (College Board, 2016). Increased tax revenues were also cited as an economic benefit of obtaining a college degree in a 1998 report published by the Institute of Higher Education Policy. The Institute supposed an individual's attainment of a degree was interconnected to the economic and social benefits for not only the individual, but also society (Pasque, Hendricks, & Bowman, 2006, p. 16).

The National Student Clearinghouse Research Center (2012) declared that higher education is critical for the individual careers of much of the country's current workforce, as well as for the well-being of the entire country. They also stated that student transfer has a substantial influence on degree completion outcomes. Thus, it is vital to support the health of the transfer process as an essential factor in the attainment of a college degree to better serve individuals, as well as society. Ruiz and Pryor (2011) urged further investigation into the "leaky pipeline" (p. 6) of student transfer to ensure more effectiveness in the support of transfer students earning baccalaureate degrees. Ruiz and Pryor's (2011) research into student experiences also provided insight for institutions serving transfer students. They closely examined areas of success, as well as those areas needing improvement, so institutions could more effectively target their work to better serve transfer students while in the pipeline. The intent, therefore, of this qualitative study was to provide a better understanding of the most influential and effective experiences of students participating in DE programs who have successfully transferred to a four-year institution. This insight will enable institutions to create deliberate mechanisms to enhance

student motivation for persistence and completion of a bachelor's degree to sustain an effective transfer system within higher education, which is not just optional but is urgently necessary.

### **Conceptual Framework: Self-Determination Theory**

For students who are successful in DE and overcome the initial barriers that often limit their access to college and who transfer to a four-year institution, the obvious questions are clear: how did they remain motivated to persist and what tools and resources did they require to overcome the challenges of transferring? What experiences did they have that helped them maintain motivation to graduate from the community college and persist toward the completion of their baccalaureate degree? This study explored the influences on DE students' motivation on the path to the baccalaureate degree using Deci and Ryan's (1985) self-determination theory (SDT) as a guiding framework. SDT and other motivation theories have been used to understand the impact on student academic success, but few have used motivation theory to understand students' experiences from their decision to enter a DE program to their progression to a four-year institution.

Motivation is a valuable construct that can be used to predict the degree of success in an individual's outcomes (i.e., student in school, professional at work, potentially the well-being of personal and professional relationships, etc.) and is defined in several different ways. Jones and George (2017) defined motivation as a psychological force that directs behavior. Ormrod (2016) defined motivation as an internal state that stimulates an action and helps maintain focus towards an end goal. Wiegand and Geller (2005) proposed the idea that motivation was a push toward achievement, as well as a failure avoidance. Ryan and Deci (2000) defined motivation as moving toward doing something. Aarts, Gollwitzer, and Hassin (2004) cited motivation as the behavior that drove one toward an end state. Miller, Galanter, and Pribram (1960) presented the



notion that motivation could be a model for thinking and Locke and Latham (2002) presented a simplified definition of motivation as intentional mindful goal setting. Robbins and Judge (2017) defined motivation as “the processes that account for an individual’s intensity, direction, and persistence of effort toward attaining a goal” (p. 209). The commonality among these definitions of motivation is that there is a starting point and an *intentional* ending point. Moreover, motivation has been linked to goals, mindset, and internalized motivation. In higher education, the concept of motivation impacts a multitude of opportunities for students, such as choosing whether to attend a college, gaining admission into a particular institution, earning a certain grade point average (GPA), being accepted into a specific academic program or specialized group, or holding a distinct position within an institutional organization. Motivation is certainly a key to success; therefore, it is essential that practitioners in higher education better understand what experiences help students maintain motivation to persist and complete, especially as they transition from a two-year institution to a four-year institution and encounter various barriers that may derail their persistence and completion.

In the present study, I utilized an SDT perspective to study motivational concepts of DE students. SDT is concerned with the quality of motivation a person demonstrates, as this has implications for a person’s psychological, developmental, and behavioral well-being (Ryan & Deci, 2000). Ryan and Deci (2000, 2008) explained that motivational regulations can be either autonomous or controlled. Autonomous motivation is derived from a personal sense of choice and coming from the self; whereas, controlled motivation stems from some sort of external pressure. Intrinsic motivation, “the doing of an activity for its inherent satisfaction” (Ryan & Deci, 2000, p. 72), is the most autonomous, authentic sort of motivation. Extrinsic motivations, all of which involve compliance with an external demand, some of which are more autonomous

than others, are described as being on a continuum (Ryan & Deci, 2000). The one that is least autonomous is external regulation, which is when behaviors are performed “to satisfy an external demand or reward contingency” (Ryan & Deci, 2000, p. 72), such as feeling pressured or coerced. The next one along the continuum is introjected regulation, which is when behaviors are performed to avoid guilt or anxiety or to seek social approval. A more autonomous form of extrinsic motivation is identified regulation, which involves a conscious owning or accepting of an action as personally important. The most autonomous form of extrinsic motivation is integrated regulation. This is when the action is integrated fully and “brought into congruence with a person’s values and Culturally Diverse Client Motivation perceptions” (Ryan & Deci, 2008, p. 187). This continuum is often referred to as the continuum of relative autonomy suggesting that as one moves along the continuum, one experiences increasingly more autonomous forms of motivation. Autonomous motivation refers to intrinsic as well as identified and integrated forms of extrinsic regulation. Theoretically and empirically, SDT researchers have argued that when clients are autonomously motivated, they will be personally engaged in the process and have better outcomes (Ryan & Deci, 2008).

## Self-Determination Theory (SDT)

(Ryan & Deci, 2000)

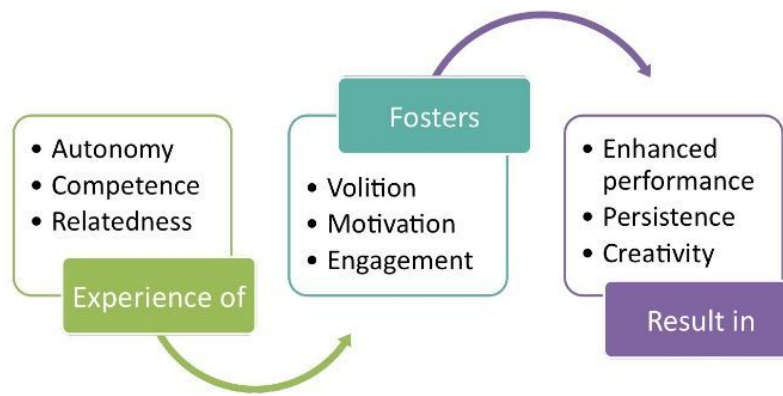


Figure 1. Model of self-determination theory. Adapted from “Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being” by R. M. Ryan and E. L. Deci, 2000, *American Psychologist*, 55(1), p. 68-78.

SDT is a well-validated theory of motivation asserting that students’ innate psychological need for belonging (or relatedness), competence, and autonomy must be satisfied for optimal engagement to emerge (Deci & Ryan, 1985, 2000, 2002). Ryan and Deci (2008) referred to these needs as “nutriments from the social environment that are essential or necessary for the process of growth, integrity, and wellness to ensue” (p. 189). The specific constructs of SDT are described in more depth below.

**Belonging.** Referring to an individual’s “desire to feel connected to others – to love and care, and to be loved and cared for” (Deci & Ryan, 2000), belonging is experienced through supportive and caring relationships, where one’s thoughts and feelings are valued. According to SDT, a sense of belonging helps foster and maintain the long-term engagement necessary to

develop competence and autonomy (Deci & Ryan, 2000). Belonging tends to make innate growth tendency more robust and may be particularly important in orientation and other early campus experiences. For example, a stronger sense of belonging may be achieved for community college students transferring to a four-year institution by the establishment of a transfer organization at the four-year institution, allowing transfer students to connect with other transfer students so they can share common problems and offer support to one another. A sense of belonging may also be achieved by establishing a point of contact at the receiving institution, a peer mentor, for example, who transfer students can contact with questions regarding the transition from the community college setting to the four-year institution. A sense of belonging is an important component of motivation.

**Competence.** Competence is considered the most straight forward of psychological needs by Deci and Ryan (2000) and is related to the pleasure of being effective in social contexts. Competence is experienced through exploring and mastering an environment, essentially by performing well. Independent work in class, opportunities to talk, timely hints, and perspective-taking statements from instructors, rather than narrow prescriptive solutions, foster the experience of competence. For example, transfer students transitioning from a community college will need continued support as they learn to successfully navigate the four-year institution's academic community. This support may include access to a tutor or enrollment in an academic monitoring program aimed at ensuring that students are experiencing academic success as they make the transition from a smaller academic environment in the two-year institution to a much larger one in the four-year institution. If students do not feel academically successful, or competent, during this transition, they may lose motivation to persist and complete.

**Autonomy.** Related to volition, autonomy is the individually defined desire to self-organize experience and behavior to resonate with one's integrated sense of self. Autonomy (self-determination) is experienced through "choicefulness and authorship of behavior" (Deci & Ryan, 2000, p. 59). Autonomy is related to students' clarity about what they value most in educational objectives and career opportunities offered and their ability to determine and follow through on steps required to attain the related objectives.

Of note is that autonomy is not the same as internal locus of control, independence, or individualism (Deci & Ryan, 1985). SDT defines autonomy not by detachment from others, but rather by the "feeling of volition that can accompany an act, whether dependent or independent, collectivist or individualist" (Deci & Ryan, 2000, p. 62). Students experience autonomy when freely seeking information on careers, programs, and options congruent with their own interests and personalities. They develop increased autonomy as they identify what they value most in educational objectives and career options, determine the steps to follow to complete a program, and work hard to attain a career option and/or goal. Environments that provide choice, acknowledge students' inner experiences, and offer freedom to pursue agendas in a supportive structure that sets clear expectations allowing optimal challenges with timely and informative feedback, foster autonomy. This autonomy may be realized by encouraging transfer students to align their career goals with a major at the four-year institution prior to transfer and meeting with career counselors at the four-year institution once they transfer. This kind of deliberate programming may help transfer students better target their behaviors to align with their self-interests and career goals.

**Engagement.** Engagement is a state of being that combines high effect, attention, and participation with emotions of interest, enthusiasm, enjoyment, and lack of anxiety or anger.

Like positive psychology and resilience theories, SDT proposed that engagement should be considered a common, rather than extraordinary, human characteristic – one that emerges naturally unless impeded or suppressed by socio-contextual factors (Deci & Ryan, 1985, 2000; Masten, 2001). Campus social-cultural systems that support student experiences of belonging, competence, and autonomy should spontaneously inspire engagement – even for students who have survived great adversity. On the other hand, if these three basic needs are not met, the risk of disengagement and attrition is much higher (Deci & Ryan, 1985; 2000). For transfer students, this engagement may be fostered by participation in the social aspect of the four-year institution as they have far more involvement opportunities than are available on community college campuses. Because of this big change in environment, transfer students may not be accustomed to participating in the social aspects of college; therefore, transfer students should be encouraged by peers, advisors, and mentors to participate in social activities prior to transfer so they are more apt to participate after transfer, especially as they transition. This social engagement may aid in maintaining students' motivation.

Numerous studies have examined the key SDT constructs of belonging, competence, and autonomy in both lab-based and classroom-based settings, leading it to become one of the most empirically validated theories for understanding educational motivation (Reeve, Deci, & Ryan, 2004), and evidence is beginning to emerge that supports its relevance for education cross-culturally (Chirkov, 2009). However, the theory has not been applied extensively to understand college students' academic achievement and persistence (Mitchell, 2015). A review of higher education research revealed only three studies that have examined relationships between intrinsic motivation and college student academic achievement and persistence (Cote & Levine, 1997; Stage, 1989, Vallerand & Bissonnette, 1992) and none of the studies assessed motivational

orientation in terms of the three basic psychological needs that SDT argued are central to human motivation. Though these studies all supported the importance of intrinsic motivation to college student success, only Vallerand & Bissonnette's (1992) study examined motivation explicitly from an SDT framework (Guiffreda, Lynch, Wall, & Abel, 2013). Additionally, research has not tested the SDT assertion that relatedness, competence, and autonomy are needs whose fulfillment leads to internal motivation.

Empirically, studies across a wide variety of countries have supported the premise that these needs of belonging, competence, and autonomy are universal and innate; however, how needs are satisfied has been found to vary within different cultural environments (Chirkov, Ryan, Kim, & Kaplan, 2003; Sheldon & Ryan, 2011). Sheldon and Ryan (2011) pointed out that "What may vary across contexts, cultures, and eras is how the needs are satisfied, how much they are satisfied, and how much satisfaction or dissatisfaction affects different types of outcomes" (p. 42). This study sought to gain a better understanding of the unique needs and potential barriers to successful transfer for students in DE programs by taking a qualitative approach assessing the relationship between motivation for students participating in DE programs and the experiences that led to their successful transfer to a four-year institution using the SDT framework, while also considering the possible moderating effects of individual and institutional characteristics that prior research has shown to be related to college academic achievement, transfer, completion, retention, persistence, and motivation. This study contributes to the literature by using motivation theory as a lens to understand the experiences of DE students who successfully transferred to four-year institutions. What experiences allowed these students to be successful? How did DE students develop positive behaviors that led to their goal achievement? This study focused on the experiences of DE students who successfully

transferred to a four-year institution and were on track to matriculate from that institution and used a motivation theory, specifically SDT, to assess those experiences to gain a better understanding of how practitioners can develop, implement, and sponsor DE programming that will facilitate experiences that lead to transfer students persisting toward, and completing, a bachelor's degree.

### **Significance of the Study**

A significant number of college student's intent on earning a baccalaureate degree begin their endeavor at a community college. There are many reasons influencing this choice, including the financial cost of higher education; a lack of academic preparation and skills; and populations, such as minority, non-traditional age, and low-income students who attend community college for a myriad of reasons not neatly categorized under financial or college readiness (Wang, 2013). Much of today's workforce, and society itself, expects the majority of individuals to attain college degrees, and individuals themselves benefit from a baccalaureate: college graduates may more easily earn higher wages, gain more opportunities, and enjoy improved socioeconomic status. However, many of those beginning at a community college with the intent to transfer to a four-year institution ultimately fail to earn a baccalaureate (Jenkins & Fink, 2016). Some withdraw from community college and leave without even completing an associate degree. Some, on the other hand, manage to complete an associate degree but fail to successfully navigate the intricate transfer process. DE has the potential to serve traditionally underserved students in a way that few other programs have in the past, as the transition from high school to college is a barrier many students find insurmountable without sufficient support. As educators seek ways to ensure more students attain college credentials, DE has become widely embraced as a means of assisting students, particularly the underserved, with the



transition from high school to college (Stuhl & Vargas, 2012). However, underserved students remain underrepresented in DE programs. Additional research is necessary to identify DE strategies that will result in greater participation by underserved students (Stuhl & Vargas, 2012). There may exist a correlation between the barriers experienced by high school students transitioning to college and community college students transitioning to four-year institutions. If practitioners can understand how to better assist high school students with the transition from high school to college, they may be able to develop better policies and practices that would aid community college students as they transfer to four-year institutions, as some of the same barriers seem to exist in both states of transition. This study, which is the second phase of a larger, collaborative mixed methods research design, sought to take a qualitative approach to understand motivation using an SDT lens with the goal of creating a better understanding of the unique needs and potential barriers to successful transfer for students in DE programs.

Selected research (Laanan, 2001; Cejda, 2006; Grites, 2013) has shown that factors influencing student persistence include academic engagement, social engagement, and institutional factors, such as student advisement and the availability of information relevant to transfer. Additionally, “transfer student capital” (Laanan, Starobin, & Eggleston, 2010, p. 177) is a term that encompasses the knowledge, skills, and relationships students have that support them in persisting along the pathway to a bachelor’s degree and provides a constructed lens by which to examine evidence this research discovered. In this qualitative study, the lived experiences of post-transfer students were examined. This study explored the experiences perceived as supporting and influencing transfer students to ultimately earn their degrees and identified factors, as well as experiences, that could potentially be improved to further support transfer students.

According to Taylor (2015), DE programs provide high school students with non-traditional pathways to earning college credits. To continue to provide these pathways, postsecondary administrators need to know the positive and negative experiences that influence participants to initially enroll and continue to enroll in the program (Evenbeck & Johnson, 2012). The data gathered in this study will help administrators develop curricula that will continue to entice high school students to enroll in DE programs, which will, in turn, lead to the financial viability of these programs for community colleges (Mechur, 2012).

Unfortunately, the literature related to student transfer in higher education primarily highlights only the community college aspect of student transfer. It does not focus on the strategies four-year institutions use to retain transfer students. Townsend (1995, 2001) and Townsend and Wilson (2006) studied the transfer mission of the community college, the current demographic and societal urgency for success with the transfer mission, and factors impacting student transfer. They discovered that though it was important to understand the transition from the community college to the four-year institution, it was vital to move beyond the point of transition. Also, they found it was just as important to focus on the experiences of students that did not persist in bachelor's degree attainment. Laanan (2004; 2006; 2007) researched community college students, their transfer aspirations, and the characteristics influencing their transfer. He found that most four-year institutions did not provide support programs for transfer students. While these studies have played an important role in illuminating the issue of student transfer, comparatively few studies investigate the issues DE students face once they have successfully made their way to the four-year institution end of the student transfer pipeline.

## Overview of Methodology

The research design for this study was a collective case study guided by a qualitative method of inquiry. A case study is designed to incorporate the following components recommended by Yin (2003): 1) research questions; 2) the study's theoretical propositions; 3) the study's unit of analysis; 4) logic linking the data to the propositions; and 5) the criteria for interpreting the findings. Yin (2003) described the research design as a "logical model of proof" (p. 21). In this study, the research questions guided the case study and the choice of which cases to study. The data collected, analysis of the data, and findings and conclusions link back to the research questions and the perception that DE and effective partnerships between two- and four-year institutions influence transfer student persistence and success.

Three effective partnership pairs between two- and four-year institutions in North Carolina were identified through Bartek's (2020) quantitative analysis. Each partnership was considered a case for this collective case study. We reviewed the websites of each of the institutions in these three effective partnerships (six institutions total) through document analysis to extract useful archival data, such as transfer policies, resources for students, bilateral agreements, and marketing material geared towards transfer students. The data were then reviewed by our research team who took extensive notes that were stored on a shared, password-protected drive. The archival data were then analyzed by our research team, and interview and focus group protocols were informed by the data collected and analyzed. Following document analysis, our research team selected participants for interviews and focus groups through purposeful sampling.

According to Merriam (1998), "purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight" regarding the phenomenon (p. 61);

therefore, we used purposeful sampling to select a sample of people who experienced the phenomenon as these participants were able to provide the data necessary to answer the research questions. This type of purposeful sampling is considered “unique sampling” (Merriam, 1998, p. 62) and is based on a need to isolate individuals who have unique and specific knowledge related to the purpose for which the research is directed. Our research team used purposeful sampling to select the participants of the study as it allowed us to select students that informed our understanding of the research problem (Creswell & Poth, 2018). This sampling procedure enabled us to pick participants who could provide the most informative data on enacted values and provide an understanding of the experiences of transfer students. Purposeful sampling ensures that participants who are well informed and know a lot about the topic of interest, in the case of this study—DE, and who have a close experience with the topic, like a DE program, will be interviewed to ensure multiple viewpoints will be captured in the research.

To answer the research questions presented in the study, an interview protocol was developed (see Appendix A). Data were then collected during a two-day site visit to each of the six identified institutions, each noted for its participation in highly successful transfer partnerships. Data collection included the collection of artifacts (e.g., strategic plans, mission statements, marketing materials, state laws), interviews, focus groups, and a survey. Follow-up interviews were conducted later for clarity of information obtained.

Interviews with students and administrators served as the primary basis of data collection. Additionally, we recruited administrators to participate in focus groups. The administrators we targeted were transfer coordinators at the two- and four-year institutions, including positions such as chief academic officer and director of advising. These administrators were also asked to provide background information about programmatic elements found in the transfer process and

offer insight into the ways in which participation in the transfer process impacts the educational journeys of participants. The administrators were asked to facilitate invitations sent out to all students who met the criteria for selection (see Appendix C). Swing (2020) based her study on students who were Pell Grant eligible at the community college and four-year institutions, while I focused on students who participated in a DE program at the community college. The criteria for selection of Pell Grant-eligible students were as follows: 1) enrollment in an AA/AS degree program with at least 30 credit hours completed at the community college; 2) good academic standing at the four-year institution (GPA of 2.5 or above); and 3) full-time student status. For DE students, the criteria for participation were as follows: 1) participation in a DE program during their junior and/or senior year in high school; 2) enrollment in an AA/AS degree programs with at least the completion of a DE course completed at the community college; 3) good academic standing at the four-year institution (higher-than-average GPA); and 4) full-time student status. This sample of students yielded a group of students who were more likely to earn a bachelor's degree.

Prior to participation in interviews, students were asked to complete a preliminary survey to gather basic descriptive and background information (see Appendix D). All interviews were recorded with the consent of participants. Immediately after the close of each interview session, I added my own notes and observations to the interview protocol. The interviews were transcribed as soon as possible after the interviews to ensure the experiences of the interviewees were accurately reflected in the findings. It is important for researchers to transcribe the first interview themselves to refamiliarize themselves with the data and to begin preliminary coding (Saldaña, 2013); therefore, I transcribed the first interview. However, based on the large number of interviews, a transcription service was used for subsequent interviews. All data obtained were

stored responsibly. Backup electronic files were generated, and all data were encrypted to provide another level of security. Once all interviews were completed with students, follow up interviews were conducted with the administrators for clarification about various programmatic elements or other questions about the overall program structure that came up during the student participant interviews.

Our research team implemented case study data analysis which requires an iterative, spiraling process that moves from the more general to more specific observations (Creswell & Poth, 2018). Atlas.ti was used to create a coding scheme for the data using open coding. Coding of the collected data was conducted to find repetitive patterns of actions and consistencies in behavior that were used to convey the research findings (Saldaña, 2013). A codebook was developed by our research team to capture initial codes that evolved from a careful reading of the data and to organize the codes into categories and subcategories (see Appendix F). Keeping a codebook offers an analytical opportunity to help categories begin to emerge (Saldaña, 2013). Saldaña (2013) suggested a process of collaborative coding where “team members can both code their own and others’ data gathered in the field to cast a wider analytic net and provide a ‘reality check’ for each other” (p. 35).

### **Definitions of Key Terminology**

The following definitions are provided to aid readers in understanding several key terms used throughout this study.

*Dual enrollment (DE) programs* refer to partnership agreements between secondary and postsecondary institutions which allow high school students to enroll in college courses taught by college instructors for college credit prior to graduating high school.

*Underserved students* refer to students who do not receive equitable resources as compared to other students in the academic pipeline. Typically, underserved students include low-income, underrepresented, racial/ethnic minorities, and first-generation students.

*Persistence* in this study is defined as consecutive semester-to-semester college enrollment for three or more semesters immediately after graduating from high school.

*Transfer student capital* refers to the knowledge, skills, and relationships students have that support them in persisting in the pathway to a bachelor's degree providing a constructed lens by which to examine evidence this research uncovers.

## **Chapter Summary**

In this chapter, the research problem was described, and the significance of the research problem was established. The theoretical framework used to guide the study was presented, as well as an overview of the research design. This study contributes to an understanding of the experiences of students transferring from a community college to a baccalaureate institution and the impact those experiences have on the pursuit of a bachelor's degree. Examining the experiences of DE students who stay motivated and successfully transfer to four-year institutions has important implications. This information can be useful to the personnel at community colleges and four-year institutions in building support strategies that will contribute to greater success for transfer students. Further, study results can affect policies supporting DE. Gaining a firm understanding of the information students need to be successful can also assist parents in being advocates for their children. Finally, this study also adds to the literature on the transfer of DE students by providing an in-depth account of what strategies facilitated students' self-determination toward college.

## CHAPTER 2: REVIEW OF LITERATURE

College access, persistence, and completion are of increasing national concern and priority (Pretlow & Washington, 2014). The vast majority of students who begin at a community college state they intend to earn a bachelor's degree, yet fewer than 15% achieve that goal within six years of community college entry (Aspen Institute, Community College Research Center, Public Agenda, & Sova, 2017). The aspiration to attain a bachelor's degree will only increase as the number of jobs that pay a family-sustaining wage requiring a bachelor's degree continues to rise. For the more than one million degree-seeking students who begin their education in community college each year, successful transfer is a means to achieve that goal (Aspen Institute et al., 2017). Because community colleges represent our society's belief that education is for all, these institutions must turn their attention to ensuring more entering students successfully transfer to four-year institutions, and DE programs may hold the key for a large population of students.

Open-door policies in community colleges began for several reasons but fundamentally began with the American ideal that every person in society is given an opportunity to move between social class regardless of their condition of birth. Additional factors that further encouraged these open-door policies at community colleges included the ideal that all members of a society should actively participate in civic affairs, the need for increasingly well-trained employees due to industrialization, and businesses' desire to have their employees trained at public expense (Cohen & Brawer, 1996). The baby boomers of the 1940-50s, the largest single generation in American history to date, and the civil rights movement of the 1960s, both brought about a need for community colleges to open their doors to all students, creating an avenue to a quality education regardless of those students' SES or race/ethnicity. Threats to the open-door



policy have traditionally arisen from periods of economic downturn. During these economic downturns, community colleges nationwide have considered policies that would decrease access, such as limiting program admission, prioritizing enrollment, and strengthening academic standards, which all would affect the spirit of the open-door (Hendrick, Hightower, & Gregory, 2006). However, the open-door at a community college is not easily closed because it has so long been an integral and defining part of the community college mission, but while it ensures access for all, this open-door does not guarantee persistence. Therefore, community colleges must work harder to increase students' persistence toward bachelor's degrees. To improve that persistence, community colleges have increasingly explored and utilized partnerships like DE. DE programs allow high school students to take college classes, earning both high school credits and college credits simultaneously. DE programs are fraught with problems, however, and community colleges and four-year institutions are in the midst of a sea-change moment regarding how DE programs are implemented and governed. If designed, implemented, and governed well, these programs could provide the persistence numbers the two- and four-year institutions need to ensure consistent funding as well as the access to higher education that students need to be competitive in the globalized workforce to obtain gainful employment.

This review of the literature is structured into four sections. First, I provide an overview of the challenges to transfer. Second, I describe possible solutions to those challenges. Next, I focus on DE as a specific possible solution to the challenges to transfer and describe the advantages of DE, including easing the college transition process, increasing college retention rates, and lowering the cost of a college degree. I also discuss some of the disadvantages of DE, such as lack of access to all students, including underserved students who have historically found

college inaccessible due to barriers to entry and their lack of college readiness (Karp et al., 2007).

### **Challenges to Transfer**

This section provides an overview of the challenges to transfer, including transfer shock, psychological adjustment, transfer process, transfer credit and articulation agreements, and academic advisement.

**Transfer shock.** Students who migrate from one institution to another often experience a variety of challenges as they transition into their new environment. Specifically, community college transfer students transitioning to a four-year institution witness new psychological, academic, and environmental challenges (Laanan, 2001). Whether it is the academic rigor, the difference in size and location, or competition among students, many studies have found these factors result in transfer students' difficulty in adjusting to four-year institutions (Cejda, 2006; Cejda & Kaylor, 2010; Grites, 2013).

Prompted by the concept of transfer shock, which is defined as the temporary dip in transfer students' academic performance as characterized by GPA in the first or second semester after transferring, Ishitani (2008) conducted a longitudinal study to explore how students' post transfer shock GPA impacted persistence when accounting for entry-level status: freshman, sophomore, or junior. The study identified greater success in the persistence of sophomore and junior transfer students when compared to freshmen. It also discovered that higher semester GPA's were positively associated with higher persistence rates (Ishitani, 2008).

**Psychological adjustment.** Laanan (1996; 2001) encouraged researchers and student affairs personnel to move beyond transfer shock and study the academic, social, and psychological adjustment of the transfer student experience as students transitioned to a new

institution. A qualitative study exploring the transition of community college transfer students to a four-year institution identified important findings related to transfer student adjustment (Flaga, 2006). Collaboration of academic advisors between the community college and four-year institution was found to be critical and findings suggested a need for increased communication to support the community college transfer student adjustment to the four-year institution. The positive impact of transitional programming during transfer student orientation and seminar courses to introduce transfer students to the academic, social, and physical environment was another vital finding from this study. Lastly, the study identified a need for increased learning connections through mentor programs, campus involvement, and living-learning options for transfer students (Flaga, 2006).

**Transfer process.** Another significant reason for the low success rate of transferring students is the actual transfer process itself. A review of the literature illustrated a transfer process that impedes the prospective community college students from succeeding in four-year institutions (Cejda, 2006; Wang, 2009; Wood, Nevarez, & Hilton, 2012). In addition, culture disparity between two- and four-year institutions, the transfer credit articulation and evaluation process, and the stigma associated with being a transfer student have also contributed to the low success rate of transfer students in attaining a baccalaureate degree (Ellis, 2013; Wang, 2009;).

**Transfer credit and articulation agreements.** Even when community college students complete the required coursework, institutional factors at the four-year institution, such as unfair transfer credit evaluations and a lack of an articulation agreement, can stymie the student's successful transfer of credits toward a bachelor's degree (Anderson, Sun, & Alfonso, 2006; Doyle, 2009; Monaghan & Attewell, 2015; Stern, 2016). Transfer credit evaluation is the process by which the receiving institution evaluates the credits that were completed by applicants

at their prior institution(s) to determine what credits can/cannot be applied toward degree requirements. This process is facilitated by the transfer evaluations office; however, the approval of credits is often done by the faculty, many of whom are typically away from campus during the late spring through summer peak period for transfer evaluations (Dowd, 2010).

Research on the pre- and post-transfer experience has shown that students were disappointed that some of their community college credits either did not transfer or were transferred only as electives (Stern, 2016). This credit loss has implications as students have to repeat courses they took at the community college level or invest more time in taking general education courses (Monaghan & Attewell, 2015). This action can prolong the student's studies at the four-year institution and makes the higher education experience more expensive (Monaghan & Attewell, 2015). From an economic perspective, students must consider the opportunity cost of the additional time needed to complete the degree, as well as the additional expenditure for the extra credits. Monaghan & Attewell (2015) found that students who can transfer most of the credits from a community college were more likely to graduate from a four-year institution.

Another instrument utilized to evaluate credits transferring from a community college can be an articulation agreement between both institutions (Gard, Paton & Gosselin, 2012). An articulation agreement is an officially approved agreement between two institutions, which allows a student to apply credits earned in specific programs at one institution toward advanced standing, entry, or transfer into a specific program at the other institution (Anderson et al., 2006). A limited articulation agreement, or no agreement at all, creates additional hurdles for transfer students (Anderson et al., 2006; Doyle, 2009; Stern, 2016).

Overall, the arbitrary nature of the transfer credit evaluation process and the lack of sufficient articulation agreements have a substantial impact on students' decisions to ultimately attend a four-year institution (Roksa & Keith, 2008). From a state-level perspective, Stern (2016) found that institutions in states with articulation agreements accept a higher proportion of transfer credits. From an institutional perspective, Doyle (2009) found that transfer rates were higher in institutions with articulation agreements. Similarly, Gard et al.'s (2012) findings confirmed that the presence of an articulation agreement can positively impact the transfer rate.

**Academic advisement.** Another important component of the transfer process is academic advisement at the two- and four-year institutions (Best and Gehring, 2003). While the office of academic advisement is ubiquitous within higher education institutions, the role it plays varies with the type of institution. At a four-year institution, academic advisors exist because students require information and assistance to navigate and make appropriate decisions within the university system. At a community college, however, academic advisors prepare students to make a successful transition to a four-year college, so they can continue in their studies and pursue their bachelor's degree (Laanan et al., 2010). In this capacity, academic advisors are often the first step in the transfer process and the stewards of the information necessary for a student to transfer. This first step includes explorations of goals with the student and academic planning necessary to transfer to a four-year institution.

However, if limited or incorrect information is disseminated by an academic advisor, it can have a cascading impact on the student's ability to transfer (Laanan et al., 2010). Timeliness is also paramount since the admissions process at the receiving institution has important deadlines for admission, transfer evaluations, financial aid, and registration. Research evaluating the efficacy of academic advisement as it relates to transfer students found that students preferred

meeting their advisors earlier in the transfer process, and they complained that information pertinent to the transfer policy and process was not readily available or inadequate (Laanan et al., 2010). Gard et al. (2012) found that improper or insufficient transfer advisement at the community college level was also a primary impediment to successful transfer.

The American Association of Community College (AACC; 2016) identified 36 percent of the community college student population as first-generation college students. This is a vital statistic of which four-year institutions must be aware when working with transfer students. Many studies have explored this specific population and identified disadvantages this population faces in accessing and persisting in higher education. First-generation students are reported as being four times more likely to leave higher education as well as bear the title of low-income. In addition, data from the NCES Postsecondary Study demonstrated that after six years, only 11% of the low-income, first-generation students earned a bachelor's degree, compared to 55% of their more advantaged peers (Engle & Tinto, 2008).

A comparison study of first-generation and non-first-generation students and their academic obstacles found that first-generation students were significantly more likely to have job and family responsibilities, weak study skills, and experience feelings of being depressed, stressed, or upset (Stebbleton & Soria, 2012). First-generation students already experience a number of obstacles to their persistence and degree completion and factoring in being a transfer student and adjusting to their new environment with a lack of social capital only impedes their success. A qualitative study reviewing social capital and academic motivation among first-generation community college students found these students were not forming relationships to support them throughout college, rather believing it was their own responsibility to succeed in college (Moschetti & Hudley, 2015).

## Possible Solutions to Transfer

Community colleges are important given they serve as a mechanism for students to transfer to four-year institutions, and while 81% of students who attend community colleges nationwide say they want to transfer, only 33% transfer within six years (Horn & Skomsvold, 2011; Jenkins & Fink, 2016). Several states have begun to experiment with the improving articulation between their community college system and four-year institutions to increase transfer rates (Chase, Dowd, Pazich, & Bensimon, 2014). Such policies hold several things in common: a prescribed pathway of courses required to matriculate, coursework that is transferable and comparable to the university level, an admission guarantee by one or more four-year institutions, and easily accessible information regarding transfer. These contemporary college policies are attempting to combat traditional college policies, which are often contributing to the low transfer rates seen at community colleges. Some critics have even described the current structure of community colleges as lacking interaction and coordination across units of student services, instruction, and administration (Bailey et al., 2015). When new policies are built to work within a current but broken framework, they cause greater confusion and inconsistencies throughout the entire college community. It is clear from the literature that structured academic pathways, a student-centered culture, and culturally sensitive leadership are all factors that add to higher transfer rates (Miller, 2013; Zalaznick, 2015).

DE programs have the potential to enable students to get a head start on college while still attending high school. The *dual credit phenomenon* (Richardson, 2007) is concurrent-enrollment programs that have been widely accepted by educators and politicians as a means to improve postsecondary outcomes (Hoffman, 2005). High school students who participate in DE programs get to maintain the structure and supportive environment of a high school while

gaining insight into the more self-directed college environment while earning both high school credit and college credit at the same time (Cassidy, Keating, & Young, 2010). This blending of two environments allows students to transition more slowly from one environment to the next, decreasing the likelihood that students will become overwhelmed by the college environment. Further, because participants in DE programs earn both high school credit and college credit simultaneously, they can potentially offset the overall cost of a bachelor's degree (Hoffman, 2005), reduce the time necessary to achieve that degree (Westcott, 2009), increase degree attainment (McComas, 2010; Swanson, 2008; Westcott, 2009), improve motivation and persistence (Davis, 2014; Robinson, 2011: & Wintermeyer, 2012), and mitigate the need for developmental education coursework (Adelman, 2004).

### **DE Programs**

As pressure mounts for states and educators to raise rates of college credential attainment, providing students with the opportunity to take college courses in high school through DE is one promising strategy that continues to gain popularity on community college campuses across the country (Giani, Alexander, & Reyes, 2014). DE programs vary widely in terms of structure, scale, and scope. An important goal of these programs is to increase the number of students who persist through high school, enroll in college, and complete postsecondary credentials (Ulna, Edmunds, Fesler, & Glennie, 2015), but there is no national formula for how these programs must be designed. There are nationwide and statewide differences in how many DE college courses are offered within the programs, in what subject areas the college courses must be offered, on what kind of campus the college courses must be taken (on a college campus or on a high school campus), and by whom the college courses are taught (college faculty or high school teachers who qualify as college adjuncts). The one similarity in these programs, however, is that



students can earn dual credit, which enables students to meet high school graduation requirements through college courses. In fact, the most recent national data (2010-11) from NCES showed that 1.4 million high school students were enrolled in DE (Fink, Jenkins, & Yanagiura, 2017), indicating that DE programs are of high value and in high demand. Additionally, the majority of these DE students were enrolled through community colleges, though these numbers do vary by state (NCES, 2013). Specifically, and consistent with their open-door mission, 98 community colleges across the country offer DE courses (Thomas, Marken, Gray, & Lewis, 2013). Since students taking community college courses while in high school represent a significant and growing portion of community college students nationally with more than 635,000 students enrolled in DE courses in 2015 (AACC, 2018), a better understanding of DE programs will be needed to address how these programs influence student persistence and degree attainment (Johnstone, 2011).

Since DE programs are shaped by state policies and legislation, they differ considerably from state to state (U.S Department of Education, 2003). Traditionally, DE programs have been aimed at academically advanced students (Karp & Jeong, 2008). The goal was to provide these high-performing students, who may have exhausted their high school's course offerings or needed academic challenges beyond what the high school could provide, with the chance to take classes that met their more advanced needs. In many places, this is still the primary reason for offering dual credit. However, more recently, colleges and school districts have begun to embrace DE as a strategy for improving college attendance and persistence among students who may lack sufficient preparation for college. National and state attention has moved toward the recruitment of disadvantaged, first-generation, and middle-achieving students (Struhl & Vargas, 2012). Participation in DE may be effective in helping these students succeed in higher

education by giving them a realistic idea of what college requires and giving them a head start on college-level work (Grubb, Scott, & Good, 2017). Research has traditionally suggested that student persistence year-to-year increases with the accumulation of college credits (An, 2013; Blankenberger, Lichtenberger, & Witt, 2017; D'Amico, Morgan, Robertson, & Rivers, 2013). If DE students graduate from high school having already accumulated college credits, they have an increased likelihood of enrolling in a college program (An, 2013; Blankenberger et al., 2017; D'Amico et al, 2013). In addition to this increased likelihood of college enrollment and/or transfer, DE students will be more likely to attain a college credential at a faster pace and at a reduced cost, having attained college credit during high school at no out-of-pocket expense (Ganzert, 2014).

In North Carolina, Career and College Promise (CCP) is the DE program for high school students. This program allows eligible North Carolina high school students to enroll in college courses at North Carolina community colleges and universities through their high school. Students who successfully complete college credits can transfer those credits post-graduation to college. There are three pathways in North Carolina considered part of CCP: College Transfer, Career and Technical Education, and Cooperative Innovative High Schools. College Transfer is designed for students planning to continue their educational aspirations beyond high school and eventually earn an associate or bachelor's degree at a community college or four-year university. Career and Technical Education allows students to begin a certification or diploma program in a particular technical field or career area. Cooperative and Innovative High Schools include early colleges and other innovative schools that have small populations and are located on the campus of a community college or four-year institution. In these Cooperative and Innovative High Schools, students simultaneously work toward completion of both a high school diploma and an

associate degree, accumulating either transferrable credit or attaining a certificate (Career and College Promise, 2017).

**Benefits of DE.** Previous studies of DE have found that taking college courses while in high school benefits students in several ways (An, 2013; Blackenberger et al., 2017; Crouse & Allen, 2014; D’Amico et al., 2013; Grubb et al., 2017; Jones, 2014; Lile, Ottusch, Jones, & Richards, 2018). The positive effects of DE include better high school grades and increased completion, increased likelihood of college enrollment, accumulation of college credit, and higher rates of college degree attainment (U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse, 2017). The studies referenced here include evaluations of DE programs in Illinois, Iowa, South Carolina, Tennessee, Texas, and Virginia, providing a cross-section of national trends as they pertain to the benefits of DE programs. Specifically, An (2013) found that participation in DE increased first-year college GPA and decreased the necessity for remediation. Blankenberger et al. (2017) analyzed data of a high school graduating class through seven years after graduation and found that students who participated in DE were more likely to complete a postsecondary degree. The findings of Crouse and Allen (2014), which were based on a large sample size of students from 14 community colleges, indicated that DE students are more academically prepared for college courses when looking at ACT scores and GPA. D’Amico et al. (2013) evaluated the persistence of South Carolina’s DE students and found that completing DE courses on a college campus led to enhanced persistence once entering college, though it is necessary to point out that South Carolina’s community college system is focused on workforce development, not on transfer. D’Amico et al.’s study also indicated that students who completed career program courses through DE were more likely to persist than those students who completed transfer courses.

Tennessee enacted the Tennessee Promise in 2014, promising free community college to all high school graduates, and Grubb et al. (2017) found that students who participated in DE in Tennessee were more likely to complete college and less likely to need remediation. The DE students represented in this study were also more likely to complete their associate degree in two to three years, a much faster rate than their non-participating peers. Jones (2014) evaluated college academic performance and persistence of DE students who enrolled in a community college or a four-year institution and found that DE students had a higher GPA and persisted at a higher rate than students who did not participate in DE. When exploring the experiences of DE students, Lile et al. (2018) found that DE helped students develop clarity of the college student role, including who attends college, what skills are required, what college can lead to, and students' own self-identification as college students. Another finding of the Lile et al. (2018) study indicated that students who attended DE courses on the college campus full-time developed better study and time management skills. In terms of academic preparedness and college readiness, the research indicates that DE programs are proving efficacious.

Another benefit of DE programs is they save students money (Crouse & Allen, 2014; Giani et al., 2014; Jones, 2014; Lile et al., 2018). Many DE programs include some level of funding as students earn credits toward a college degree while still in high school. According to Crouse and Allen (2014), Iowa covers the tuition for each college course and shares the cost burden of textbooks, transportation, and teacher pay with the local school district. Giani et al. (2014) found that the Texas Education Code was amended to allow both high schools and postsecondary institutions to receive additional funding from the state in order to cover the cost of DE. This allowed many students to take dual credit courses without paying college tuition. Jones (2014) estimated that parents saved between \$5,000 and \$24,000 in tuition expenses for

students completing up to one year of college credit, while Lile et al. (2018) posited that students and their families saved money when students sped up college graduation through pre-college credit accumulation through DE. These studies were particularly rigorous because most were based on large representative datasets and were able to control for some measure of pre-program academic achievement when comparing outcomes of program participants and nonparticipants. Although these studies used different statistical models, they all found positive outcomes for students who participated in DE, an indicator that DE programs may help community college improve persistence rates.

**Challenges of DE.** While the research suggests that DE programs have had a positive impact on persistence and performance, there are several barriers to the growth and development of these programs. One concern is if there has been sufficient research done to support the long-term continued benefits of the programs to warrant such growth and development efforts (Jones, 2014). As indicated by Jones (2014), some barriers that often prevent the scaling up of DE programs include lack of quantitative data to support the claims of benefits; low or uncertain academic quality of program courses; limited oversight of academic rigor; college course experience not duplicated in high school courses; college credit transferability problems; high costs to run the programs; potential funding uncertainty, and limited access for low-income, minority, and academically underprepared students (Bailey et al., 2002; Hebert, 2001; Karp et al., 2007). This last barrier, according to An (2013), is largely due to the rigorous academic requirements associated with the competitive application process typical in DE programs. Because of the selective and competitive application process associated with DE programs, high-achieving students are the ones to reap the potential benefits of these DE programs. Academically underprepared students are not academically competitive enough to participate;

yet, it is those students in particular who struggle with persistence (Ganzert, 2014). Pretlow and Washington (2014) conducted a study evaluating a DE program in Virginia that was open to students from their freshman year through their senior year. Data about students who graduated from high school in the spring of 2004, 2005, or 2006, and enrolled in at least one DE course as a high school senior, were collected from the National Student Clearinghouse to track college enrollment and degrees earned. Findings showed an increase in the number of DE offerings at the high schools and an increase in participation in those courses; however, there was no increase in equitable outcomes for all populations of students. The number of Black and Hispanic students enrolled did not proportionately increase, despite the increase in access and course offerings. The achievement gap between minority racial/ethnic groups was not significantly decreased. While White students made up 64.3% of the 2006 graduating class, they accounted for 80.3% of DE students. The corresponding figures for Black students were 23.8% and 13.9%, respectively. The number of DE students for Hispanics remained abysmal. Though Hispanics accounted for 5.5% of the 2006 graduating class, they constituted less than one half of 1% of DE students with only 50 of the 4,334 Hispanic graduates participating in a minimum of one DE course during their senior year. The findings of Giani et al. (2014) showed that DE may not have a significant impact on postsecondary outcomes when the majority of students who participate are high-achieving and likely to complete college regardless of their DE experience.

The other challenges to DE, such as quality of instruction, oversight of academic rigor, transferability, and differing environmental experiences are equally problematic, although less wide-spread, but are representative of state-wide and national trends (Crouse & Allen, 2014; Ganzert, 2014; Jones 2014). The concerns related to quality of instruction and course rigor oversight apply more to college courses that are offered on the high school campus by high

school teachers (Fergus, Baker, & Burnett, 2015). To ensure the quality of DE instruction, some states require that the high school teachers meet the same hiring requirements as a college adjunct (cite).

There are also issues around policy (Zinth, 2016). The selection process for DE has very little consistency nationwide. In South Carolina, for example, DE courses are limited to high school juniors and seniors, and each student has to have a recommendation letter from the principal or the principal's designee, and students have to meet the same college admission requirements to take an individual course in the DE program as all college students do for admission to the college (D'Amico et al., 2013). Some DE programs also require a minimum GPA for students to participate. In Oklahoma, students were admitted to the DE programs based on high ACT scores and high GPAs (Roach, Vargas, & David, 2015). This has since changed to include mid-level academic students in an attempt to decrease the barriers to access for lower-achieving students who nonetheless aspire to attend college.

Other barriers to access include financial barriers, such as students not being able to afford the tuition, fees, and textbooks required to participate in DE, as some DE programs do not cover such costs (Zinth, 2016). Transportation has also been a barrier. To alleviate this barrier, some school districts offer college courses on the high school campus or pay for bus transportation to the college (Pretlow & Patterson, 2015). Financial barriers prevent lower-income students from participating and reaping the benefits of DE, regardless of their academic achievement level (Pretlow & Patterson, 2015).

One last barrier is related to the administrative challenges associated with supporting adolescent students and the faculty teaching them (Academy Administration Practice, 2014). Specifically, little is known about the challenges faced by community college instructional

administrators in implementing DE programs in terms of the programs' impact on instructional policies and procedures and the availability of support services geared toward teaching adolescent students. For North Carolina lawmakers and community college administrators to make informed decisions regarding DE practices, requirements, and procedures, more needs to be learned about the degree to which the state's community college administrators support DE programs and the faculty responsible for teaching college-attending adolescents and their families.

As colleges and universities begin to more fully explore how DE programs can improve persistence rates and degree attainment, they also need to more fully explore how to support those students while they are in the entire transfer pipeline. If DE students are automatically categorized as transfer students, then the community colleges and four-year institutions have an obligation to not only improve the DE experience for those students but also to support them during and after the transfer process. The majority of the research cited previously addressed the issues involved in the design and governance of the DE programs at the community college, a worthy enterprise to be sure; however, what is missing from the current research into DE programs is how to support these students as they transition from one academic goal to another, from high school into the community college or from high school into the four-year institution.



### CHAPTER 3: METHODS

Author's Note: This chapter is a collaborative work between Ashley Swing and I; therefore, Chapter Three in both of our dissertations is identical with only small differences when discussing the specific populations.

This study is part of a larger study that overall examined practices that support successful transfer outcomes for different transfer student populations and the partnerships needed to do so. This study focused on exploring the transfer-related experiences of students through qualitative analysis using exceptional partnership pairs determined through quantitative analysis by Bartek (2020a). The overall study followed an explanatory sequential mixed methods design since the qualitative component helped explain the quantitative results (Creswell & Plano Clark, 2018; Bartek, 2020a). We used a case study approach using the partnership pairs as cases and students at the universities as subcases. The research questions addressed in this qualitative study include the following:

1. What are the transfer-specific experiences of students who participate in DE programs?
2. What are the motives of enrollment for students to enroll in DE programs?
3. What specific aspects of their DE program participation most influenced students' motivation to persist?

The populations examined in the qualitative phase of the study were at the institution- and individual-level and included: 1) artifacts describing transfer policies and practices; 2) administrators, faculty, and staff engaged in transfer structures, processes, and partnerships; 3) transfer students at the high-performing University of North Carolina (UNC) System colleges who were dual enrolled at the high-performing North Carolina Community College System (NCCCS) colleges; and (4) transfer students who received Pell Grants, a proxy for low-income

status, at the high-performing UNC System colleges. Using multiple linear regression, an administrative dataset from the UNC System was analyzed to identify strong community college and four-year university partnerships based on bachelor's degree completion (Bartek, 2020a). Using Bartek's (2020a) quantitative results along with document analysis and informal interviews, the top three partnership pairs were identified and designated as the cases for this study. Qualitative data were then collected at these high-performing partnership institutions using focus groups and interviews. The overall aim was to identify institutional practices, including both transfer practices and partnership practices. This study focused on examining the experiences of transfer students that contribute to bachelor's degree completion.

This chapter begins with a description of the research design used to answer this study's research questions, along with a rationale for using a case study approach. Next, a description of the setting and an explanation of the methods that were used to collect and analyze data will be provided. The chapter will conclude with a description of trustworthiness measures, as well as my positionality as the researcher and the study's limitations.

## **Research Design**

Mixed methods research involves collecting and analyzing both quantitative and qualitative data using rigorous sampling and analysis methods (Creswell, 2014). The strength of a mixed methods design is that it minimizes the limitations of these two approaches. By effectively combining quantitative variables with qualitative phenomenon, a mixed methods study can answer questions that naturally arise, but are left unanswered, during a purely quantitative or qualitative research project. This thorough investigation provides a fuller and more complete understanding of a study's research questions (Fink & Jenkins, 2017; Tashakkori & Teddlie, 2010).

The results of the quantitative analysis conducted by Bartek (2020a) were examined and used as the basis for the qualitative inquiry. Because this qualitative study is attempting to explain the how and why of the quantitative results, an explanatory sequential mixed methods design was selected (see Figure 2; Creswell, 2014; Creswell & Plano, 2018; Tashakkori & Teddlie, 2010).

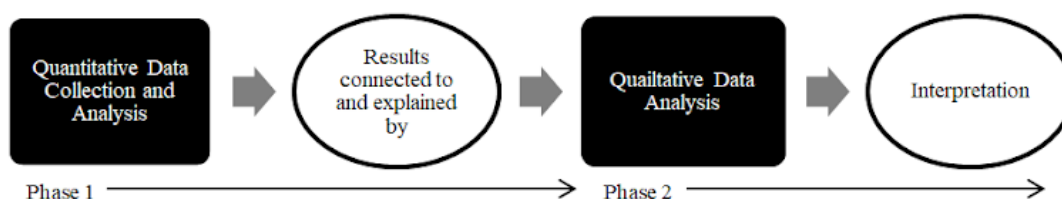


Figure 2. Phases in an explanatory sequential design. Adapted from *Designing and Collecting Mixed Methods Research* (p. 115) by J. W. Creswell and V. L. Plano Clark, 2018, Thousand Oaks, CA: Sage Publications.

While mixed methods research has many strengths, it also has challenges. This type of study is time-intensive as it requires extensive data collection and analysis of both quantitative and qualitative data and requires researchers to be familiar with both methods (Creswell, 2014). To overcome this challenge, a collaborative approach was used during the data collection and analysis phase of this study. Carrie Bartek, Ashley Swing, and I collaborated in designing the overall study and worked together during data collection and analysis. Bartek (2020a) completed the quantitative phase of the study, while Swing and I conducted the qualitative phase. All of us worked together to validate the quantitative results, design protocols for the qualitative phase, and code and theme qualitative results. Not only did this collaboration make the study more manageable, but it provided triangulation and data validation not typically possible in

single-authored works. Because each researcher is also an experienced practitioner in a community college, this collaboration also more accurately reflects typical community college practices.

**Case study approach.** A case study is a detailed review and analysis of one or more cases using multiple sources of information (Creswell & Poth, 2018). According to Yin (2018), “a case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 15). It is the most appropriate method for filling a gap in the literature, answering the research questions, and fulfilling the purpose of this research. For this qualitative study, a case study approach was used to understand the practices of the institutions and the experiences of transferring from the student perspective. The partnerships identified by the quantitative analysis (Bartek, 2020a) were each considered cases and each student was considered a subcase. Using a case within a case research strategy allowed our research team to explore the practices of the partnerships pairs but then also allowed us to “compare both similarities and differences within and across the subcases in order to glean insight into the larger phenomenon of interest” (Gondo, Amis, & Vardaman, 2010, p. 2). Because there were multiple cases in this study centered around understanding the specific issue of student transfer, we considered this study a collective case study (Creswell & Poth, 2018).

### **Data Sources and Case Selection**

Data sources for the quantitative portion of this study included a de-identified longitudinal administrative data set provided by the UNC General Administration under IRB Protocol 11984 (Fall 2017) that tracked students who transferred into and graduated from the UNC System between 2003 and 2015 (n=124,716 unique transfer student cases). The data were

filtered to focus on students who transferred from NCCCS colleges to UNC System colleges in Fall 2011. Independent student-level variables in this data set include student demographics (state and county of residence, gender, race/ethnicity, Pell Grant status at UNC System transfer college); UNC and NCCCS college identifiers; and transfer variables. Transfer variables include class level at transfer (freshman, sophomore, junior, senior); term first enrolled; NCCCS awards prior to enrolling at a UNC System college; transfer credit hours at time of entry at UNC System college; total degree credit hours earned at UNC System college for graduates or last term enrolled; and other transfer credits (e.g., advanced placement [AP], international baccalaureate [IB]) accepted at the UNC System transfer institution. The dependent outcome variable in the UNC dataset is the century, year, and term of graduation.

Results from Bartek (2020a), where quantitative data were analyzed to identify NCCCS and UNC System partnership pairs with higher-than-expected bachelor's degree completion rates, were the foundation of our case selection methods. Partnerships pairs with higher than expected bachelor's degree completion rates were identified and 18 pairs were reported as "much higher than expected" (Bartek, 2020a). The pairs were then restricted to those that had at least 20 students in the cohort examined, reducing the number of pairs to nine. Document analysis was then conducted on relevant material from each college's website using a rubric based on Wyner et al.'s (2016) *The Transfer Playbook: Essential Practices for Two- and Four-Year Colleges*. Additionally, we queried members of the North Carolina Transfer Advisory Committee who were knowledgeable about each of the colleges and their transfer practices. The information extracted from this document analysis added a layer of data to the quantitative results from Bartek (2020a) that was essential in selecting the three top pairs for our cases. Additionally, the data gleaned from the document analysis informed our protocols and potential

participants for our focus groups and one-on-one interviews. All information was integrated and the top three pairs with the highest rankings were used as a basis for purposeful sampling and case selection in the qualitative phase. The top three pairs were: 1) Appalachian State University via Forsyth Technical Community College; 2) the University of North Carolina at Chapel Hill via Durham Technical Community College; and 3) the University of North Carolina at Wilmington via Carteret Community College.

To answer the research questions posed, site visits were conducted, and data were collected from multiple sources at each institution in the top three partnership pairs. In-depth, semi-structured focus groups with faculty, staff, and administrators were conducted at all six institutions and were the sources of information with which Bartek (2020b) evaluated the transfer practices and partnership practices occurring at each college and within each pair. To explore student transfer experiences, one-on-one interviews were conducted with students currently enrolled at each university who had successfully transferred from the specific community college identified in the pair.

### **Qualitative Methods**

Qualitative research results in a complex description and interpretation of the problem, adds to the literature and calls for a change (Creswell & Poth, 2018). This type of inquiry is a “process of knowledge production” (Gaudet & Robert, 2018, p. 9) and is necessary when a phenomenon needs to be closely examined to gain a complex, detailed understanding (Creswell & Poth, 2018). In this case study, the qualitative analysis was intended to help explain the quantitative results consistent with an overall explanatory sequential mixed methods design (Creswell & Poth, 2018). As a follow up to the quantitative results, cases of high-performing partnerships were studied to gain a deep understanding of the contexts and settings of these

institutions, as well as explore the experiences of their students (Creswell & Poth, 2018). This study's qualitative component allowed our research team to explore the practices at these high-performing partner institutions and the experiences of transfer students to better understand differing outcomes for different types of students. Because the focus was on effective partnerships and students' experiences, a qualitative approach allowed exploration of the issue of transfer and provided insights from success stories.

The qualitative portion of this mixed methods study used a collective case study design, with the unit of analysis being the identified effective NCCCS and UNC System transfer partnership pairs and the unit of inquiry and observation being the students, faculty, staff, documents, and websites at each effective partnership campus (see Figure 3). A case study design was appropriate for this research effort because the objective in a case study is to "develop a better understanding of the dynamics of a program" (Merriam, 1988, p. 30). Through structured interviews, focus groups, and an analysis of available program documents, our research team was able to gain insight into the research questions, and in turn, build an overall understanding of the ways in which transfer partnerships influence the educational journey and academic progress of students. The cases were bound by the parameters of place (institutions within the state of North Carolina) and time (information was collected during the fall and winter of 2019); therefore, only students enrolled, and administrators employed, during that time period were interviewed.

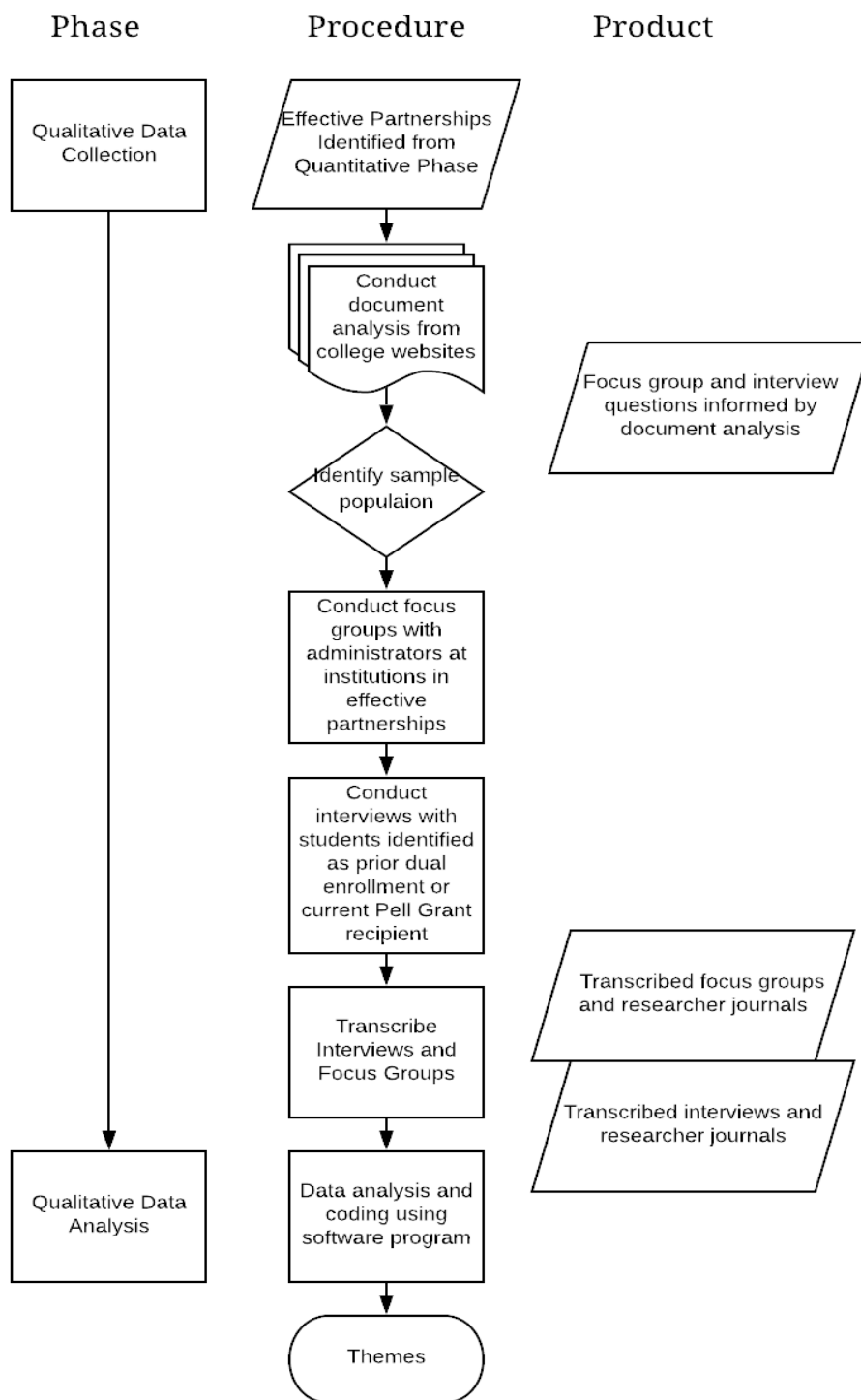


Figure 3. Qualitative analytical framework for mixed methods study.



## Setting

**Community colleges.** The top three effective partnerships identified by Bartek (2020a) in the quantitative phase of this mixed methods approach, included the following community colleges: 1) Forsyth Technical Community College; 2) Durham Technical Community College; and 3) Carteret Community College. Forsyth Technical Community College and Durham Technical Community College are located in midsize cities while Carteret Community College is located in a small town on the coast. Only focus groups with administrators, faculty, and staff were conducted at the community colleges.

Forsyth Technical Community College (FTCC) is located in Winston-Salem, North Carolina which is in the region of the state known as the triad or foothills. Winston-Salem has the youngest population of the three locations with a median age of 35 and a female majority (53%). The majority racial makeup is 46% White, 34% Black, and 15% Hispanic and Latino. In Winston-Salem, 34% of the population holds a bachelor's degree or higher. The median annual income for a working person over the age of 35 is \$31,445 and for those holding a bachelor's degree is \$42,146. Postsecondary educational pursuit is demonstrated with 33% of the population enrolled in undergraduate or graduate studies (U.S. Census Bureau, 2017).

Durham Technical Community College (DTCC) is located in Durham, North Carolina which is in the central part of the state also known as the Research Triangle. The city is diverse with a population that is 38% White, 40% Black, 14% Hispanic and Latino, and 5% Asian. The area is highly educated with 49% percent of the population holding at least a bachelor's degree and almost half of those individuals holding a graduate or professional degree. The median annual income for a working person over the age of 25 is \$38,962 and \$46,380 for those with a

bachelor's degree. An estimated 39% of the population is enrolled in postsecondary education with 25% in undergraduate studies and 14% in graduate studies (U.S. Census Bureau, 2017).

Carteret Community College (CCC) is located in Morehead City, North Carolina, a port city in the eastern part of the state and the smallest town we visited. The waterfront campus sits on the edge of the Bogue Sound which can be viewed from their waterfront student center. The area is predominantly White (83%) and 30% of the population holds a bachelor's degree or higher. Within the 18 to 24 age group, 60% of the population has attended at least some college or have an associate degree, but only 12% have translated that into a bachelor's degree. The median annual income for a working person over the age of 25 is \$27,395 and \$40,716 for those with a bachelor's degree. An estimated 39% of the population is enrolled in postsecondary education with 25% in undergraduate studies and 6% in graduate studies (U.S. Census Bureau, 2017).

Table 1 illustrates specific data points from each community college including enrollment, financial aid, and cost data. It is important to note the cost of attendance listed in the table. The cost of attendance is a required disclosure by the Higher Education Act of 1965 (2008) and is assembled by each college. The elements included in the calculation include direct costs (costs directly related to education, including tuition, fees, books, and supplies) and indirect costs (costs indirectly related to education but are needed to be able to subsist, such as transportation, room, board, and personal expenses; Higher Education Act of 1965, 2008). Most colleges estimate a cost of attendance based on the type of student. For community colleges in North Carolina, there are typically four different costs of attendance for the following groups: 1) students charged in-state tuition and living at home with their family; 2) students charged in-state tuition and living off-campus on their own; 3) students charge out-of-state tuition and living at

home with their family; and 4) students charged out-of-state tuition living off-campus on their own. At public universities in North Carolina, there are usually six estimated costs of attendance based on students receiving in-state tuition or out-of-state tuition and then based on either living on campus, off-campus with their families, or off-campus on their own. In this study, all students were considered in-state, so only those data points were included. While this may not be an exact cost for a student to attend the school, it is an estimate used to determine need-based aid, the total amount of funding a student can receive, and can be the basis for funding such as scholarships.

The second data point to note is the average net price. Net price is defined as the cost of attendance minus the amount of grant and scholarship aid awarded to a student (Federal Student Aid, 2018). The student is typically responsible for covering the net price with student loans, earnings from work, parent contribution, or however else is necessary. Often a student alone cannot borrow enough federal student loans to cover the net price. For example, an 18-year-old dependent student can only borrow \$5,500 for their first year of college and a 24-year-old independent student can borrow \$9,500. This data point will be more salient in reviewing the university data.

Table 1

*Community College Descriptive Characteristics*

	FTCC	DTCC	CCC
Setting	City: Midsize	City: Large	Town: Distant
City	Winston-Salem	Durham	Morehead City
Student to faculty ratio	11:1	13:1	7:1
Total undergrad enrollment (fall 2018)	7,779	5,434	1,390
Transfer out rate	21%	25%	29%
% Undergrad students age 25+	-	48%	34%
Average in-state tuition	\$2,199	\$1,958	\$2,696
Estimated Cost of Attendance: In-state/with family	\$6,158	\$8,178	\$12,748
Estimated Cost of Attendance: In-state/off campus	\$16,450	\$19,050	\$22,674
% with Pell Grant award (full-time, first-time)	57%	49%	57%
Average Pell Grant	\$5,064	\$4,944	\$6,983
% with federal student loans (full time, first-time)	69%	8%	not offered
Average federal student loans	\$5,066	\$5,117	n/a
% with institutional aid (full-time, first-time)	0%	63%	10%
Average institutional aid	\$0	\$923	\$647
Average net price (cost minus grants and scholarships)	\$4,629	\$7,759	\$10,190
Average net price for lowest income group	\$3,759	\$6,600	\$9,205
Non-Pell recipient graduation rate (full-time, non-first time)	23%	5%	34%
Pell recipient graduation rate (full-time, non-first time)	12%	3%	16%

*Note.* Adapted from <https://nces.ed.gov/collegenavigator/> by National Center for Education Statistics.

**Universities.** The three corresponding universities in the partnership pairs are: 1) Appalachian State University; 2) the University of North Carolina at Chapel Hill; and 3) the University of North Carolina at Wilmington, respectively. The geographic regions of these three institutions are very different, as well as the populations within those regions.

Appalachian State University (ASU) is located in the town of Boone, North Carolina which is situated in the Blue Ridge Mountains in the northwestern part of the state. Boone is the second smallest town that we visited behind Morehead City; however, the town is predominantly made up of university students with a median age of 21 and 94% of the population enrolled in

postsecondary education. Due to this, it is difficult to evaluate median income data with any certainty since most everyone in the town is a student. The town is also predominantly White (90%) and there is a slight majority of males (51%; U.S. Census Bureau, 2017).

The University of North Carolina at Chapel Hill (UNC-CH) is located in Chapel Hill, North Carolina in the center of the state and like DTCC is located in the region known as the Research Triangle. The university is the flagship school of the UNC System and began enrolling students in 1795 making it the oldest public university in the United States. The campus is somewhat more diverse than the others in this study with 68% White, 13% Asian, 10% Black, and 6% Hispanic and Latino. Chapel Hill is also predominantly made up of college students with 71% of the population enrolled in postsecondary education (U.S. Census Bureau, 2017).

The University of North Carolina at Wilmington (UNC-W) is located in the port city of Wilmington, North Carolina along the Cape Fear River. The city is 72% White, 18% Black, and 6% Hispanic and Latino and has a majority of females (53%). The university is part of Wilmington but does not encompass the vast majority of the area or population like the other two universities in this study. About 50% of the population in Wilmington is enrolled in postsecondary education and 41% of the population holds a bachelor's degree or higher. The median income for those who are age 25 or older and working is \$34,247 and \$44,492 for those holding a bachelor's degree (U.S. Census Bureau, 2017).

Table 2 illustrates specific data points from each university including enrollment, financial aid, and cost data.

Table 2

*University Descriptive Characteristics*

Name of University	ASU	UNC-CH	UNC-W
Setting	Town: Distant	City: Small	City: Midsize
City	Boone	Chapel Hill	Wilmington
Student to faculty ratio	16:1	13:1	17:1
Total undergrad enrollment (fall 2018)	17,381	19,117	14,452
Undergrad transfer in enrollment (fall 2018)	1,568	817	1,919
% Undergrad students age 25+	7%	3%	18%
Average in-state tuition	\$7,364	\$8,987	\$7,091
Estimated Cost of Attendance: In-state/on campus	\$19,194	\$23,811	\$24,982
Estimated Cost of Attendance: In-state/off campus	\$20,427	\$23,811	\$24,982
% with Pell Grant award (full-time, first-time)	26%	21%	25%
Average Pell Grant	\$4,520	\$4,644	\$4,820
% with federal student loans (full time, first-time)	51%	27%	53%
Average federal student loans	\$5,136	\$4,333	\$5,315
% with institutional aid (full-time, first-time)	35%	44%	48%
Average institutional aid	\$4,192	\$13,557	\$3,225
Average net price (cost minus grants and scholarships)	\$10,491	\$11,649	\$17,771
Average net price for lowest income group	\$7,238	\$4,159	\$12,443
Non-Pell recipient graduation rate (full-time, non-first time)	78%	89%	78%
Pell recipient graduation rate (full-time, non-first time)	72%	85%	75%

*Note.* Adapted from <https://nces.ed.gov/collegenavigator/> by National Center for Education Statistics.

### Qualitative Data Collection

The following sections outline the strategies utilized for qualitative data collection, focus groups, and one-on-one interviews.

**Document analysis.** Document analysis is a “systematic procedure for reviewing or evaluating documents--both printed and electronic” yielding data that can be organized into themes, categories, and case examples (Bowen, 2008, p. 27). While this analysis was used to select cases and inform interview and focus group protocols, it also served as a form of

triangulation, as we sought corroboration between the data collected from the documents, focus groups, and interviews (Bowen, 2008).

To conduct document analysis, the website of each college in the potential effective partnership pairs was reviewed to extract useful information, such as transfer policies, resources for students, bilateral agreements, and marketing material geared toward transfer students. Content analysis was performed on each website and evaluated using a rubric developed by our research team based on Wyner et al. 's (2016) book of effective transfer practices. Data gathered through document analysis were stored in a shared, password-protected drive.

**Focus groups.** Focus groups are a useful tool for collecting data through group interaction about a shared topic. We visited the campuses of each of the institutions identified within the three strongest partnership pairs (six colleges total) to conduct focus groups after receiving approval from each college's Institutional Review Board. The focus groups were conducted with administrators, faculty, and staff at all six colleges on their own campus. Collecting data in the natural setting where participants experience the phenomenon provides the researcher with an up-close viewpoint (Creswell & Poth, 2018). A natural setting also provides a clear perspective to the participants' enacted values, physical structures, shared language, rituals and ceremonies, and the gathering of stories and legends (Creswell & Poth, 2018).

To recruit administrators to participate in the focus groups, we started with information gleaned in the document analysis. We identified administrators at each college involved in transfer and contacted them via email. We focused on administrators with titles such as transfer coordinator, chief academic officer, and director of advising. The specific administrator targeted at each institution varied as each organizational structure and individual responsiveness was different. Because titles vary widely across the NCCCS and UNC System, no two administrators

were the same. Our goal was to engage an administrator on each campus who would serve as a gatekeeper and ambassador for the study. We were able to establish gatekeepers at five of the six institutions. The gatekeepers helped schedule campus visits and recruit other faculty and staff to participate in the focus groups. The purpose of the focus groups was to examine the transfer and partnership practices of the institution.

A focus group method of collection was specifically selected to foster conversation amongst participants and to understand how each participant's role can affect others. The focus group protocol included open-ended questions to facilitate discussion amongst participants (see Appendix B). The protocol for the focus groups was developed based on a model detailing effective transfer practices at two- and four-year colleges developed by Fink and Jenkins (2017) and a model for successful partnerships developed by Hanleybrown, Kania, and Kramer (2012). The focus groups were recorded with participant consent and pseudonyms were assigned to each administrator. Each focus group was conducted in under two hours to be respectful of the participants' time. Following each focus group, members of our research team discussed and journaled observations and initial reactions. Two focus groups were transcribed by one of the researchers on the team using the artificial intelligence software, Otter. The other four were transcribed through an outsourcing service called Verbalink. The focus groups were conducted as part of the larger study and are analyzed in Bartek (2020b).

**Interviews.** Interviews are considered one of the most essential methods of data collection in case study research (Yin, 2018). An interview is considered to be a social interaction based on a conversation (Rubin & Rubin, 2012; Warren & Xavia Karner, 2015). According to Brinkmann and Kvale (2015), an interview is where “knowledge is constructed in the interaction between the interviewer and the interviewee” (p. 4).



Purposeful sampling was utilized to recruit interview participants because it allows researchers to select students that informed the understanding of the research problem (Creswell & Poth, 2018). Purposeful sampling allowed us to identify participants who could provide an understanding of the specific topic areas in question (i.e., transfer practices and partnership, DE students, and low-income students). According to Merriam (1998), “purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight” regarding the phenomenon (p. 61); therefore, the researcher must select a sample of participants who can inform the research with the data necessary to answer the research questions. This type of purposeful sampling is “unique sampling.” Merriam (1998) noted that unique sampling is based on a need to isolate individuals who have a unique and specific knowledge related to the purpose for which the research is directed.

Target participants for interviews were students at the UNC System institutions who successfully transferred from the partner community college and either participated in a DE program at a NCCCS college or were low-income, identified as those receiving Pell Grants at the UNC System institution. Gatekeepers at the three UNC System colleges identified as high-performing partner institutions were asked to assist us in recruiting students who met the criteria for selection. Gatekeepers were able to assist in a variety of ways, including emailing potential participants directly and sharing information about our interviews and campus visit in a transfer newsletter. One gatekeeper was even able to provide a roster of all currently enrolled students from the specified community college.

Participants were initially recruited using social media posts with minimal success. Determining that a roster of students was an essential tool for recruitment, we used online public record request portals for the other two universities to request a roster of students who met the

criteria for our study. The Family Educational Rights and Privacy Act (FERPA) allows schools to release directory information for students and each school determines what constitutes directory information. The two universities were able to release rosters of all current undergraduate students, but they could not disclose previously attended institutions. Recruitment emails were sent to either all students or targeted groups of students depending on the information included and the size of each roster. At one university, we were able to target communications to students who were more likely than others to have attended a certain community college based on a home address in the same county or surrounding county of the community college.

An incentive, in the form of a \$25 Amazon gift card, was used in order to increase participation. Students interested in participating were directed to an online pre-screening form to ensure they met the criteria (See Appendix C). The online form included 14 questions that were either multiple choice or short answer. It was important to keep the questionnaire as brief as possible, so potential participants did not find the form to be cumbersome. Overall, 106 potential participants completed the online form.

If the student met the criteria set forth in this study, an email was sent to schedule an interview time during the campus visit. If the student was not on campus or not available during the visit, an online meeting or off-campus meeting was arranged depending on the student's preference. Once the interview time and place were finalized, a confirmation email was sent to the student. A reminder email was sent 24-48 hours prior to the interview and a thank you email was sent in the few weeks following the interview with the member check.

The participant recruitment portion of this study required significant time, effort, and organization. The work was divided between the research team; I led the gatekeeper and focus

group recruitment and Swing led the student interview recruitment. All correspondence and scheduling data were organized in a shared Google Sheet in a password protected drive. This allowed our team to track potential participants, including when each participant was contacted and when site visits and interviews were scheduled. We also used this mechanism to track the incentives given to students and send member checking materials.

Our target sample size was 18-24 DE students and 18-24 Pell Grant recipients who had transferred to the university from the partner community college. Swing and I aimed to each conduct six to eight student interviews per university during each two-day site visit. Swing interviewed 10 students at ASU, seven from UNC-CH, and eight from the UNC-W for a total of 25. I interviewed seven students at ASU, five from UNC-CH, and eight from the UNC-W for a total of 20. We believe we were able to reach saturation with no new information emerging related to transfer (Saldaña, 2013).

All of the interviews were digitally recorded, with the participant's consent, using two recording devices, one serving as a back-up to the other. Each interview lasted an average of 45 minutes. The interviews were recorded for two major reasons; first, so the researcher could focus on the student and be engaged in the conversation during the interview; and second, so the researcher could later transcribe the interview to accurately reflect what was said and ensure completeness in data collection. Seidman (2006) suggested that recording interviews facilitates active listening.

Interview protocols were developed based on our research questions and information from the document analysis (See Appendix A). Swing and I each added our own notes and observations to the interview protocol directly following the conclusion of the session. Each participant was assigned a pseudonym and no record of their real name was kept. We

transcribed each interview using the artificial intelligence software Otter, as soon as possible after the interviews. Each transcript was then securely sent to each participant for member checking to ensure the experiences of the interviewees were accurately reflected. Member checking, where the researcher solicits feedback from the participants to ensure their viewpoint was captured, increases the credibility of the study (Creswell & Poth, 2018). Follow-up questions were sent to the gatekeepers or a specific administrator via email, as needed, to clarify information from the student interviews. All emails were saved and stored as part of our record keeping. All data obtained were stored responsibly on a password-protected shared drive and online interviews were encrypted.

### **Qualitative Data Analysis**

The study was conducted over a period of eight weeks and involved the collection of large amounts of data through in-depth interviews with multiple participants. Data analysis began at the conclusion of all interviews and was a collaborative process. Case study data analysis was conducted using a data analysis spiral as described by Creswell and Poth (2018), which involves an iterative, spiraling process that moves from more general to more specific observations. To analyze qualitative data, Creswell and Poth (2018) suggest the researcher engage in the process of moving in analytic circles rather than using a linear approach. This method allows the researcher to enter with data of text and exit with an account or a narrative. In between, the researcher touches on several facets of analysis and circles around and around. Within each spiral, the researcher uses analytic strategies for the goal of generating specific analytic outcomes. See Figure 4 for a visual representation of the process.

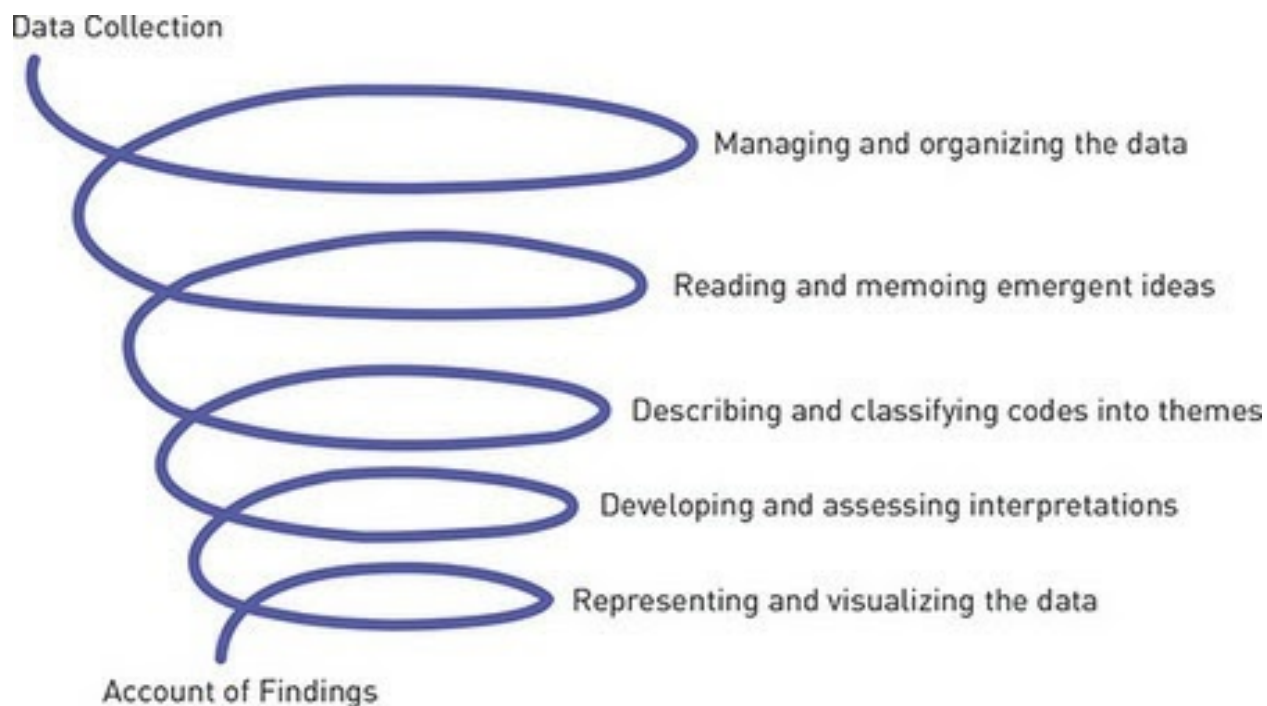


Figure 4. The data analysis spiral. Reprinted from *Qualitative inquiry and research design: Choosing among five approaches* (p. 186), by J. W. Creswell and C. N. Poth, 2018, Thousand Oaks, CA: Sage Publications, Inc.

The first loop in the spiral starts with managing and organizing the data. The consistent application of a file naming system ensures materials can be easily located in large databases of recordings for analysis either by hand or by computer (Bazeley, 2013). During this process, we organized the data into digital files in a password protected drive and created a file naming system based on the pseudonym of the participant and the university where the participant attended. This allowed us to organize our subcases, the students, within our partnership pair cases.

The second loop of the spiral is reading and memoing emergent ideas. Creswell and Poth (2018) suggest that researchers “read the transcripts in their entirety several times. Immerse yourself in the details, trying to get a sense of the interview as a whole before breaking it into

parts” (p. 103). Part of this process included the transcription of each interview using Otter software. The artificial intelligence program was able to automatically transcribe the recordings of our interviews, but each had to be checked for accuracy. This required the researchers to listen to the recording while reviewing and editing the transcript. We estimate that for each interview, this process took about double the length of time of the interview. While this was a significant time commitment, it allowed us to review and examine the details of each interview.

Creswell and Poth (2018) also suggest using memoing as a strategy to explore a large database. They define memoing as writing short phrases, ideas, or key concepts as they occur to the researcher without getting caught up in the detail of coding. We wrote memos for each transcript either during or after transcribing the interviews which allowed us to begin synthesizing for higher-level analytical meaning (Creswell & Poth, 2018). Written memos were utilized throughout the process for code development, reflections over time, and summaries across the project.

The third loop of the spiral is describing and classifying codes into themes where the data is described in detail, classified using coding, and interpreted into themes (Creswell & Poth, 2018). This loop is where a majority of time was spent coding the data in multiple rounds and classifying and refining those codes into themes. The outcome from this loop included a finalized codebook that could be used to guide the development of themes. Our detailed coding procedure is described later in this chapter.

The fourth loop of the spiral is developing and assessing interpretations. Interpretation involves making sense of the data, requiring judgments to be made with critical consideration to what is meaningful while checking one’s interpretations using relevant literature and existing

data for comparison (Creswell & Poth, 2018). We interpreted our data based on the theories and relevant literature outlined in Chapters One and Two of this dissertation.

The final loop of the spiral is representing and visualizing the data which will be discussed in the findings section of Chapter Five.

**Coding procedures.** After reviewing the options available to us and getting an expert opinion from Library Services at North Carolina State University for this study, our research team decided to use a cloud-based version of Atlas.ti software. Atlas.ti is a computer program that enables the researcher to organize and code interview transcripts along with other documents, such as memos or journals. With Atlas.ti, the researcher is able to code, annotate, and compare segments of information quickly. It also allows the researcher to rapidly search, retrieve, and browse all relevant data segments and build unique visual networks that connect passages, memos, and codes into a concept map.

We used Saldaña's (2013) two-cycle coding strategy to analyze the qualitative data collected. Saldaña (2013) noted that the use of codes helps researchers summarize and condense data and to find repetitive patterns of action and consistency in behavior. The cyclical act of coding the data focuses on the salient features needed to generate categories, themes, and concepts present in the data.

Elemental methods, defined by Saldaña (2013) as foundational approaches to coding qualitative texts, were used to guide the qualitative data analysis. Elemental methods include five coding strategies that were each used in this study: structural coding, descriptive coding, in vivo coding, process coding, and initial coding. Structural coding uses a content-based or conceptual phrase that relates to a specific research question as the code (Saldaña, 2013). The data segments coded similarly are then gathered and re-analyzed. This coding technique was

especially helpful in extracting segments of the interviews that specifically addressed the students' transfer-related experiences and those experiences that related to policies and procedures of the colleges. Descriptive coding summarizes a data segment with a word or short phrase to convey the basic topic of the passage (Saldaña, 2013). This type of coding was useful when identifying similar topics discussed across cases such as the cost of books. In vivo coding requires the researcher to use words or phrases directly from the participant's own words as the code and helps researchers become attuned to the language, perspectives, and worldviews of the participants (Saldaña, 2013). This type of coding was important in this study because we were examining the experiences of students and wanted to honor their voices. In vivo and descriptive coding helped to elicit a vivid portrait of the salient actions and cultural beliefs held by the community college to promote transfer to the four-year institution. Process coding uses gerunds to extract participants' actions and consequences from the data (Saldaña, 2013). This was especially useful when coding actions and results that occurred during the transfer process for each student, such as a student visiting an advisor or asking for advice. Finally, initial coding simply delineates the first major review and coding of the data and incorporates other coding methods. Attribute coding was also used to notate descriptive data for each participant. This coding strategy was helpful when compiling profiles of each student and is reported in table format in Chapter Four.

Using these first cycle strategies from Saldaña (2013), each transcript was read and coded twice. In the first review, we focused on in vivo, descriptive, and attribute coding. The second review of each transcript focused on structural and process coding. Once the initial codes were developed, we used a process of code mapping to categorize and refine the codes around



the study's research questions and theoretical frameworks. This allowed us to focus our codebook into organized categories and focus on higher-level concepts (Saldaña, 2013).

During second-cycle coding, the data coded in the first cycle was reorganized and reanalyzed to develop categorical, thematic, and conceptual topics (Saldaña, 2013). Pattern coding was used to pull emergent themes into a more meaningful and parsimonious unit of analysis. Throughout the second cycle of coding, after answering the "why" questions in the research, an understanding of "what" enacted values were used by the participants and "how" those enacted values related to students successfully transferring to the four-year institution were examined.

The final stage of the coding cycle was post-coding and pre-writing. Code weaving was used to investigate how the themes were interrelated and to determine the causality of themes (Saldaña, 2013). This assisted us in presenting a holistic view of the data. The most salient ideas that emerged from the data were used to compose the findings in Chapter Five.

A codebook was developed and refined by each researcher to organize the codes into categories and subcategories. The codebook can be reviewed in Appendix E.

Saldaña (2013) suggested a process of collaborative coding where "team members can both code their own and others' data gathered in the field to cast a wider analytic net and provide a 'reality check' for each other" (p. 35). All researchers (Bartek, Swing, and I) collaborated to provide a check to the coding of the qualitative results. Passages from each study's data were selected and coded together as a team. Our group met to review the transcripts and codes, and changes to the codebook were based on this work. This process was fundamental in making sure all relevant information was extracted, our codebooks were translatable, and that the participant's voices were interpreted correctly. This served as a "reality check" and for interrater reliability

(Saldaña, 2013). Not only did this collaboration make the study more manageable, but it provided triangulation and data validation not typically possible in single-authored works.

**Memoing.** We also utilized several memoing strategies throughout our data collection and analysis processes. The first type of memo that was used was a form of field notes focused on summary and reflection. Later memos focused on analyzing and synthesizing the data in the context of the research questions assisted in forming the themes discussed in later chapters.

After each interview, we reflected on our initial thoughts and the factors that stood out in each student's experience. We wrote a memo for each interview summarizing the student's experience and our first impressions. Also documented in these memos was our reflective thoughts on how we related to the participant. By reflecting on our own emotions, relationships, attitudes, and beliefs, we were able to better understand participants' perspectives and worldviews (Saldaña, 2013). We also debriefed together after each site visit, discussing both the interviews and focus groups, which helped us check our understanding of the participants and how their experiences were similar or different.

Clarke (2005) described memos as "sites of conversations with ourselves about our data" (p. 202). Writing analytic memos with breadth and depth in content assists researchers in writing substantive portions in the final chapters of the study. Saldaña, (2013) wrote:

The purpose of the analytic memo writing is to document and reflect on the coding process and the code choice, how the process of inquiry will take shape, and the emergent patterns, categories, subcategories, themes, and concepts in the data. (p. 41)

Analytic memos also aided us in tracking the progression of the research. Furthermore, "analytic memo writing serves as an additional code and category generating method" (Saldaña, 2013, p. 51). We utilized analytic memos to organize the research data and document research

discoveries that were used to form the foundation for composing Chapters Four and Five.

Memos helped us organize, track, and reflect upon concepts that began to emerge in the data and later led to the formation of our themes.

Saldaña (2013) further noted that the act of coding data and writing analytic memos happens concurrently in the analytic process and helps the researcher understand the phenomenon by labeling and classifying memos into different subcategories. We used the following types of memos, each with a specific purpose: theoretical memos, coding memos, task memos, and research question memos. A description of each of these memo subcategories is below.

***Theoretical memos.*** To structure the study within our theoretical frameworks, we used memos to establish how our data related to the theory. We detailed the components of the framework and then determined how our data fit within the theory. Data that presented ideologies that were not covered in the theoretical framework were then summarized to capture ideas for possible amendments to the theory or future research actions which are discussed in Chapter Six (Saldaña, 2013).

***Coding memos.*** Coding memos assist in listing and grouping codes into broader concepts, suggesting themes, and creating order in the data analysis (Saldaña, 2013). Additionally, coding memos capture code weaving to summarize how the research pieces fit together. Diagrams can also be designed to illustrate the connectivity between concepts (Saldaña, 2013). We used coding memos to begin to group related codes together, which focused our reflections around themes. It was also helpful to use diagrams to ascertain how some of the codes and themes were related or overlapped. The emergent categories, themes, patterns, and concepts were captured in these memos.

***Task memos.*** Task memos were written to enable us to reflect on the coded data and provide instruction for performing additional tasks to aid in the understanding of the phenomenon. Using these memos allowed us to organize and track tasks that were needed and allowed us to store follow up information in an organized way. For example, when follow-up questioning was needed to gain a fuller understanding of a participant's response such as the advising model at an institution, it was documented in a task memo. The task was usually completed by online research or contacting an institution's gatekeeper and then findings were recorded in the task memo.

***Research question memos.*** This type of memo allowed us to align our reflections with our research questions to keep focus on the topics at hand. This was very important in keeping our data analysis on track and within the scope of our research questions. Because the participants presented such a variety of data, some outside of the scope of this project, it was tempting to get distracted by an unrelated topic. Research question memos were written for each student interviewed. The research questions were written out and then codes from the interview were situated within the appropriate research question. We were then able to reflect on the concepts within each question which later served as a genesis for Chapters Four and Five of this research study (Saldaña, 2013). The process of memoing throughout data collection and analysis was imperative for understanding our participants, organizing large amounts of data and codes, producing themes, and focusing the analysis within the confines of our studies.

### **Trustworthiness**

For the qualitative phase, the focus is more on validity than reliability and "assessing whether the information obtained ... is accurate, such as examining the extent to which the information is credible, transferable, dependable, and confirmable (Lincoln & Guba, 1985). The

use of at least three strategies to determine validity is recommended (Creswell & Plano Clark, 2018), so our research team used member checking, triangulation, and contrary perspectives to ensure trustworthiness. Member checks were used for participants in both the focus groups and interviews. At the end of each interview, I informed each participant that I would be sending a copy of the transcript to them by email for their review. If they needed to make changes or clarify any topic they could and return to me by email. If they were satisfied with the transcript then they did not have to respond. No response was an indication that they were giving me permission to use their transcript as it was. By allowing the participants to review the transcript for accuracy, we created trustworthiness that their stories are being told authentically (Merriam & Tisdell, 2015). Triangulation was also used as we drew data from multiple sources in both the qualitative and quantitative phases. After each site visit, we reviewed our field notes and debriefed the data and the research process (Creswell & Poth, 2018). This allowed us to compare and reflect on methods, meanings, and interpretations to provide an external check (Creswell & Poth, 2018). It was especially helpful to check our interpretations of the data and to process our feelings after each site visit. Additionally, the debriefing process assisted in keeping us honest and in check of any bias or personal feelings.

Finally, our research team reported disconfirming evidence, information, or perspectives that were contrary to the perspective we sought in order to confirm the data analysis' accuracy (Creswell & Plano Clark, 2018).

### **Limitations**

The quantitative results Bartek (2020a) used in the selection process of cases for this study used 2011 data to identify high-performing partnerships. Those partnership institutions were visited in 2019. Because of the time gap, current transfer outcomes could be different.

This limits generalizability; however, qualitative findings are not necessarily meant to be generalizable since the findings are unique to the context and participants (Creswell & Plano Clark, 2018). A strength of this mixed methods analysis is that multiple forms of data were collected and triangulated, which improves the validity and generalizability of the findings so that they can be applied to other colleges within the state and to other state contexts with similar state policy. Further, the recency of this data provides insight into more current transfer practices and student experiences.

Generalizing the results of this study is limited by the selective nature of the population under investigation. Dual enrollment has been employed in all 50 states (Andrews, 2001), includes students of varying academic ability (Clark, 2001), and is generally considered a public school reform model. This study, however, is limited to students in the partnerships pair institutions selected to be studied. Secondly, because dual enrollment encompasses a variety of delivery methods, instructor options (high school instructor versus college faculty), and locations (classes at high school versus on a college campus versus online), only generalizations should be drawn from this research. A third limitation is that this study was limited to dual enrollment practices in North Carolina. Although North Carolina was an ideal locale for the study due to the number of community colleges in the state, its dual enrollment policies are not identical to those of other states in the Nation. Therefore, the results of this study are best used to inform educators in North Carolina.

### **Role of the Researcher**

Preconceptions and beliefs regarding the topic of high school students participating in DE programs and then transitioning to four-year institutions were informed by my experiences in education, both as a dual enrolled high school student and as an educator. My interest in this

study stems from being a former high school teacher, a community college instructor, and currently an academic dean with 28 years of experience in education. My work experience includes assisting students and families regarding student achievement, four-year graduation plans, and transition to college and work. My interactions with students in DE programs, as well as with DE administrators, staff, and teachers have led to a well-informed understanding of the importance of participation in such programs with regard to students' college readiness and degree attainability.

This study was motivated by my personal experience with DE. The community college where I am an academic dean is currently the site of a middle college, which enrolls many high school students from our service area's high schools. I became interested in understanding why students were choosing to participate in DE programs. Based on my experience with DE, I have developed opinions as to why students are participating in DE; however, I am conducting this study openly, setting aside previous notions.

## **Chapter Summary**

An overview of the methods used in this study was provided in this chapter. Using quantitative analysis from Bartek (2020a), document analysis, and informal interviews, this study identified three top partnership pairs of NCCCS and UNC System colleges where students graduated with bachelor's degrees at higher-than-expected rates. The three pairs served as cases in this qualitative case study and site visits were conducted at each of the six institutions. Focus groups were conducted with administrators, faculty, and staff at all six institutions and interviews were conducted with current students at the three universities. Data were analyzed guided by Creswell and Poth's (2018) data analysis spiral and included multiple rounds of coding and memoing techniques to extract themes and overall findings. The chapter concluded

by addressing trustworthiness, the role of the researcher, and the potential limitations of the study. The following chapters will discuss the findings and implications that emerged situated within the data.



## CHAPTER 4: PARTICIPANT, SITE, AND COMPOSITE PROFILES

The purpose of this qualitative study was to explore the experiences of students who participated in DE programs and successfully transferred to a four-year institution in an effort to discover what experiences most impacted their successful navigation of the transfer process and their motivation to persist and complete their four-year degree. I interviewed 20 students from three universities in North Carolina over the course of five weeks. The selection of the universities was determined by a quantitative study conducted by Bartek (2020a). Bartek identified three pairs of successful partnerships between community colleges and four-year institutions in the state of North Carolina: Carteret Community College (CCC) and the University of North Carolina Wilmington (UNC-W); Durham Technical Community College (DTCC) and the University of North Carolina Chapel Hill (UNC-CH); and Forsyth Technical Community College (FTCC) and Appalachian State University (ASU). This chapter presents a brief overview of each participant, a brief overview of the three community colleges and three universities in the partnership pairs, and composite profiles that convey the major themes that arose during the collective interviews.

The composite profile was divided into three pivotal points in the students' academic progression from high school to a four-year university. The first composite profile, "Should I Participate in a DE Program," describes the major themes that emerged when students were considering whether or not to participate in a DE program. The second composite profile, "The DE Program," is a summation of students' experiences while in the DE program. The third composite profile, "Time to Move On: The University," explores the period of time during which students graduated from high school and transitioned to the four-year university. The themes that emerged during the interviews are discussed in greater detail in Chapter Five.

Prior to the composite profiles, I provide a brief overview of each participant, grouped according to the partnership pairs, as well as a brief overview of the community colleges and universities in the partnership pairs. This description is intended to provide the reader with an overview of general demographic information about each participant and each site.

An advantage of the composite profiles (Willis, 2018) is that one account can tell a story of a collective group through general, yet representative, experiences of the participants. I was drawn to the composite profile method of reporting data after first reading examples of others' work but also because of the sheer volume of qualitative data I had to manage. I conducted 20 interviews with current UNC students, and they talked to me about their life, their relationships with various people, and the challenges and successes they experienced once they had transferred to a UNC System institution. The composite profile allowed me to present complex, situated accounts from individuals, rather than breaking the data down into categories (Willis, 2018). Secondly, composite profiles confer anonymity, allowing the researcher to treat the collective experiences of all participants as one, fluid account. Third, composite profiles condense findings in ways that prove useful and accessible to those outside of the research.

### **Participant Profiles**

**CCC and UNC-W.** The following participants participated in DE at CCC and successfully transferred to UNC-W.

Table 3

*Participant Profile for CCC and UNC-W Students*

Name (Pseudonym)	High School Institution	Age	Gender	Race/ Ethnicity	DE Experience	# of Credit Hours and/or Degree Completed	First- Generation College	Siblings with College Experience
Cooke, Richard	Public	21	M	White	Online	9	N	Yes
Duke, Michelle	Public	18	F	White	Online	12	Y	No
English, Georgia	Private (Homeschooled)	20	F	White	Traditional	45	Y	No
Goode, Catherine	Public	19	F	White	Online	12-14	Y	No
King, Joy	Public	19	F	White	Online	18	Y	No
Mack, Zillow	Public	21	F	Asian	Online	3	Y	Yes
Roberts, Jennifer	Public	22	F	White	Traditional	21	Y	No
Smith, Alicia	Public	18	F	Asian	Online	21	N	Yes

**Richard Cooke.** Richard is a senior majoring in marketing with a focus on professional selling at UNC-W. He participated in DE by taking three online courses during his senior and junior years in high school. He was not successful with one of the courses and had to re-take it. His mother has a master's degree and works at another UNC System school. His father earned an associate degree. Richard did not work during high school and works only in the summers while attending UNC-W. He has two older sisters. One attended UNC-W but did not graduate. Richard did not participate in any extracurricular activities in high school but did join a fraternity in his sophomore year at UNC-W. He is scheduled to graduate in the spring of 2020.

**Michelle Duke.** Michelle is a student at UNC-W and has not yet declared her major. She is leaning toward either the medical field (nursing) or social work. Both of her parents are college-educated, and she is the youngest of three children. Michelle took online DE courses in her junior and senior years of high school. While in high school, she worked several part-time jobs, including working the concession stand for a minor league baseball team and working at two fast-food chains. She is not working while attending UNC-W. She completed and transferred 12 semester hours of credit to UNC-W.

**Georgia English.** Georgia is a music technology major and a first-generation college student attending UNC-W. She is the youngest of five children. Her mother earned a cosmetology degree at CCC and is the only person in her family with college experience. Georgia participated in DE as a homeschooled student. She completed 15 hours as a DE student and then transferred to CCC where she earned an additional 30 hours of credit. She did not complete the associate degree. She was encouraged to transfer without the degree because she gained acceptance to UNC-W. None of the courses she completed through DE transferred to UNC-W.

**Catherine Goode.** Catherine is a first-generation pre-nursing major at UNC-W. She has one younger brother and is engaged to be married. She participated in DE by taking online courses at CCC during her junior and senior years in high school. Catherine worked at a restaurant as a DE student and works as a babysitter and nanny while enrolled at UNC-W. She did not participate in any extracurricular activities while in high school and does not participate in any while enrolled at UNC-W. She thinks she earned and transferred 12-14 semester hours of credit to UNC-W.

**Joy King.** Joy is a first-generation pre-nursing major at UNC-W. Neither of Joy's parents went to college and her father is deceased. She has an older brother who also did not pursue college. Joy participated in DE by taking online courses during her junior and senior years. She took 12 credit hours but only 9 of those hours transferred to UNC-W. She also took 9 hours of AP credit, all of which did transfer to UNC-W. When she was enrolled in DE, she had two part-time jobs. She is still employed at one of those jobs, working only on the weekends and during breaks. When she participated in DE, she played soccer but does not currently participate in any extracurricular activities.

**Zillow Mack.** Zillow is a first-generation environmental science major at UNC-W. Her mother completed her associate degree at a community college. Zillow participated in DE by taking one online course (three semester hours of credit) at CCC during her senior year. Upon her high school graduation, she transferred to CCC and completed an associate degree. She then transferred to UNC-W. While in high school and while at CCC, Zillow worked 20-30 hours per week at a bowling alley and an escape room. She is not working while attending UNC-W. She has an older sister who is taking courses at CCC. Her mother is also taking courses at CCC, though she completed an associate degree in medical science from another community college.

Her maternal family originates from Argentina, and Spanish is the primary language spoken in the home.

**Jennifer Roberts.** Jennifer is a first-generation college student majoring in public health with a concentration in community health at UNC-W. She is the middle child with an older brother and a younger brother. She participated in DE by taking traditional courses at CCC during her senior year of high school. Her younger brother is also a DE student. While participating in DE, Jennifer worked part-time but only on the weekends. As a student at UNC-W, she is working almost full-time. As a DE student, she completed and transferred 18 semester hours of credit to UNC-W. Jennifer also took three hours of AP courses in high school. She did not participate in any extracurricular activities in high school but has joined a sorority at UNC-W. Next semester she plans to complete an internship in her field.

**Alicia Smith.** Alicia is a second-generation college student majoring in chemistry at UNC-W. She has an older sister who attended a UNC System college, as well as another older sister who graduated from a UNC System school. She participated in DE by taking online courses at CCC in her junior and senior years in high school. Alicia worked at a fast-food chain while a DE student and she currently works for the same fast-food restaurant chain in Wilmington. While in high school, she participated in extracurricular activities, such as Key Club, student government, and the school news. At UNC-W, she continues to participate in the Key Club and also lives in a learning community focused on careers in medicine. She earned and transferred 21 semester hours of credit to UNC-W.

**DTCC and UNC-CH.** The following participants participated in DE at DTCC and successfully transferred to UNC-CH.

Table 4

*Participant Profile for DTCC and UNC-CH Students*

Name (Pseudonym)	High School Institution	Age	Gender	Race/Ethnicity	DE Experience	# of Credit Hours and/or Degree Completed	First-Generation College	Siblings with College Experience
Anderson, Colby	Public	20	M	White	Middle College	60 (AA)	N	Yes
Holmes, Jacqueline	Public	22	F	White	Middle College	40	N	Yes
King, Renee	Public	18	F	Black	Traditional	60 (AS)	N	No
Umpire, Jada	Public	18	F	Black	Traditional	60 (AS)	Y	Yes
Williams, Bobby	Public	19	M	Asian	Traditional	26	Y	No

**Colby Anderson.** Colby is double majoring in peace, war, and defense and public policy while minoring in Chinese at UNC-CH. He participated in DE at the Middle College High School (MCHS) at DTCC. Both of his parents are college-educated. Colby has a younger brother who is also participating in DE and taking courses at DTCC. While in DE, he was inducted into the Gamma Beta Phi Honor Society and participated in the student government association. Colby also took 20 semester credit hours of honors courses, which allowed him to participate in Honors Carolina. He graduated from DTCC with an Associate in Arts degree. All his credits transferred, but he had to take two general education courses once he transferred to UNC-CH. Colby has a full Naval ROTC scholarship that requires him to enroll in courses for four years at UNC-CH. While at UNC-CH, he participates in the safety and security committee, serving as the committee chair. He plans to study abroad next semester in Beijing. When he graduates, he will be commissioned as a Marine officer.

**Jacqueline Holmes.** Jacqueline is a student at UNC-CH and has not yet declared a major, although she knows she wants to focus on international development. She participated in DE at MCHS located on DTCC's campus. Both of her parents are highly educated, and she has a younger brother who is currently attending DTCC. Jacqueline graduated from MCHS with over 40 hours of credit and graduated as valedictorian of her class. While participating in DE, she took viola lessons. Before starting a four-year university, Jacqueline took two gap years, during which she completed an internship at an organization that provides free employment readiness training, personalized job coaching, employer referrals, and supportive services to job seekers. She also worked part-time at a local coffee shop and completed the Race Equity Institute (REI) training. She also became very involved with a Durham grassroots organization that advances the community through political activism. Jacqueline then attended a private



research university in another state. After becoming ill and reevaluating her life, Jacqueline transferred to UNC-CH. All of her credits were accepted.

**Renee King.** Renee is a student at UNC-CH majoring in public policy on a pre-med track. She immigrated to the U.S. from Kenya when she was a small child. Both of her parents are college-educated, and her father is pursuing a master's degree at UNC-CH. She has a younger brother. Renee participated in DE during her sophomore through senior years. She completed the Associate in Science degree and experienced a smooth transition from DTCC to UNC-CH. While in high school, she worked one part-time job during her junior year and two part-time jobs during her senior year. She has chosen not to work while at UNC-CH. While at DTCC, Renee participated in student government and was inducted into the Gamma Beta Phi Honor Society. Before matriculating to UNC-CH in the fall of 2019, Renee participated in a summer bridge program at UNC-CH. Renee plans to apply to medical school.

**Jada Umpire.** Jada is a student at UNC-CH majoring in public health with a focus on hospital management. She immigrated to the U.S. from Nigeria. She has two younger brothers and a twin sister who is also attending UNC-CH and also participated in the DE program at DTCC. Jada is a first-generation college student. She participated in DE during her freshman through senior years of high school. She completed her Associate in Science degree from DTCC. She is a member of Honors Carolina and continues her passion for student government that began when she was a student at DTCC. Jada plans to apply to medical school.

**Bobby Williams.** Bobby is a student at UNC-CH who has not declared a major but is interested in majoring in environmental science and minoring in economics. Bobby is an immigrant from China and a first-generation college student. He has a younger brother. Bobby participated in DE during his senior year in high school. He transferred in 26 semester hours of

credit from DTCC to UNC-CH and 14 semester hours of AP credit. While at UNC-CH, Bobby participates in several extracurricular activities, including a business club, a health care club, and a club about food insecurity in the community. He is working in admissions through a work-study assignment.

**FTCC and ASU.** The following participants participated in DE at FTCC and successfully transferred to ASU.

Table 5

*Participant Profile for FTCC and ASU Students*

Name (Pseudonym)	High School Institution	Age	Gender	Race/ Ethnicity	DE Experience	# of Credit Hours and/or Degree Completed	First Generation College	Siblings with College Experience
Craft, Michael	Public	30	M	White	Traditional	60 (AA)	Y	No
Gibson, Donna	Public	18	F	White	On HS campus	34	N	Yes
Jones, Kathy	Public	18	F	White	Traditional/On HS campus	16	N	Yes
Lewis, Susan	Public	18	F	White	Early College	60 (AS)	N	Yes
Tillman, Joshua	Public	19	M	Asian	Traditional/on HS campus	60 (AS)	N	No
Tucker, Andrew	Public	18	M	White	Early College	60 (AA)	N	Yes
Wilson, Heather	Public	18	F	White	Traditional	21	N	No

**Michael Craft.** Michael is a first-generation college student majoring in construction management at ASU. He is a non-traditional student who participated in DE during his junior and senior years in high school and then completed the associate degree at FTCC before transferring to ASU. He worked 35 hours per week while attending FTCC. He did not participate in any extracurricular activities while enrolled at FTCC but has joined a fraternity at ASU. He plans to seek employment immediately after graduating.

**Donna Gibson.** Donna is majoring in criminal justice with a minor in Spanish and chemistry at ASU. She is the second oldest child out of seven children. Both of her parents were educated through UNC System schools. Her older brother is also a student at ASU. Donna participated in DE by taking FTCC courses at her high school during her junior and senior years. She never had a need to go to FTCC's campus. While a DE student, Donna worked three jobs for a total of 20-30 hours per week. She was very active in high school, participating in youth government, swim club, and a volleyball team. She is also very active at ASU – she is a member of the chemistry club and the forensics club. Her first semester at ASU only cost her \$124 after financial aid, scholarships, and grants. She transferred 34 semester hours of credit from FTCC to ASU. She plans to work for the FBI one day and pursue a graduate degree.

**Kathy Jones.** Kathy is majoring in psychology and minoring in criminal justice at ASU. She has an older brother who is also a student at ASU. Both of Kathy's parents have a college degree. Her mother has a master's degree. Kathy participated in DE during her senior year of high school. She worked as a DE student and participated in extracurricular activities like lacrosse and volleyball. She works now only during the holiday breaks. She is not participating in any clubs or extracurricular activities. Kathy plans to become a forensics psychologist and wants to pursue a doctorate degree.

**Susan Lewis.** Susan is majoring in cellular molecular biology at ASU. She has an older brother who is attending another UNC System school. Both of her parents are college-educated. She participated in DE during her four years of high school. While in high school, she participated in the Red Cross Club, the Interact Club (community club), and played volleyball. She completed her Associate in Science degree while in DE. She is working while a student at ASU and participates in the Broken Pancreas Club (a club for students with diabetes). She wants to become a physician assistant and plans to spend only two years at ASU before continuing to graduate school.

**Joshua Tillman.** Joshua is majoring in psychology with a minor in criminal justice at ASU. He is the oldest of three children. His stepdad is college-educated and served as an academic advisor for him. Joshua participated in DE by taking classes on both his high school campus and at FTCC during his junior and senior years of high school. He worked 30-40 hours a week as a pizza delivery driver while in high school. He is working for campus housing as a night safety officer at ASU. He completed the Associate in Science degree before transferring to ASU. He plans to pursue a career as a forensics psychologist and knows that he will need to attend graduate school.

**Andrew Tucker.** Andrew is an electronic media broadcasting major at ASU. He is the youngest of three children. His parents and his siblings are all college-educated. Andrew participated in DE as part of the Early College at FTCC. While in DE, he participated in the drama club and worked a part-time job. Currently, he is interning at ASU TV and does not work. He completed the Associate in Arts degree while in DE. He plans to graduate in two years and seek employment.

**Heather Wilson.** Heather is majoring in child development at ASU. She is the oldest of three children. Her mother is college-educated. She participated in DE her junior and senior years. While in high school, she worked as a babysitter. She transferred 21 semester hours of credit from FTCC to ASU. Heather works 15 hours per week in one of the college's dining halls. She participates in the campus ministries at ASU. She plans to become a child life specialist and knows that it will require additional coursework to obtain a certificate beyond the degree.

### **Overview of Sites**

The three corresponding universities in the partnership pairs are: 1) ASU; 2) UNC-CH; and 3) UNC-W, respectively. The geographic regions of the universities are very different as well as the populations within those regions.

**ASU.** ASU is located in the town of Boone, North Carolina which is situated in the Blue Ridge Mountains in the northwestern part of the state. Boone is the second smallest town that we visited behind Morehead City. The town is predominantly made up of the university with a median age of 21 and 94% of the population enrolled in postsecondary education. Due to this, it is difficult to evaluate median income data with any certainty since most everyone is also a student. The town is also predominantly White (90%) and there is a slight majority of males (51%).

**UNC-CH.** UNC-CH is located in Chapel Hill, North Carolina in the center of the state and in a region known as the Research Triangle. The university is the flagship school of the UNC System and began enrolling students in 1795 making it the oldest public university in the U.S. The campus is somewhat more diverse than the others in this study with 68% White, 13%

Asian, 10% Black, and 6% Hispanic and Latino. Chapel Hill is also predominantly made up of college students with 71% of the population enrolled in postsecondary education.

**UNC-W.** UNC-W is located in the port city of Wilmington, North Carolina along the Cape Fear River. The city is 72% White, 18% Black, and 6% Hispanic and Latino and has a majority of females (53%). The university is part of Wilmington but does not encompass the vast majority of the area or population like the other universities in this study. About 50% of the population is enrolled in postsecondary education and 41% of the population holds a bachelor's degree or higher. The median income for those who are age 25 or older and working is \$34,247 and \$44,492 for those holding a bachelor's degree.

### **Composite Profiles**

#### **Should I Participate in a DE Program?**

It is the summer before my junior year. Two more years of high school and then what? My older brother enlisted in the service and has been stationed in Texas for the last 18 months. He makes decent money and seems to be doing okay. My friend's brother got a job at the local seafood restaurant and was able to get a place of his own, though he shares it with three other people. He seems happy. My parents really can't help me determine if college is right for me because neither of them graduated from college or have much college experience. My best friend has been talking about doing this college program at our high school that lets you get credit for high school and college at the same time. My mom said she heard about it from one of her co-workers. The co-worker's daughter was in the program, and the co-worker assured my mom that the program is essentially free. Her daughter finished her high school courses at 11:00 a.m. every day and then took easy online courses offered by a community college. Since she got out of school so early, she was also able to work more at her part-time job. She was working

almost 35 hours per week making lots of money. My mom thought it would be a good idea for us to talk to her co-worker and find out more about this opportunity.

My mom arranged for her co-worker and daughter to stop by our house to talk more about this special program. The daughter talked about how much she liked the program. She was able to take classes and get credit for both high school and college. She didn't have to go anywhere to take the courses because they were all offered online. She said that sometimes a bunch of students enrolled in the program met in the library after their regular classes to work on their online classes together. She also said that students had to pay only a \$9.00 fee to take the online classes and that the courses were easy. She is now at a four-year university and because she had taken the online courses in high school (completing 16 credit hours), she started the university as a second-semester freshman. Unfortunately, she was not able to use all of her college credits earned through the program because all of them did not transfer. She took a few courses in medical terminology that were not transferrable. All-in-all, she said she had no regrets and recommended that I participate in the program. She said that I could not beat the cost because it is virtually free, and that I would be satisfying high school requirements for graduation at the same time as earning college credits.

A few weeks before school was to begin, a lady from the community college invited rising juniors and seniors and their parents to a meeting at the local high school to introduce us to this program called Career and College Promise. She worked for the community college but worked specifically with all the high schools in the area. My mom and I went to the meeting. All my friends were also there with their parents. This lady, Miss Julie, talked to us about the advantages of taking these courses that would count as both high school and college credits. She mentioned that we would save time and money by participating in the program. If we were



successful in the program, we could also start at a university with credits already completed and could even graduate early from college.

At the time, I really did not understand the difference between a high school credit and a college credit. Some of the courses sounded interesting, like something I may want to know more about, but it was never clear to me how these courses would count toward college. But all my friends were signing up for the program and I did not want to be left out. Plus, an added bonus was getting out of school at 11:00 a.m., which would allow me to work part-time and save some money for when I go to “real college.” So, I signed up for the Career and College Promise program in my junior year.

### **The DE Program**

The Career and College Promise program is very different from my freshman and sophomore year in high school. I am taking college courses. The teachers are different, the classrooms are different, and some of my courses are with regular college students. Because I still needed high school English and a social studies class, my first two periods of the day are at my high school. After I finish my high school courses, I get on a bus that transports me to the community college. There I take psychology, college success, and anatomy and physiology (A&P) for a total of nine credit hours. Since I took high school chemistry and biology, I qualified to take BIO 168, A&P I. I’m thinking about becoming a nurse, so I hope these courses will help me when I go to a four-year university.

I like that I do not have to go to the same class every day. My classes meet every other day. I like the freedom of choosing what I want to take and taking classes that I am generally interested in. I feel more like an adult. I choose how much I get out of the class based on how much I put in.

The courses are really not that different from my high school classes – at least not my psychology class. We have homework and talk a lot in class about the things we read about in our book, and then we take tests and quizzes. This class is composed mostly of other high school students, so it does not really feel like an actual college class. The teacher has to stop class often to deal with discipline issues, such as talking too much or not being focused on the course material.

The biggest difference comes with the courses that have non-high school students in them. I thought I would be taking classes with students from my school, but there are all kinds of people in my A&P class. Most of my classmates have no idea that I am still in high school. There is a guy who is in his forties. He is going back to school to change his career. Apparently, he was laid off from his job and needed to go back to school to get retrained for a different career. There are also ladies in my class that are old enough to be my mom. They have children and often talk about their children when we have discussions in class. Sometimes they miss class if the school opens late or is closed for weather reasons. Then there is a man who served in the Army and was stationed overseas. He writes and talks about things that he experienced when he was protecting others. His stories can be dark. He has definitely helped me decide not to enlist. The expectations for this class are different too. We are expected to apply the information we learn. Memorization does not work for this class; I really have to study. I like all my courses, but I think I have to work harder in the A&P class.

I want to get an “A” in all three of my college classes. An “A” in those classes gives me an extra point towards my GPA in high school, like an AP course without the stress of AP. I debated taking the college A&P class versus the AP A&P class and decided that by taking the community college class, I could get the extra point, not pay a lot of money for the class, and not

have to pass a standardized test at the end of the class to get the college credit. That was a win-win for me. Plus, I heard that the AP courses are a lot harder than the community college classes.

One thing I have been surprised about with my classes is how much I appreciate the diversity of the students in my classes. Not only are they diverse in ethnicity, but they are also diverse in age, experiences, and goals. I appreciate the differences and am learning so much about them and about myself.

When I need help with my classes, there are resources at the college I can use to help me. They have a tutoring center and a place I can go to get assistance with my writing. The instructors also will help you during their office hours; yet, I cannot always take advantage of these services because I must catch the bus to get back to my high school. There really is no time between my classes for me to use these services unless I come back to campus after the high school day. But that doesn't always work out for me either because I am on the swim team at my high school and we have practices and meets. I did join a club at the college for people who are interested in going into health careers. They do a lot of volunteer work with hospitals.

I like taking college courses. I like the freedom of deciding which courses I want to take and on what days I want to take them. I am taking three courses each semester and decided that it would be beneficial to also go to summer school. I want to complete the degree and the only way I can do that is to take courses in the summer. But that is okay with me because when I finish, I will be a junior at the university.

I have been meeting with an advisor at the community college who has been helping me navigate the university's baccalaureate degree plan to make sure the courses I am taking are the right courses. The college has also provided workshops on how to transfer to the university I

want to go to. A representative from the admissions office of the university I want to attend has also been on campus to meet with students to talk about the transfer process, deadlines, and requirements for specific schools. She brought with her representatives from different colleges within the university to talk specifically about their programs. Since I am interested in being a nurse, a representative from the nursing school came to campus and met with me individually to look at the courses I have taken to make sure I will meet the prerequisites for the school. This was very helpful. I also went on a tour of the university several times. I wanted to make sure it was a good fit for me. It was important for me to be close to home, so I didn't want to go to a university that was too far away from my family or my friends.

### **Time to Move On: The University**

Time has flown by. I cannot believe I have graduated from high school and have also earned my Associate in Arts degree. The ceremony for my associate degree even occurred before my high school graduation. It was not my intention to complete the degree when I first started the Career and College Promise program, but as I progressed through the program and met with my academic advisor, we determined it would work to my benefit to complete the degree and get all my general education courses out of the way before transferring to a "real college." I earned 60 semester hours of credit and all my courses transferred. I thought I would transfer in as a junior to the university, but that is technically not true.

I thought I would be considered a transfer student, but after talking to the transfer admissions advisor at the university, it was determined that it was more beneficial for me to start as a first-time student. As a first-time student, I am guaranteed to get housing on campus, and I am eligible for more scholarships. I can also take my time completing my four-year degree. I

don't have to take 18 credit hours per semester to finish in a two-year period. I can pace myself and enjoy the experience. I might even study abroad for one semester to gain that experience.

At first, I was not happy that I had done all the courses at the community college and would still be considered a first-time student, but once it was thoroughly explained, I was comfortable with that designation. I have junior status, which means that I can take upper levels courses and have priority for registration. I can still graduate early if I want to, but what is the rush?

My community college courses prepared me well for university. The courses are a lot harder at the university, but I feel like most of my coursework at the community college aligned with the courses I am taking now. There are so many people on campus and in some of my courses. I do miss the community feel of the community college. One of my classes at the university has 200 plus people in it and a required recitation hour with a teaching assistant. We did not have that at the community college. The rigor is different, too. At the university, I have a reading list of outside readings. We never had that at the community college. I really don't understand why and when I am supposed to get it all done. I have figured out how to determine what is important and what I can get away with not reading. The community college courses seemed more purposeful and direct.

I am living on campus in a living-learning community with other students who did DE in high school, which is really cool. I have this group of people who can relate to the experiences I had and am having. This resource serves as my support system. We take classes together, eat together, and do social things together.

I don't believe in regrets, but if I had the opportunity to do things differently, I would. I would have taken my community college courses more seriously and been involved more with

the life of the campus. Overall, I think taking college courses while still in high school is one of the best decisions I have made regarding my educational journey. It was scary at first because I was not sure what to expect. I was nervous about the courses being harder than my high school classes and that I would not measure up, but I made it through. I am all set to graduate from a four-year university in two years, and I saved tons of money by completing my associate degree before transferring.

## CHAPTER 5: FINDINGS

This chapter presents the results of interviews with 20 university students who participated in DE programs and successfully transferred to a four-year institution. The purpose of the interviews was to gain an understanding of participants' experiences with DE and transferring to a university, as well as learn about participants' future goals after graduating to gather a comprehensive understanding of the factors that have supported the successes of these students. Six major themes emerged from the data analysis process: 1) the appeal of DE; 2) developing the skills needed to navigate college; 3) rigor of community college courses; 4) information related to the transfer process; 5) continuing beyond a four-year degree; and 6) the lack of diversity among the participants. The themes and subthemes are discussed throughout this chapter.

I interviewed 20 students from three universities in North Carolina over the course of five weeks. All participant interviews were conducted at students' home universities except for two participants. Catherine was interviewed online through Zoom and Jacqueline was interviewed at a coffee shop in her hometown. Relevant quotes from participants are included to support the emergence and analysis of each theme and subtheme. Pseudonyms were given to all participants to protect their identity. The community college and university names were not removed or changed to denote the importance of the partnership pairs to DE within the state of North Carolina.

Table 6

*Participant Profile*

Pseudonym	Institution Classification	DE Experience	# of Credit Hours and/or Degree Earned	Race/Ethnicity
Anderson, Colby	Public	Middle College	60 (AA)	White
Cooke, Richard	Public	Online	9	White
Craft, Michael	Public	Traditional	60 (AA)	White
Duke, Michelle	Public	Online	12	White
English, Georgia	Private (Homeschooled)	Traditional	45	White
Gibson, Donna	Public	On HS Campus	34	White
Goode, Catherine	Public	Online	12-14	White
Holmes, Jacqueline	Public	Middle College	40	White
Jones, Kathy	Public	Traditional/On HS Campus	16	White
King, Joy	Public	Online	18	White
King, Renee	Public	Traditional	60 (AS)	Black
Lewis, Susan	Public	Early College	60 (AS)	White
Mark, Zillow	Public	Online	3	Asian
Roberts, Jennifer	Public	Traditional	21	White
Smith, Alicia	Public	Online	21	Asian
Tillman, Joshua	Public	Traditional/On HS Campus	60 (AS)	Asian
Tucker, Andrew	Public	Early College	60 (AA)	White
Umpire, Jada	Public	Traditional	60 (AS)	Black
Williams, Bobby	Public	Traditional	26	Asian
Wilson, Heather	Public	Traditional	21	White

**The Appeals of DE are Numerous**

The first theme that emerged from the findings was the appeal of DE. Within this theme, three subthemes emerged: a) earning of college credits; b) saving money by getting “free” college; and c) preparing for “real college.” The participants in this study were attracted to DE programs for a variety of factors (see Table 7).



Table 7

*Appeal of DE*

Subthemes	Frequency ( <i>f</i> )	Percentage (%)
Earning college credits	12	60
Cost savings	11	55
Preparation for four-year institution	6	30
Bored with high school	2	10
Increase GPA	2	10
Friends	2	10
Challenging coursework	2	10
Save time	1	8

**Earning College Credits**

The first subtheme to emerge was the earning of college credits. Throughout the interview process, participants consistently and emphatically declared that college credit was the single most important reason to participate in DE. They felt the accumulation of college credits helped them to graduate on time or even early. Many of the students expressed their aspirations of going to graduate school and the thought of completing an undergraduate degree earlier was appealing. Renee wants to be a medical doctor and knows it will involve many years of education. She explained:

I was thinking of graduating in two years and that's it ... because I want to go into medicine, and doing those pre-med requirements and then taking the MCAT and then applying to schools. Those two years that I have already completed while in high school help me get closer to that goal.

Andrew explained that saving time was important to him. He also weighed the pros and cons of taking DE versus AP courses:

I could shave two years off my college career ... When comparing dual enrollment to taking AP classes, I always had the impression that dual enrollment was a better move. You get more college credit ... I had reservations about the AP program because you have to pay to take the test and there's a lot of extra stuff. With dual enrollment, I could take some advanced courses and that saves me time.

Donna described that she was excited about the prospect of completing her degree early when she said, "[I] would love to finish early. I really would. My advisor said I could take classes and still finish in three and a half years." There were some participants who did not want to participate in high school coursework and chose to take DE courses, but still recognized that earning college credits was a great outcome. Richard was one such student. He said:

The reason I did dual enrollment was so that I would not have to take actual high school classes. That was the main reason but there were other good reasons like college credits and the dual enrollment classes look good when you are applying to college.

Many students are able to graduate with a semester or two worth of credits earned, while others earned 60 or more credits and graduated with an associate degree; therefore, they entered the four-year university with junior status. Jada explained that it was her intention to get the degree so she would be college-ready:

I wanted to graduate with my associate's degree ... I wanted to be more college-ready. My high school did not do a very good job of preparing graduates for college. There is just no college preparedness. So dual enrollment was making sure I was more college-ready.

Due to the NC Community College Articulation Agreement, a statewide agreement governing the transfer of credits between NC community colleges and NC public universities which has the

objective the smooth transfer of students, there is assurance that courses listed on the transfer list will transfer to the 16 UNC System institutions; and if students complete the AA or AS degree, they are assured admittance with junior status. Some students were aware of the advantages associated with completing the degree but that was never the goal for some. Jacqueline explained that she wanted to earn credits. "I did graduate with almost 40 credit hours. It was never really my intention to complete the associate's degree." Some students commented that by earning college credits while in high school, they are able to take advantage of other opportunities like study abroad, or become more involved in university life while at the four-year institution. Alicia stated, "I am thinking about a summer abroad. I do not know if I want to do a semester but definitely, I could do a summer ... because I have this cushion, of course, I can do that." Others commented they are able to take their time finishing their four-year degree by only taking three or four classes per semester. Taking college courses while in high school allowed some students to consciously spend their summers earning money to pay for college. Jacqueline stated:

I wanted to accumulate enough credit hours so that I would not have to work and go to college at the same time ... I could spend the summers working, earning money to pay for college, and not have to go to school and work at the same time.

Some of the students commented they did not realize the advantage of the college coursework until they transferred. Richard explained it best when he said:

The benefit was huge. After my first semester, I mentioned to my advisor that I had taken dual enrollment courses. He told me I should request my transcript and have it evaluated to see if the courses would transfer. When you first get to college you cannot immediately start taking the classes you want to take. My three dual enrollment courses

fulfilled a requirement. It made it easier, having some of my requirements fulfilled because I could start taking the classes I actually wanted to take much sooner.

Students are also accomplishing two goals at one time through DE: earning their high school degree and earning college credits. Zillow explained, “I like that you could get credit for high school and college and it would transfer to a university.”

Nearly all of the participants recognized that earning college credits was a benefit of DE. Despite that not being the goal for some and intentional for others, they now recognize the advantage they have over other students who come to college with no credits. They are able to get into higher-level courses and register early. Others are able to take their time completing the requirements of their degree and experience other aspects of college such as study abroad or being more involved in the campus community. The second subtheme to emerge was cost savings.

### **Saving Money by Getting “Free” College**

A benefit of DE programs is that they save students money. In North Carolina, the state is responsible for paying college tuition for DE students. The General Assembly reimburses full-time enrollment (FTE) costs to the community college system based on participation reports; however, state funds are not available to cover textbooks or fees. Fees are not waived unless the community college chooses to do so. The local education agency and community college determine how to pay for textbooks, and whether and how student fees will be paid.

There are variations in costs associated with DE programs among the partnership pairs. FTCC, for example, charges students a \$9 fee, and students are responsible for their books. DTCC, on the other hand, bases costs on the high school the student attends. One of the high schools, for instance, pays for everything, so there is no cost transferred to students. Another

high school in Durham County requires the students to pay for their own textbooks. CCC requires its DE students to pay a \$60 fee, and they are also responsible for their own textbooks.

The participants in the study were quite aware of the cost-saving effect of DE. Many commented on getting “free” college and that they were saving their parents money in the long run. Alicia acknowledged the savings to her father. “I was able to take five [courses] at once and get some college and knew that it would be cheaper for my Dad eventually.” Jennifer explained, “The cost was a big factor because I paid \$9 for my courses while in high school, which is awesome.” The cost element has a natural appeal, given that higher education is a big-ticket item in most states. Participants feel like they are graduating early which translates to saving money. Donna was very aware of the amount of money she was saving by taking DE courses. “Knowing that I could get a whole year of college free ... I’ve saved \$20,000 doing it. I paid \$124 to come here [ASU] this semester after scholarships and FASFA.” Andrew completed the associate degree and transferred into ASU as a junior. He explained that by completing the degree he will be able to graduate in two years from the university and pay half the cost. He was very intentional about completing the degree and the major he chose. Andrew explained:

I shaved two years off my college and only paid \$36 (\$9/semester) while doing it. I plan on graduating in two years. I am finishing in two years. I have friends who went to college with me that are at App and because of their major requirements, they have to stay longer or their semesters are a lot tighter than mine. I went into the electronics media broadcasting major because even before I was admitted I could look online at the transfer guide and see that it was feasible for me to finish in two years which was attractive.

Most of the participants felt that saving money was an appealing aspect of taking DE courses. They seemed very conscious of the cost of college, and saving money by earning credits while still in high school was a no brainer. Most seemed to feel the cost-saving provided opportunities for them to complete the degree within two years and/or it provided them the opportunity to take their time completing the degree. The third subtheme to emerge was the preparation for the four-year institution.

### **Preparing for “Real” College**

Students who took DE courses are likely to be better prepared for university. They are also able to complete general education requirements while in high school, allowing them to focus on courses specific to their majors once they transfer. If students are taking courses on the community college campus, they have access to resources, such as the library, computer labs, writing centers, and alternate stimulating environments to work on assignments. Students who are taking courses online have access to those resources but often do not utilize them.

Participants often noted they felt more prepared for the four-year college after taking DE courses. Catherine noted that courses prepared her for what to expect at the four-year. “I think in the aspect of how college classes are at the university, yes. When I got to UNC-W I was not surprised by the courses. I felt like dual enrollment, even though I took online courses, prepared me.” Some students felt that the DE experience prepared them much more than their high school did. Jacqueline stated, “Middle College prepared me much better for university than a traditional high school.” Colby, another Middle College graduate, commented about the workload of the DE courses, “The workload is pretty similar. At least, in my opinion, a lot of the DE work is pretty much UNC standard.” Donna also said about the workload, “[At the university], the

workload is very demanding and that is how it was for dual enrollment ... My professors from dual enrollment were definitely similar to mine here [at ASU].”

Some students felt like they were prepared in some ways but not in others. Renee explained:

I feel like it prepared me in some ways and failed me and others ... I think it prepared me for the survival skills like go to office hours, don't take 8:00 a.m. courses, that kind of thing. But I think it failed me by not giving me a real glimpse and the real truth of what a four-year institution is like. Four-year institutions are very different from community colleges, as much as they're both colleges, it's a very different experience because it's not you living on campus and you're actually getting used to having a lot more resources and the campus is a lot bigger.

Participants acknowledged that DE prepared them academically for the university. Most felt that the workload was similar and they were not surprised by the requirements of the university. There were participants who commented on DE and four-year institutions being different and DE not fully preparing them for the campus aspect of the university. Living on campus, as opposed to taking courses online, or as a commuter student and the size of the university did not compare to the community college campus. Many students commented on how they learned skills that helped them prepare for the four-year institution. This led to the next theme which was developing the skills needed to navigate college.

### **Developing the Skills Needed to Navigate College**

The second theme to emerge was related to developing the skills needed to successfully navigate college. Some of those subthemes included a) time management; b) autonomy; c)

making connections and establishing relationships; and d) learning to interact with different people. Students were able to learn and develop these skills while enrolled in DE courses.

Table 8

*Developing the Skills Needed to Navigate College*

Subthemes	Frequency ( <i>f</i> )	Percentage (%)
Time management	12	60
Autonomy/independence	9	45
Embracing diversity	7	35
Establishing relationships	6	30
Learn how to study	3	15
Registration for courses	3	15
Responsibility	2	10

### **Time Management**

Most students find their greatest challenge in adjusting to college life and succeeding in the classroom is managing their time effectively. This is especially true for community college students who often work long hours. As a student, managing time can be a difficult task, but the ability to manage time effectively will be one of the key determinants of success as a college student — and in life.

By taking demanding courses, students were forced to learn how to manage their time to be successful. Donna explained:

Biology ... was definitely the most demanding course. It was difficult ... because the labs were in class, but the lecture was out of class ... We were responsible for learning the lecture material on our own. So that was tough, with time management because ... he would tell you to read from chapter A to chapter B, and you'd have to figure out what was



important and make your own study guides and prepare yourself for the test. So, that was hard, but I had the best teacher. I learned so much from that class.

Some students acknowledged learning the skills in DE that a student would typically learn their first year in college. Renee shared, “I learned all the skills that they tell you your senior year and even freshman year of college, go to office hours, talk to your professors, make sure you have good time management.” Procrastination was another issue that many participants had to overcome to prepare for college. Joy explained:

During high school, I was a really bad procrastinator. Then coming to Carteret and doing online courses, you have to schedule everything yourself. You have a list of due dates and you turn them in when you need to. Maybe there was an occasional email to remind you but other than that you had to keep up with your assignments and plan stuff [assignments] out yourself.

Participants seemed to learn how to manage their time and successfully navigate their college courses. They acquired the skills needed to plan and control how they spent their time to effectively accomplish their goals. The second subtheme to emerge was autonomy/independence.

### **Autonomy/Independence**

Autonomy is the ability to take charge of one's own learning. Encouraging autonomy allows the student to become less bored and more confident, and value their schoolwork more, which may help set in motion all the other positive effects that come from promoting students' independence.

Participants realized they have learned skills their peers who did not participate in DE did not learn. They are able to register for classes and know how to navigate the nuances to which

courses are offered (T/TH, M/W/F). Colby referred to this when he talked about his UNC-CH experience:

When I came to UNC, I ... pretty much knew what I was doing, as far as how college worked; whereas, a lot of my peers coming here had no idea how to register for classes. I assumed stuff like that was kind of second nature already.

Participants also learned the importance of attending class and the consequences of not attending.

Georgia said it best when she stated:

[DE] really helped me know how important it is to get your homework done because one missed assignment and my grades went down a lot. So, I was like, I need to get it under control, get all my homework done, and be on top of everything, and go to class a lot, because I think the first or second semester that I was enrolled ... there was one particular class that I was skipping a lot, just because I had ... six or seven days that I could just miss without penalty ... But I guess after that, I realized, oh, I didn't learn very much because I wasn't in class. So that helped me to realize how important it is to go to class, and this semester, I've had almost perfect attendance in this one class.

Participants have also figured out how to problem-solve instead of relying on others to figure things out for them. Donna explained:

I feel like the DE classes, they were more catered towards the people who are in the top 20%, top 30% of my class. Those are the people who were in those classes ... here [at ASU] it's kind of a mixture ... When you're in the top 20%, you are all in the same classes together. So, all my friends were in the same classes and we'd help each other. But when you come here [to ASU] you don't have that. You're all on your own. And...that's definitely hard ... In high school when I was in those classes and I needed

help, I would text my friends, ‘Hey, can you help me with this?’ I remember my first few weeks here [at ASU] when I didn’t know people and I needed help; I thought, I don’t have anyone to text now. I was all on my own trying to figure this stuff out. And I mean, it’s definitely taught me a lot more about independence and you have to figure things out, and problems out. But it was definitely a change.

The participants in DE were given an opportunity to be autonomous. By doing so, the students became confident and have feelings of self-efficacy which can lead to more engagement in their coursework. They learn that there are consequences for their actions and in college, the students are responsible for their learning and what they get out of the experience. The third subtheme to emerge related to having the skills needed to navigate college was embracing diversity.

### **Embracing Diversity**

Diversity in education is a wonderful opportunity to create a better sense of community for students. Embracing diversity means accepting differences in others. To raise a broad-minded and well-educated nation, we need to teach students to stand up to intolerance and discrimination and to reject stereotypes. Students need to learn to not prejudge others, tolerate difference and show respect for themselves and for others. Diversity is not only differences in ethnicity but also differences related to race, gender, gender identity, sexual orientation, age, social class, physical ability or attributes, religious or ethical values system, national origin, and political beliefs. The participants in this study recognized diversity and seemed to celebrate it.

For the participants who were enrolled with traditional community college students, they recognized there were differences among their classmates. Some noticed differences in age,

others noticed differences in race, while others noticed differences in experiences. Jacqueline explained her love for diversity:

There is something really refreshing about being in an area where I could be with students who were not just black or white or different ethnicities, but people who are of different age groups ... Be in a class with someone who is 14 to 65 and just be myself and feel accepted. I find that I really am most comfortable in areas where I can just be around a lot of different types of people.

Joshua was excited to learn from people who had seen a lot more of the world than he had in his 19 years of life. He stated:

I love meeting other people because most of them were older than me. Actually, all of them were older than me. I got to engage in conversation with these people, who are older, seen a lot more of the world. I get to learn from them, learn from my professors. I was just absolutely soaking up as much knowledge as I could, and it was great.

Similarly, Heather also spoke to age differences in her courses. “[DE had] different ... grade levels there. There was one class ... someone who was already a mom and just getting that one credit ... There were a lot of different ages there.” Michael found it easier to communicate with older students and students with different experiences. He stated:

I enjoyed being in classes with diverse groups of people. I actually enjoyed it a lot because there were some older people in my class that were easier to talk to. They weren’t judging and they were more knowledgeable about life and whatnot.

Jada recognized that she had limited exposure to a diverse group of people and was excited about getting that at a community college. She said, “I just wanted to diversify my perspective by meeting new people.”

Though the participants who interacted with students on the community college campus were limited in their definition of diversity, they did recognize differences, mostly due to age but differences nonetheless. They appreciated being able to communicate and learn from those students' experiences. Many of the participants took courses online so they had limited exposure to the diverse population of students. The fourth subtheme to emerge was establishing relationships.

### **Establishing Relationships**

Real success, the kind that exists on multiple levels, is impossible without establishing relationships. Real success is impossible unless you treat other people with kindness, regard, and respect. Trust, teamwork, communication, and respect are the keys to effective working relationships. Developing positive relationships with the individuals you interact with will make your life more enjoyable and productive. These connections could also serve as future references or contacts in their career.

Every relationship is unique, and people come together for many different reasons. Part of what defines a relationship is sharing a common goal for exactly what you want the relationship to be and where you want it to go. Knowing these basic principles can help keep your relationships meaningful, fulfilling, and exciting. Most of the relationships that participants spoke about had to do with relationships with their instructors though a few participants did mention relationships with others.

Susan spoke about how DE helped her learn how to build relationships with people and her instructors:

[DE] also prepared me to get used to ... the people you're around and building relationships. It allowed me to learn how to ask for help me, especially with teachers

here because my brother said that even though he did the same thing, it was intimidating going to Chapel Hill and having to ask his teacher for help even though he has 300 other students in that one class.

Jacqueline also mentioned the importance of developing relationships with professors:

You have a lot more control of how you approach things, which also means you have to learn how to approach things and how to tackle larger assignments and how to establish more of a relationship with your professors than you are necessarily used to and how to keep track of going to different classes on different days and it's just a different lens.

Later during the interview process, Jacqueline stated that one of her goals when she entered Middle College was to make friends. “So, goals? Yes ... I was hoping to maybe make some friends, possibly, which I did, much to my surprise.” Donna stated, “DE ... smaller classes, you're more involved with your professor.”

I was surprised that only female participants and no male participants commented about relationships. Growing up, often boys and girls are often segregated, restricting them to socialize solely with individuals of their own gender, learning a distinct culture as well as their gender norms. This results in differences in communication between men and women, inclining both genders to communicate for contrasting reasons. For example, men are more likely to communicate as a way to maintain their status and independence, while women tend to view communication as a path to create friendships and build relationships. For men, communication is often a way to negotiate power, seek wins, avoid failure and offer advice, among other things. For women, communication is often a way to get closer, seek understanding and find equality or symmetry. Though I find this topic very intriguing, the study of gender issues is beyond the

scope of this dissertation. This led to the third theme which was about the rigor of community college coursework and its preparation for university coursework.

### **Rigor of Community College Courses**

The third theme to emerge was the rigor of the community college courses. Participants consistently spoke about the rigor of their community college coursework when referring to their preparation for transfer to the university. When it comes to college admissions, the rigor of students' high school coursework matters. Understandably, admissions committees want students who challenge themselves and who demonstrate that they are able to successfully navigate demanding classes. Not all college credit is equal. If a student has a career objective and major in mind, they can take courses that will transfer to meet either general education or prerequisite requirements. Otherwise, the college credit earned might be lumped into the "electives" category. North Carolina has a website that contains the Comprehensive Articulation Agreement (CAA) between community colleges and public universities so that a student can look up which community college classes can be substituted.

Due to the varied responses about rigor, this theme has been divided into five subthemes: a) community college did not prepare me for university coursework; b) community college coursework did prepare me for the university; c) mixed feelings about preparedness; d) the community college prepared me for differences; and e) false realities about university coursework.

### **Community College Coursework Did Not Prepare Me for the University**

When discussing the rigor of community college coursework and whether or not it was comparable to the coursework participants were taking at the university, many felt it was not. Some of the participants were enrolled in online courses and in general, did not feel that online

courses could be rigorous. Alicia simply stated, “I think the Carteret ones were not as rigorous just because being online isn’t super rigorous.” Others did not discount the level of rigor with the coursework they received at the community college, but they seemed surprised by the difficulty of their university coursework. Bobby explained:

It didn't prepare me as much as I thought it would have. Carolina's classes feel so hard.

Okay. The course load at Durham Tech. There wasn't light coursework, but here [UNC-CH] I went from a level three to a level 10.

Others felt they had the skills to be successful in a university course but they felt unprepared for the amount of time university courses require or the level of difficulty. Susan shared:

The classes here are a lot harder. That's what they didn't prepare us for ... They all talk about ... how the classes are so much different. While they do prepare you skill-wise, they don't prepare you ... [for the] workload ... It doesn't prepare you for it because you're still in that transition between high school and college, but they want you to act like college, but you're also still in high school.

There were participants who thought there were exceptions dependent on the course taken, but still had a sense of “easier” coursework at the community college. Andrew described:

There are definitely exceptions to what I'm about to say. But overall, I'd say community college classes tend to be a little easier in the coursework. A little bit less is expected of you ... but the thing is being able to take those early college courses ahead or those college courses in high school and instead of now you get used to how little safety net there is like, you realize that you can't turn stuff in late, you're responsible for your own assignments.



The opposite of not feeling prepared were the participants who felt that their community college courses did prepare them for the university courses. This led to the emergence of the second subtheme which will be explored in the next section.

### **Community College Did Prepare Me for the University**

Many of the participants acknowledged the workload of the community college courses were very different from their high school courses and felt the DE courses did prepare them for their university courses. Donna echoed the sentiment of many of the participants. She said, “[DE] workload definitely helped my transition here ... it [DE] was different from high school, but it definitely prepared me okay for the classes here [ASU].” Michele, though a student at a different partnership pair, had a similar response:

I think they [DE courses] did [prepare me well] ... Because ... it was different than high school itself. So that was good ... Let me get my toes in the water a little bit and see what it's like. So then now that I'm here, I know what I'm doing. I feel like it did prepare me.

Catherine acknowledged she thought she was prepared but admitted to only having an online experience. She stated, “I think in the aspect of how college classes are, yes, because I wasn’t surprised by how laid back they were. But online doesn’t give you that much perspective.”

Then there were participants who had mixed feeling about the level of preparedness. They felt prepared in some aspects but not prepared in others. The next sections will explore the third subtheme mixed feelings about the level of preparedness.

### **Mixed Feelings about Level of Preparedness**

Some of the participants had mixed feelings about their level of preparedness. They seemed prepared to navigate a university campus but not prepared for the academic challenges.

Renee explained:

I feel like it [DE] prepared me in some ways and failed me in others. It kind of did both.

I think it prepared me again for the ... go to office hours, don't take 8 a.m.'s that kind of thing. But I think it failed me actually ... it's kind of hard but actually giving me a real glimpse and the real truth of what a four-year institution is like, because four-year institutions are very different from community colleges.

Another participant thought the courses were harder at the university but they helped prepare her.

Catherine stated:

I'd say at UNC-W [classes are] probably a little harder than those [DE] classes ...

Definitely, Carteret was harder than high school classes. But I think since it's a community college it's not as harsh as a university. But it definitely did help me prepare for college.

There were participants who felt the community college courses prepared them for a different type of experience at the university not solely based on academics. The next section will explore the fourth subtheme preparing for differences.

### **Community College Prepared Me for Differences**

Differences was another subtheme that emerged when the participants were asked about rigor. There seemed to be an expectation that the experience would be different. The community college prepared them to expect a different experience at the university so they did not seem surprised by the rigor. Andrew explained, "I knew the experience was going to be

different. I knew a lot of the college classes were going to be more difficult. I was kind of mentally prepared for that.” Similarly, Jacqueline commented on the differences in the assignment of reading material:

Durham Tech workload and Durham Tech classes are not quite the same as they are at UNC. UNC is very fond of assigning ridiculous amounts of reading, you know, like 70 pages a class. And I've kind of had to learn how to skim through it ... what work actually has to get done, what doesn't. That's just not a model that Durham Tech pushes as much as more of a sense of the work we assign you to actually have work to do.”

Along with not being prepared, being prepared, having mixed feelings, and expecting differences, there were some participants who expressed that DE coursework gave them a false reality. The fourth subtheme to emerge was a false sense of reality. This final subtheme will be explored in the next section.

### **False Reality**

Alicia was a participant who only took online DE courses. Participants who never take courses on a college campus, or even at their high school, before transferring to a university seemed to have a different DE experience than those who did. Participants were often left to figure out how to navigate their coursework and learning on their own. Online education provides a format in which most students can succeed in that it provides a wide range of options for curriculum; yet, there is a perception that the quality of both the instruction and the instructors is far below that of classroom-based education. Alicia described this when she said, “[DE] set people up to think college is super easy when it’s not.”

The rigor of the DE coursework seemed to vary among the participants. In some cases that variance is due to the type of experience the student had: online, traditional, Middle College

or a combination of experiences. In other instances, the differences may be due to the information and support provided to the participants about DE and the transfer experience. This leads to the fourth theme: the transfer process.

### **Information Related to the Transfer Process**

The fourth theme to emerge was about information related to the transfer process. Within this theme, four subthemes emerged: a) personnel (high school and college); b) peers c) earning transfer credits; and c) transfer swirl.

Participants enrolled in DE programs in this study had all planned to attend a four-year university upon graduation from high school. Students are usually taking courses that will transfer and serve the purpose of a general education or elective course once they transfer. In order to get the most benefit from this experience, students need to be aware of policies and procedures in place to transfer. They also need to have contact with advisors at both the community college they are attending, their high school, and the college to which they plan to enroll. The first subtheme to emerge was about the presence or lack of personnel to help with the transfer process.

### **College Personnel**

The first subtheme to emerge was about the presence or lack of personnel to help with the transfer process. The presence of a college employee to help DE students navigate both the high school and community college environment seemed to make a difference for the participants who had that as an option. Alicia explained:

Mr. Hall was the advisor for all the dual enrollment kids at the high school. He would come every Monday during lunch if you had a question or something ... I also had my high school counselor, Jamie ... You were assigned to one, but you could talk to other

counselors ... They did not really make sure the courses we were taking were transferable. We were kind of on our own for that one. Honestly, I don't think anyone came up to me and said, "Oh, this won't transfer." No one said that and I think I just signed up for things that sounded interesting or that I knew could be a gen ed.

Similarly, Jennifer described a similar experience:

I did have an advisor, Mr. Hall, that was specific for the high school students. And he helped me. He did put me in classes that made sense but looking back, I was so young, and I don't think I was ready to step out and be that independent. I just kind of did what he said.

At other sites, the guidance counselor was instrumental in assisting the students with the transfer process. Kathy explained:

Our whole guidance department was on it. They were really good with helping, especially when it came to applying for colleges. They would review my Forsyth transcript and see what could transfer. There were a lot of resources for us to use. They were there to help with the transition ... If our liaison person from Forsyth Tech was not there, they would step in and help you or get you in contact with that person.

Donna has a similar experience:

This lady was hired and paid through Forsyth Tech and she had an office at my school. She was there four days a week. We would register for classes. She would meet with us all of us one-on-one and discuss classes and our career goals and help plan out our classes to transfer here [ASU] and knew which courses would go toward our major or toward general educations. She was very helpful.

Students who took courses at DTCC described similar experiences. Jada described, “I went to my Durham Tech college liaison, Miss [she could not remember her name]. I went to her a lot about how to figure the college stuff out.” Colby used the advising center and the transfer center at DTCC to assist with the transfer process. She explained:

Every semester I went to the advising center in Wynn. At least once, my first semester and my last semester twice. I went in and talked to a counselor about making sure I had a plan, making sure my classes actually counted. Things like that. So, that was the big thing that kind of set me straight as far as the path I needed to pursue ... I also talked to the transfer coordinator about completing the associate degree in my last semester and talked specifically about going to UNC.

### **Peer Influence**

The second subtheme to emerge was the influence of peers. Some participants used their peers as a resource. They knew they were not the first to venture down this pathway and used the experiences and advice of their peers to guide them. Renee described:

[I had] No hiccups when it came to getting all my credits transferred. I really appreciated going to Durham Tech because I knew that if I ended up going to a state school within NC, it would be a smooth transfer. There were two people ahead of me that got their degree. They are currently sophomores at Chapel Hill. So, they were explaining to me that they didn’t have any issues with transfer. It shows up as TRX [transfer credit on the transcript]. It just says transfer, it doesn’t show what grade you have, but that’s fine. As long as it transferred over then I was good with it.

Michael had a similar experience:

At Forsyth Tech, there was a group of us taking courses together, so we supported each other. If one of us had a question around the process of transferring or something like that, we could lean on each other for support.

### **Earning transfer credits**

Earning transfer credits is the third subtheme to emerge related to the transfer process. Many participants are taking courses to transfer but often that is not the case and these courses do not transfer. Joy described her experience with the many people she encountered:

Our guidance counselor at East [high school] would tell us ... [to] take some CCC courses. Talk to this woman from CCC that would give us the paper that we fill out. Here are some classes that you can take. She did go over some of the transfer courses, but that wasn't until my senior year. My junior year she didn't go over the transfer courses. So maybe she did learn something new and decided, yes, let's look at the transfer courses. But other than that, it was just here, yes, that looks great, medical terminology, which sounds good because it sounds like it would be applicable. Then you go to the advisor, Mr. Hall. He puts them in the system, you're signed up for classes and you go pay for them. You go through three people, but none of them at any point told me medical terminology isn't going to transfer to anything at UNC-W. Don't take it. It's nice to have the knowledge but it would have been nice to have the credits as well.

Other participants were not aware that the courses they were taking through the community college could transfer to a four-year university. They had to self-advocate. Catherine explained after being asked how she got credit for her community college courses:

I actually didn't transfer my classes from Carteret until my second semester, freshman year because I realized that I wanted to go into the nursing program and those could go

toward my classes. So, I went to my advisor and she helped me look up how to transfer my transcript over.

Similarly, Richard described his experience:

The benefits that I received from the courses was accidental. It was completely accidental ... It was a surprise to me that the three courses I took could count towards something and allow me to start taking classes that I actually wanted to take much sooner.

### **Transfer Swirl**

The fourth subcategory is not a subtheme but a very different experience for one student with the transfer process. Her experience was so different that it warranted a separate description. Jacqueline participated in DE and transferred to an out-of-state university after graduating from high school and earning her associate degree. She spent one year out-of-state, briefly worked, and then transferred to UNC-CH, a school closer to her home. A term used to describe her experience would be “transfer swirl.” Though there is some confusion as to what her status was when she entered UNC-CH. She explained:

I was considered still a first-time student, but I was definitely considered a transfer student and they were explicit about that. And I was coming in as a sophomore-ish student. It’s still not entirely clear what my class standing is, but they [courses] all transferred, so, I don’t really care. It’s more like this is where you are until you are going to graduate and you’re approximately a junior. Now, you should have enough credits to graduate within a year and a half. So, I would be graduating when I was expecting to graduate. They’ve been very transparent about the process. It’s just because I’ve in a bit of a weird situation. The exact box I go into, it’s not always clear.



When asked about her transfer student process, Jacqueline said:

I didn't want to come in as a freshman student ... There's much more of a community coming in as a transfer student. And at that point, I've been away for a couple of years ... After leaving Middle College, I did attempt to go to another university and that didn't work out because of complicated reasons ... By the time I came to applying for UNC, I'd have a little bit of experience as a proper freshman. I didn't really like it. It didn't go well for me. I appreciated that UNC-Chapel Hill knew what to do with me as a transfer student and a lot of the other schools I was applying to took one look at me and were like, we don't know what to do with you. UNC just didn't bat an eye. You're a transfer student, here you go. We have a residential learning program. If you want it, we have 2000 plus other transfer students you can connect with. Here's the transfer student office, here's the counselor, here's all these resources for you. That's really what's cinched the school for me.

Jacqueline's experience with UNC-CH is very different from the path of the other participants in the study; yet, she described a process that was smooth, stress-free, and easy to navigate.

Navigating the transfer process can be a seamless process if the right resources are in place to help the student. College and high school personnel can help students understand which credits can be put toward a major or general education requirement. They can review transcripts and help students select courses that will transfer and help them attain their goals. The degree to which the personnel can be helpful seems to vary dependent on the institution. Peers who have transferred to a university can even serve as a resource. Jacqueline was an outlier, but her experience was worth sharing.

### The Influence of a Four-Year Degree

The fifth theme to emerge was related to students continuing their education beyond a four-year degree. When asked about their future goals and life after undergrad, half of the 20 participants reported that a four-year degree was not enough and they knew they wanted to go to graduate school (master's, doctorate [Ph.D.], or medical degree [MD]). After being on the university campus and speaking with advisors and learning more about their major and career goals, many students decided they wanted to continue their education. Some of the students were influenced by their parents and siblings. Many of the participants were from college-educated households. Some participants are pursuing life-long goals while others were influenced by their experiences with DE and the four-year university they attended.

Table 9

#### *Aspirations After College*

Name (Pseudonym)	College-Educated Parent(s)	Aspiration	Area of Interest
Gibson, Donna	Yes	Master's or Ph.D.	Criminal Justice Field
Jones, Kathy	Yes	MD	Forensic Psychologist
Lewis, Susan	Yes	PA	Physician's Assistant
King, Renee	Yes	MD	Emergency Medicine
King, Joy	No	Master's	Nursing
Mack, Zillow	No	Master's	Climatology
Roberts, Jennifer	No	Master's	Social Work
Tillman, Joshua	Yes	Master's	Psychology
Umpire, Jada	No	MD	Neurology
Wilson, Heather	Yes	Certificate beyond four-year	Child Development

Kathy is a psychology major with a concentration in social sciences and a minor in criminal justice. She wants to be a forensic psychologist. Her dream job is to work for the FBI

and create criminal profiles and conduct mental evaluations of high-profile criminals. She said, “I would potentially be a doctor, like a psychiatrist. I haven’t figured that out, but I just know. I want that. It is a goal of mine.” Donna’s long-term dream job is to also work for the FBI in 10-15 years. In the meantime, after college, she explained, “I would love to get a master’s or maybe a Ph.D. That’s kind of not decided. I need to get through these first four years.” Both of these participants gave credit to taking Psychology 150 while in high school, which helped to open them up to that career path.

Susan comes from a college-educated household. Her brother is studying neurology at UNC-CH. She has always known she wanted to be a physician’s assistant. Her brother, father, and she are all diabetics. Taking an anatomy course in DE solidified her desire to become a PA. Susan described, “That anatomy. I really liked it because I want to be a PA. That was my favorite course.”

Two of the students (Renee and Jada) attended high schools (City of Medicine Academy) that support students going into the healthcare profession. Their mission is to challenge students through rigorous and authentic academic and healthcare experiences in collaboration with community partners. Both participants had to decide in middle school they were interested in working in the healthcare field in order to attend this high school. They were also able to gain experiences through DE that helped support their career choice and provided them more information about higher education preparing them for those goals.

Joy is a first-generation college student. She decided she wanted to be a nurse after taking a course, medical terminology, while a DE student. This course did not transfer. Joy is applying for admission to the School of Nursing this spring. She is aware that to become a nurse practitioner, she will need to pursue a graduate degree. She said, “I’d like to work there

[hospital] for a little bit before I go on to get my master's degree. I would like to be a nurse practitioner."

Zillow comes from a non-college-educated household but sees the value of higher education. She is not a typical DE student because she only took one online course while in high school. She then enrolled at CCC and completed the associate degree before transferring to UNC-W. Zillow stated:

I'm thinking of applying to NC State for a master's in climatology ... higher education opens new opportunities for making more money ... Being from the coast and all the hurricanes we get ... I am interested in learning a lot more about the weather and I know I will need more schooling beyond my BS degree.

Jennifer's parents have both completed associate degrees. Her mother stressed the importance of college to make a better life for yourself. Jennifer is graduating in May and has just discovered at the end of her four-year degree that she loves social work and that is exactly what she wants to do. Instead of changing her major she decided to pursue a master's degree in social work through an online degree program. She explained:

I also want to get my master of social work online ... I am doing public health here [UNC-W]. Last semester, I really found social work. I thought this is exactly what I want to do. I'm already in a bachelor's, I'm not going to change now. So, let's go get my master's and I was already planning on getting a master's in public health. I found social work. So, I was like, I want to get my Master's. I just think getting a higher education opens more doors. I don't frown upon people who don't so it. I personally just want to go as far as I can. If that involves getting my doctorate, then it would be great. But right now, the goal is to get my master's.

Joshua's stepfather has been a big influence in his life. His stepfather is the person who convinced him to try DE courses and he graduated with an associate degree. Joshua is graduating in May with a degree in psychology and a minor in criminal justice after being at ASU for two years. Joshua stated, "I've always wanted to try to get a doctorate. That's the goal. But I need at least maybe a master's to go into forensic psychology."

Hannah has a college-educated mother. She changed her major from elementary education to child development. She hopes to pursue a degree as a child life specialist. Hannah believes that to attain this goal it will require more education but not graduate school. She explained:

I won't have to go to graduate school, but I'll have to take other classes to get a certificate ... I think higher education gets you more money and more opportunity, whether it's with a job and a higher position and then being able to help your family out.

Though the reasons for pursuing a higher degree vary among the 10 participants, it is clear that they know they want to pursue it. Some seem to equate a higher degree with greater opportunity and more money. Some had direct experiences that led to their decision.

### **Lack of Diversity Among Participants**

The survey prospective participants completed to determine eligibility to participate in this study did not ask for ethnicity. At the conclusion of the interviews, it was determined that knowing the ethnicity of the participants would be important information to verify based on the researcher's observations. There appeared to be a lack of diversity. Additional information was collected from each participant about to verify their ethnicity. The findings are illustrated in Table 10.

Table 10

*Diversity of Participants*

Aspect of Diversity		Frequency ( <i>f</i> )	Percentage (%)
Race/Ethnicity	White	14	70
	Asian	4	20
	Black	2	10
First-Generation College	Yes	9	45
	No	11	55
Siblings with College Experience	Yes	10	50%
	No	10	50%

**Chapter Summary**

This chapter provided an understanding of the experiences of DE, transfer, and future goals after graduating of the 20 participants from the partnership institutions. At least one quote is provided for each participant. The experiences were divided into six themes: 1) the appeal of DE; 2) developing the skills needed to navigate college; 3) rigor of community college courses; 4) information related to the transfer process; 5) continuing beyond a four-year degree; and 6) lack of diversity. The themes were further divided into subthemes that emerged after the data analysis process. Chapter Six will provide a discussion of the findings.

## CHAPTER 6: DISCUSSION OF FINDINGS

Over the past decade, there has been a significant increase in the number of high school students participating in dual enrollment (DE) programs across the U.S. and that number continues to grow. In fact, DE programs have become the second most popular college preparatory option in the nation, surpassed only by AP (Cowan & Goldhaber, 2015). Although the creation of opportunities for high school students to get early exposure to college has grown, the implementation of services aimed at supporting DE programs has not kept pace.

The purpose of this qualitative study was to understand the experiences of students who were dually enrolled in high school and successfully transferred to a four-year institution. Participants in the study were selected because they attended universities identified in a quantitative analysis by Bartek (2020a) based on strong community college and university pairs. Purposeful sampling was used to select the participants of the study as it allowed for the selection of students that informed the understanding of the research problem (Creswell & Poth, 2018). This sampling procedure enabled me to pick participants who could provide the most informative data on enacted values and provide an understanding of the experiences of DE students. This chapter discusses the research findings, implications for research and practice, and directions for future research.

### **Discussion**

Given that no study has specifically explored the experiences of students who participated in DE programs after the student transitioned to a four-year institution, this study adds new perspectives on ways in which college students describe their experiences. Additionally, the multiple interviews conducted with students provide an in-depth perspective as to how students are successful with degree completion. Five conclusions were identified:

1. Students enrolled in DE programs are able to facilitate and foster the transition from high school to college.
2. Students enrolled in DE programs matriculate to a four-year institution and have the option of completing the degree sooner.
3. Students enrolled in DE programs are able to experience a reduction and cost savings for postsecondary education expenses.
4. Students enrolled in DE programs need more information about the transfer process.
5. Students perceive courses at the community college to be less rigorous than their coursework at the university.

These findings represent the experiences of 20 students across three UNC System institutions who participated in DE. The findings build upon one another to describe the experiences and future aspirations of these students. The remainder of this discussion section will describe how the findings align with previous research on DE and the theoretical framework for this study: Self-determination theory.

**Students enrolled in DE programs are able to facilitate and foster the transition from high school to college.** It was clear the participants in this study were able to prepare for the transition from high school to a four-year university because of their experience with DE. Students suggested that their DE experiences have a positive relationship on their first year success. The results of this study provide some evidence that introducing high school students to college coursework has great potential to better prepare them for matriculation to college. Renee expressed:

For me, the transition from high school to UNC was a huge thing for me because ... the dual enrollment courses that I took helped me to know what to expect, and how the



classes were going to be and taught me things like how to talk to the professors and how to manage my time and how to register for classes. Having that experience before being on a four-year campus was a great experience for me and helped me succeed.

Research (Allen 2020) on the transition from high school to college also supports DE programs as a strategy to prepare high school students for college. With community colleges situated between secondary and other postsecondary institutions, they are a logical partner and integral collaborator for helping students with the transition from high school to college (Bragg, 2011, p. 366). Allen (2010) found that DE programs help facilitate the transition by preparing students for college-level work, reducing the need for remedial coursework, enhancing the high school curriculum, raising students' motivation and aspirations to attend college, and acclimatizing students to the college environment. The information gained from this study is not only supporting the work of Allen (2010) but it is also adding to that work. Not only did the participants matriculate to a four-year university, 50% of them aspire to continue their education beyond the four-year degree.

**Students enrolled in DE programs matriculate to a four-year institution and have the option of completing the degree sooner.** One of the expected benefits of dual enrollment programs is that they reduce the financial cost to students of attending college, either directly through tuition subsidies or indirectly by shortening the ultimate time to degree. By accumulating college credits while in high school, students may reduce the time it takes to complete a college degree, thereby reducing the costs of completing college. By reducing the cost of obtaining a postsecondary degree, dual enrollment programs should unambiguously increase the likelihood that students enroll in some type of college after high school (Kane, 2007). Susan stated:

I had considered college before enrolling in the dual enrollment program but was not sure how I would go and if I was ready. After taking dual enrollment courses and being successful, it gave me the confidence to believe that I could succeed at a four-year. It wasn't really an option for me before taking college courses. And now, I am going to only have to spend two years at App and then I graduate.

According to the Alliance for Excellent Education (2018), nationally, 59% of postsecondary education students graduate with a bachelor's degree in six years. Students from DE programs graduate from 4-year colleges at a rate of 60% in just 5 years. My data suggests that the decreased time to degree is critical to dual enrolled students.

**Students enrolled in DE programs are able to experience a reduction and cost savings for postsecondary education expenses.** Participants in this study commented on the cost savings of the DE program they participated in. Donna knew to the dollar how much money she saved by participating in DE. She stated, "I've saved \$20,000 doing it [DE]. I paid \$124 to come here [ASU] this semester after scholarships and FAFSA." Andrew reflected, "I shaved two years off my college...and saved a lot of money." Participants felt that saving money was an appealing aspect of taking DE courses.

One of the expected benefits of DE programs is they reduce the financial cost to students for earning a degree, either directly through tuition subsidies or indirectly by shortening the ultimate time to degree (Cowan & Goldhaber, 2015). The rising tuition cost in a declining economy requires students to consider ways to reduce their cost of a college education. The DE programs in North Carolina cover the cost of tuition; however, some programs still charge students for fees and books. By reducing the cost of obtaining a postsecondary degree, DE

programs should increase the likelihood that students enroll in some type of college after high school (Dynarski, 2003; Kane, 2007).

**Students enrolled in DE programs do not have a full understanding of what it means to be dually enrolled.** As participants in the study reflected on their DE experience many admitted to not having a full understanding of what it meant to be dually enrolled. Richard reflected:

I took nine hours of college credit when I was in high school, but I didn't know that it would transfer to UNC-W ... It was not until my second year at UNC-W that I requested my transcripts from Carteret so that I could apply the credit to my university coursework.

This quote illustrates the haphazard manner in which a student earned college credit toward his degree rather than an intentional selection of courses to be applied to a baccalaureate degree.

Jennifer reflected on how she heard about the opportunity but did not fully understand all the benefits:

They [high school] were making announcements about a lady coming to talk about dual enrollment. All rising juniors and seniors were invited to a meeting at the school to learn more about it ... My mom didn't really know anything about college ... It sounded like a good opportunity so I signed up ... I didn't know that getting my associate's degree was an option. I would have liked to have done that [earned her associate degree].

Even when a participant had a sibling with DE experience, they were still unaware of the potential benefits of taking DE courses. Kathy stated that her brother, who also attends ASU, had participated in DE:

My brother did dual enrollment when he was in high school so I knew about the program and figured I would follow in his footsteps...but I didn't really understand how it would benefit me.

A variety of strategies are used to inform students and parents about DE offerings, including brochures, posters, websites, and student/parent orientation sessions. High school counselors, teachers, and current and former students are all considered essential in student recruitment (Hughes, Karp, Bunting, & Friedel, 2005). Halsey (2016) researched low-cost marketing tactics to boost enrollment and found a number of methods (geofencing, word of mouth, personal hand-written notes, letters of support from the community college president) to boost enrollment at community colleges. Most of the participants in this study gathered information about DE by word of mouth. The students usually knew someone (sibling or friend) who had previously participated. Though the students had general information about the program, they often did not understand the nuances of how the program operated. For example, most students understood that courses would transfer to the four-year university but they did not understand how those courses would be applied to the baccalaureate degree and that some courses were more beneficial than others. It is important for students to understand the pros and cons of DE and make a decision to participate based on researched information because students have a diverse range of academic backgrounds. One student's reason for participating (i.e. reducing future costs, college credit) may not be advantageous for another student (i.e. the four-year university they want to attend may not accept dual enrollment courses for transfer credit).

**Students perceive courses at the community college to be less rigorous than their coursework at the university.** Participants overwhelmingly expressed that DE coursework was not as rigorous as coursework at their university. Joshua expressed, "I just don't feel like the

courses I took at FTCC were that hard as compared to the courses here at ASU. There are greater expectations and harder work.” Bobby also reflected, “Classes at Durham Tech were harder than my high school classes, but UNC courses are super hard. UNC is known for being a tough school and I would agree with that.”

According to Kim, Barnett, and Bragg (2003), the biggest concern related to the quality of dual credit courses has to do with ensuring the courses are taught at the college level. Critics (Allen, 2010) of dual and concurrent enrollment programs argue that significant numbers of concurrent classes do not maintain the academic rigor of the same courses taught on college campuses. A major tension related to DE programs that surfaced in Kim et al.’s (2003) research was between promoting accessibility versus maintaining program quality and integrity. Access is important but not at the cost of quality and integrity. It is imperative that the students have the knowledge and skills necessary to be successful when they transfer to the four-year.

According to Johnston and Del Genio (2001), “[There] is a great similarity – indeed a virtual overlap – between the curricular content and the educational purposes of the last years of high school and the first years of college” (p. 544). Even so, their analysis of policies and practices at 450 postsecondary institutions showed great differences between two- and four-year institutions in the extent to which “college-level” courses taken by high school students are accepted and credited toward graduation. The researchers found that some colleges and universities question whether the grading standards, particularly in high school-based DE programs, are rigorous enough, or whether “high school teachers, however pedagogically talented, know what is genuinely ‘college-level’ in assessing the learning of their students” (Johnston & Del Genio, 2001, p. 546).

The issue can be problematic because there is no universal agreement on the meaning of “college-level.” Jobs for the Future (JFF) and other DE researchers maintain there should be some investment in quality control in order to ensure the skill of the teachers offering college-level classes and to certify that course content and course examinations are in fact college-level (Hoffman, Vargas, & Santos, 2008; Makela, 2005). Most of the participants in this study commented that the community college courses were not as rigorous as their university-level courses. When the participants are describing rigor, they are referring to the amount of reading required outside of class for their university courses. They describe that instructors at the university have an expectation that they have the knowledge to complete assignments without detailed guidance like they might have received at the community college. Yet these students are succeeding and progressing through their coursework at the university. It is my belief that the community college prepares the student to be a successful college student by giving them the skills needed to navigate the university environment. Skills such as time management, autonomy, establishing relationships, registering for courses, and learning how to study. It is imperative that community college courses are of high quality and adequately prepare students to succeed in university-level coursework.

The participants in this study led the researcher to the following conclusions: 1) Students enrolled in DE programs are able to facilitate and foster the transition from high school to college. 2) Students enrolled in DE programs matriculate to a four-year institution and have the option of completing the degree sooner. 3) Students enrolled in DE programs are able to experience a reduction and cost savings for postsecondary education expenses. 4) Students enrolled in DE programs need more information about the transfer process. 5) Students perceive

courses at the community college to be less rigorous than their coursework at the university. The next section will focus on the theoretical framework: self-determination theory.

### **Theoretical Framework: Self-Determination Theory**

Self-determination theory (SDT) (Ryan & Deci, 2000) provides a useful theoretical framework to explore and understand the experiences of students who participated in DE programs and then transferred to a four-year university. According to self-determination theory, having the experience of autonomy, competence, and relatedness fosters volition, motivation, and engagement which result in enhanced performance, persistence, and creativity. When students earn college credits and degrees while still in high school, are able to problem solve, develop self-efficacy skills, and feel smart and confident they are more likely to develop interests in college that lead to them transferring and earning a baccalaureate degree. Thus, it can be theorized that students who participant in DE experiences are more likely to develop aspirations to complete the degree and in many instances (50%) aspire to continue their education beyond the four-year degree when they see themselves as motivated and engaged. The participants in this study participated in DE and matriculated to a UNC school and were intrinsically or extrinsically motivated. Their motivation is considered intrinsic The following sections connect the findings of this study to the students' innate psychological need for belonging (or relatedness), competence, and autonomy for optimal engagement to emerge (Ryan & Deci, 1985, 2000, 2002).

**Belonging.** Referring to an individual's "desire to feel connected to others – to love and care, and to be loved and cared for" (Deci & Ryan, 2000), belonging is experienced through supportive and caring relationships, where one's thoughts and feelings are valued. Alicia

described the learning community she is living in at UNC-W that offered her a sense of belonging:

I know I want to pursue a career in medicine. When I came to UNC-W for an orientation session they [admission counselors] told me about a learning community in the dorm focused on careers in medicine. I was thrilled. I'm with a bunch of students who are also interested in being in the medical field and we all live on the same hall ... We have classes together this semester. It's kind of fun because we all know each other. This was my group ... A group where I belong.

Jada commented on being a part of Honors Carolina at UNC-CH:

I took Honors courses when I was a student at Durham Tech. I actually graduated with honors [students had to complete 18 hours of honors credit at the community college to graduate with honors] and it allowed me to participate in the Honors College here [UNC-CH]. It is a small group of students who get to have this experience so we know each other and sometimes hang out together and do homework together.

Participants' sense of belonging with the groups they joined gave them a group of people who were like them and who they could relate to during their successes and their moments of doubt. These strong connections seemed to have an impact on their students' motivation to continue their education and matriculate to a university.

**Competence.** Competence is considered the most straight forward of psychological needs by Deci and Ryan (2000) and is related to the pleasure of being effective in social contexts. Competence is experienced through exploring and mastering an environment, essentially by performing well. Half of the participants in the study had siblings with college experience. 45% of the participants have a college-educated parent. Parents and siblings were



influential in providing competency support. Most of the second-generation students in this study knew at an early age that college was an option for them. Michelle stated:

Both my sisters graduated from college so I knew college was something I should try to do. I look up to my older sisters ... I did well in high school ... got good grades, so I knew I could be successful if I went. And I am.

Georgia reflected, "I am the first in my family to go to college. I am the youngest, smart, and want to show my older brothers and sisters that it can be done ... one of us can get a college degree." Siblings seem to have an impact on the participants' desire to excel and attend college. Participants with siblings expressed confidence in their ability and this enhanced their motivation to attend college.

High school and college personnel were also key to providing participants in this study with competence. Joshua's step-father is an Early-college high school teacher and talked to him about trying the DE program. Joshua reflected,

...I have a step-dad who is absolutely amazing and he is the one who gave me this opportunity [DE]. He thought it would be a good experience for me and he was right.

Colby spoke about a history instructor and two biology instructors he had while at Durham Tech. He stated:

My favorite instructor was a history professor, Dr. DePalma. His class was so interesting. He made history come alive. I also took a SEA-PHAGES biology course [research-based course] with Drs. Fogarty and Leadon. That class was really cool...we got to go to UNC and sequence our dirt DNA. They also talked about transferring to UNC and continuing with science...I was already committed to doing ROTC but their class was hands-on and I felt like I learned a lot in that course.

Parents, siblings, and high school and college personnel provided positive feedback, which is essential for augmenting feelings of competency (Ryan & Deci, 2000). Hearing that their instructors and parents thought they were capable, helped the participants in this study believe in their college readiness.

**Autonomy.** Autonomy means to act with a sense of choice without being forced or obligated and with freedom to determine one's options (Ryan & Deci, 2000). Autonomy is experienced through "choicefulness and authorship of behavior" (Deci & Ryan, 2000, p. 71). Autonomy is related to students' clarity about what they value most in educational objectives and career opportunities and their ability to determine and follow through on steps required to attain the related objectives. The participants in this study spoke about the process of choosing to participate in DE. Renee reflected:

When I was at the City of Medicine and they [counselors] talked about being able to go to Durham Tech to take college courses, I went home and talked about it with my parents. They were supportive ... We talked about the pros and cons but ultimately the decision was left up to me.

The participants in this study also expressed how their families were supportive of their choice of where to go to college. Susan explained:

My brother is at UNC studying neurology. There was an expectation that I too would go to college and study science. But my parents allowed me to decide for myself what I wanted to study and where I wanted to go. I decided that ASU was a better fit for me and that is where I applied.

Participants cited family members as promoting their autonomy. These autonomy-supported strategies facilitated students' motivation on the path to college by serving as sounding boards supporting their child's decision, but ultimately leaving it up to the child to decide.

**Engagement.** Engagement is a state of being that combines high effect, attention, and participation with emotions of interest, enthusiasm, enjoyment, and lack of anxiety or anger. SDT proposes that engagement should be considered a common, rather extraordinary, human characteristic – one that emerges naturally unless impeded or suppressed by socio-contextual factors (Deci & Ryan, 1985; 2000; Masten 2001). Many of the participants in this study are involved in extracurricular activities such as fraternities and sororities and clubs. Richard explained, “I joined a fraternity in my sophomore year. It fulfills a lot of my time. We do a lot of activities together around campus. Those are my brothers.” Colby spoke about his participation in a safety and security committee on campus. “I am in the student senate and was president of the safety and security committee. That was my extracurricular activity last semester ... When I was at Durham Tech, I participated in student government and wanted to continue that at UNC ... So, I joined the senate.” The engagement of some of the participants in the social aspects of the four-year university may aid in maintaining students' motivation. Student engagement is related to positive student outcomes, affects the future quality of the learning environment, and the extent of a student's active involvement in an activity affects his or her subsequent motivation toward that same activity (Eccles & Wang, 2012). This is important in this study because students were able to take advantage of the special interest/social activities on the college's campus. Connecting to the campus in non-academic ways was important to the students.

SDT was relevant for this study because it has been widely used in educational research to investigate environments that augment or forestall motivation among students (Ryan & Deci, 2000). The **experiences of** earning college credits or the AA/AS degree, feeling smart, and developing problem solving skills and self-efficacy, **fostered** the student's participation in extracurricular activities and being able to choose the major and the university they attended **resulted in** the students transferring to a university and aspiring to continue their education even beyond the four-year degree.

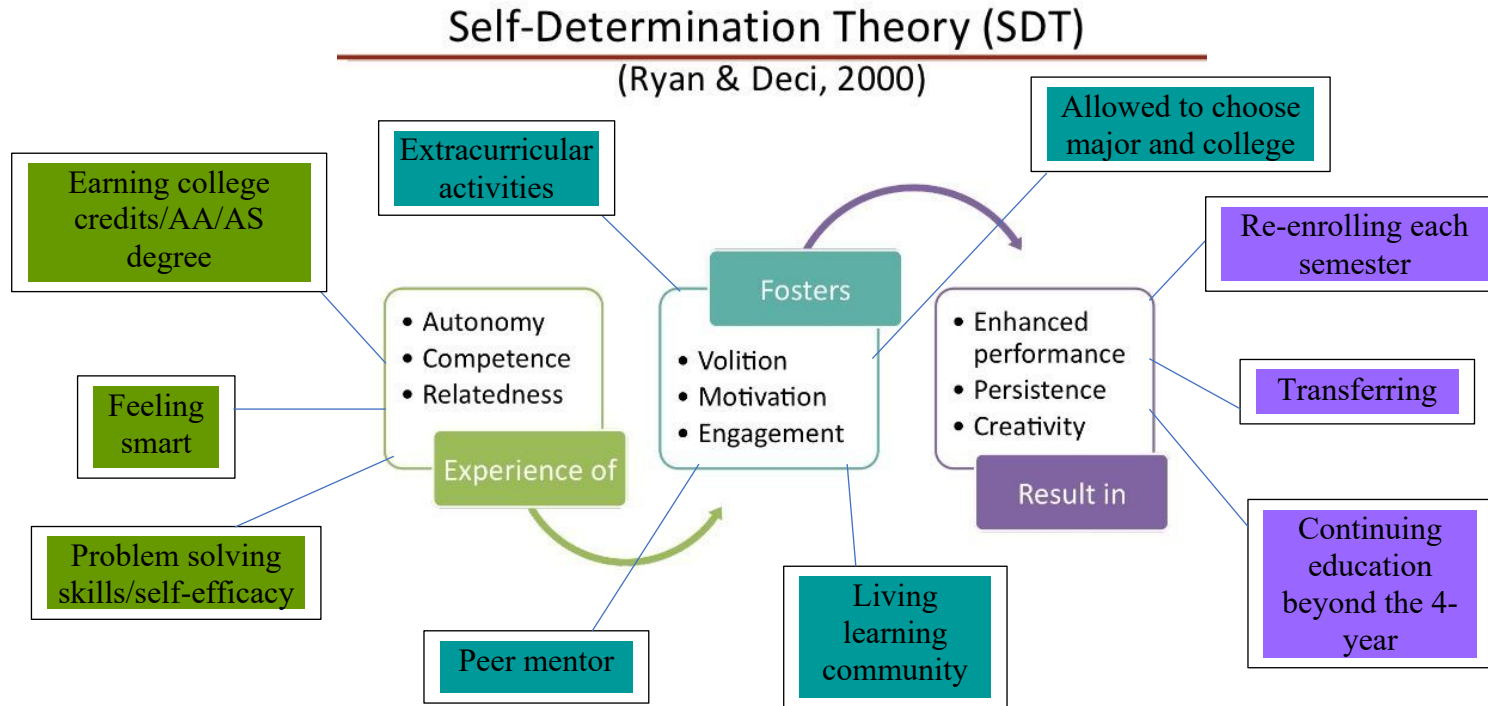


Figure 5. Model of self-determination theory. Adapted from “Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being” by R. M. Ryan and E. L. Deci, 2000, *American Psychologist*, 55(1), p. 68-78.

## Implications

The findings from this study contribute to our understanding of how motivational support from family and the communities in which the students were a part, augmented students' feelings of belonging, competency, autonomy, and engagement. The family and communities in which the students were a part supported students' motivation by providing feedback, support, and validation. The findings could be useful to those working to impact college access and completion, such as high school personnel and higher education staff in supporting DE students. Based on these findings, there were several implications for theory, practice, and future research.

**Theoretical implications.** With regard to theory, there were several implications. This study provided an opportunity to integrate SDT, which has not been widely utilized as a construct to explore students' experiences on the college transfer trajectory. SDT in this study highlights why students stay motivated and are on a path to complete a degree. This study enables researchers to better understand how autonomy, relatedness, and competency influence students' experiences. The students in the DE programs at the research sites indicated that the environment supported autonomous decisions. They were able to make decisions about their major and the university they choose to attend. The participants completed college credit hours, with many earning the AA/AS degree. Success in their courses led to students feeling smart and competent. The participants in this study used primarily extrinsic (influence of school personnel, parents, siblings, and friends; saving money; completing the degree sooner) motivation though there extrinsic motivations may have evolved into intrinsic motivations (the doing of an activity for its inherent satisfactions).

Some participants in this study persisted despite a lack of motivation. Some seemed to have an inner drive that enabled them to persevere. This may have stemmed by their family's

early emphasis on education and college or by their desire to change their life circumstances. SDT did not enable me to discern the personality traits or psychological processes that may have been at play. Such as emotion, environment, mindset, and life satisfaction or whether a person is an introvert or an extrovert. Using SDT alongside other theories from psychology or sociology may enable the exploration of those ideas. For example, if we had information on the frequency and intensity of positive and negative emotions it would help us understand more about a student's mind-set.

Many of the participants in this study found a group to assimilate with – whether that was a living learning community or belonging to a transfer student group or having a peer mentor at the four-year university who could answer questions regarding transition from the community college to the four-year. A sense of belonging is an important component in motivation. The students' sense of belonging contributed to their successfully transfer from high school to the four-year.

SDT served as an important framework for this research as it helped to understand the motivations of students during the important transition between their DE environment and university environment. SDT helped explain some important student behaviors but could not explain the entire transfer student experience. This research focused on particular community college and university partnerships, when exploring all the options transfer students could consider additional theories such as college choice theories would be valuable. Theories such as social and cultural capital would also be valuable additions to understand factors that contribute to the success of a transfer student,

**Practical implications.** There are four major implications for practice based on the findings of this study. First, there is a need for well trained staff to understand the transfer

process and to provide accurate, high-quality information about college. Second, students perceive courses at the community college as less rigorous than their coursework at the university. Understanding whether this perception impacts reality would be important, but in the meantime, ensuring that DE courses are taught by and capable instructors that adequately prepare students for university courses is important. There is also a need to provide DE students with experiences on the college campus to better simulate a collegiate experience. Lastly, access for underrepresented students in DE needs to be expanded.

**Advising.** Students who participate in DE programs should receive proper advising in order to make informed decisions. Advising throughout the program is crucial for DE students. Since students can earn high school credits and college credits at the same time, they should be aware of university admission requirements so that all prerequisite courses are completed prior to transferring to the university. An advisor from the college could meet with the students at least once per semester to discuss course selection and how the courses will apply to the four-year degree. DE instructors should be aware of resources at the high school and collegiate level for these students.

**Instruction.** The participants in this study reported that the coursework is not as rigorous as the university-level coursework. A DE champions team of stakeholders (e.g., administrators and faculty from the community college and high schools) should spend time thinking about which instructors are selected to teach DE courses, which courses are offered for DE credit, and where courses for DE are physically offered. Many DE classes take place on local high school campuses and community colleges may use adjunct faculty or local high school faculty credentialed by the college to teach such courses. Both options may potentially present conflicts of interest or lack of familiarity with college policies on DE programs. Complicating matters are



full-time faculty members who may object to “teaching high school,” suggesting DE is not what they were trained to teach. DE courses need highly effective, engaged teachers in the classrooms who are knowledgeable about the community college. It may involve incentivizing instructors to teach DE by perhaps counting a DE course as 1.25 hours towards their total teaching load in order for a DE course instructor to have one less class. However, with the rising importance of DE to students and community colleges, selecting effective and capable instructors to teach DE courses on high school campuses must be seen as fundamental to the success of the students, the program, and the host institution.

Role-related learning (Karp, 2012) is dependent upon students actually experiencing the college student role, and they cannot do this in courses that do not accurately reflect the expectations placed on college students. Practitioners often pay close attention to making sure that the academic components of DE courses mirror those of on-campus college courses, but the findings presented here indicate that broader attention should be paid so that the normative, behavioral, and attitudinal expectations of DE courses are well-implemented in campus courses as well. This could be done by having all stakeholders (e.g., high school, community college, and the four-year institution administrators and instructors) working together to communicate expectations to all involved. Better communication would involve creating strategies and an action plan.

***Experiences on the college campus.*** Some students who took DE courses on their high school campus or online rather than a community college campus did not grasp the difference between their high school classes and college classes. Their role-related learning was muted as a result. Finding ways to shift dual enrollees’ experience more dramatically, such as moving DE

to the college campus, or expecting students to spend significant time on the community college campus, is likely to increase the program's impact on college readiness.

Role rehearsal, (Karp, 2007) is the opportunity to gain an increased understanding of what it means to be a college student. Students not only need to hear about college expectations, but they also must be given ample opportunities to experience college by telling them about college processes (i.e. making an appointment with an instructor, using the tutoring center on campus, participating in an organization) and then giving them an opportunity to try them out. Practice gives participants the chance to understand truly what they need to be successful in their new role as college students. DE and other similar programs have an important role to play in helping students learn all facets of college readiness so they may achieve their educational goals.

Another option may be to have a transfer ambassador program where former DE students serve as peer mentors to current DE students. This would be especially helpful for those students who have no parents or siblings with prior college experience. There could be connections that allow students to visit the four-year university and stay on campus with their mentor. Any exposure to a college experience would be beneficial to the DE student.

**Access.** Overall, the data demonstrate that participants in this study of North Carolina DE experience are more likely to enroll in college, but the majority of these students were non-minority, first generation, academically high performers, who were not eligible for a Pell Award. In this study, Swing (2020) and I recruited a few students who overlapped, meaning they qualified for both studies. Swing's study explored the experiences of students who transferred from the partnership institutions and were Pell-eligible. However, the majority of the students I interviewed did not qualify for Pell, which can be an indicator of income. Thus, a traditional model of DE was found in this study in which high-achieving, non-minority students are given

the opportunity to take a wider range of course options in high school. African American students, Hispanic students, and first-generation college students participated in North Carolina DE and enrolled in postsecondary education at rates lower than expected given their representation in higher education today, revealing the need to improve policy and practice to better attract and retain these students in DE (NCCCS Data Dashboard, 2019).

Table 11

*Race/Ethnicity of DE Students in NC*

Race/Ethnicity	Frequency ( <i>f</i> )	Percentage %
White	35,617	60
Black	7,892	13
Hispanic	7,762	13
Unknown	4,402	7
Multiple	1,348	2
American Indian/Alaskan	843	1

Further, credit momentum (i.e., number of DE credits completed) was associated with higher rates of college enrollment for students in this study. Therefore, participation in North Carolina DE helped students in this research continue their momentum into college. Also, North Carolina DE appeared to be of a greater benefit to four-year institutions since North Carolina DE students were more likely to enroll in them than two-year institutions.

The leading purpose of DE in North Carolina – to provide a wider range of course options for high school students in academic and career/occupational-technical subject areas – seems only to preserve institutional structures that help high-achieving college-bound students

pursue their postsecondary education after high school graduation. Unfortunately, these structures neither demand nor support students from a variety of academic and economic backgrounds to participate in DE, and thus, undermine the potential impact of North Carolina DE on college enrollment and completion. Similar to the paradigm shift from access to success with community colleges, DE can no longer be solely about providing high school students the opportunity to enroll in college prior to high school graduation. Rather, DE has the potential to help all students achieve success in postsecondary education and training.

In Oklahoma, a DE pilot program was designed specifically to eliminate barriers for low-income, first-generation, and minority students through policy changes (Roach et al., 2015). The pilot program was implemented after exemptions to an existing policy – primarily student eligibility requirements and tuition waivers – were granted. Although student eligibility requirements are not as strict in North Carolina, college readiness (i.e., college placement exam score and GPA) is a primary factor for determining who participates in DE, which may exclude some high school students who otherwise may have the potential to become college-ready through participation in DE. One strategy for mitigating the potentially negative effect of the current policy's requirement for demonstrated college readiness is offering a targeted approach (college-preparation in the high schools) to help prospective DE students become college-ready and therefore build up the credentials to become eligible for DE. This could be achieved by broadening entry requirements and giving students multiple points of entry, including but not limited to: ACT/SAT scores; high school GPA or class rank; fulfillment of pre-requisite requirements; students' demonstrated proficiency in the subject for which they wish to enroll (even if they are not proficient in other areas); and the recommendation of an academic or career advisor.

Research (Wang, 2009) indicates that DE has a positive influence on students' access to, and success in, college. DE, therefore, has an important role to play in helping the nation meet its completion goals. Nationally, the Lumina Foundation (2017) has calculated that the nation would need 50% of working-age people to earn college degrees, workforce certifications, or other quality credentials by 2025 to meet social and economic demands. Locally, myFutureNC (2018) is striving for 2 million North Carolinians with a postsecondary credential or degree by the year 2030. Importantly, DE can help ensure equity in college completion, not just higher overall completion rates. DE appears to improve student outcomes by simultaneously changing individuals' educational experiences and spurring structural change. By encouraging high schools and colleges to more closely couple their educational processes, DE lessens the gap between two traditionally separate sectors of our education system. In doing so, it fuses the gaps in the completion pipeline, helping more students move from one sector to the other. Reconceptualizing DE as a structural reform helps us understand why it is both so challenging to administer yet so promising. Higher education institutions could partner with the high schools to establish agreements that include a plan for providing student advisement and support. This could include providing DE students with access to the same support services (e.g., academic advising and counseling, library resources, etc.) that are available to regularly enrolled college students and/or designating at least one person to serve as a liaison for each district and postsecondary institution partnership. This person would be responsible for advising students and families, assisting with course scheduling, linking students to support services, and preparing students for transfer.

**Future research implications.** The results of this research offer several opportunities for additional inquiry and investigation. Leaders, educators, and policymakers will need to

continue to collect and analyze DE data, explore qualitative research methods, and develop case studies to assist in further identifying and understanding the institutional structures and practices most effective for optimizing DE programs. The remainder of this section details my recommendations for future research.

A few of the data limitations for this current study point to opportunities for future research that use better measures of student demographics, such as SES and family income, or academic metrics, such as high school GPA and standardized test scores. That information was not collected for this study. Future research should seek a sample, if possible of DE students from more diverse backgrounds and perhaps those who did not originally intend to go to college. These variables could help researchers control for preexisting characteristics that may explain differences among DE students and their postsecondary educational pathways. The location where DE courses are taught (e.g., high school campus, community college campus, or both) may also reveal differences among DE students and their patterns of college enrollment. Further research should explore the experiences of students who took DE courses at their high school compared to those who took DE courses on a college campus. This would allow researchers to better understand if high school-based programs are providing realistic early college experiences for participants or if the differences in students' experiences and preparation for college in a high school-based versus college campus-based DE program.

Within this study, I found differences between students who were homeschooled and students who attended public high schools, such as the total number of credits completed. Differences among high school types were not the focus of this study, but the topic could be further explored in future research. Exploring the course-taking patterns of students and the types of postsecondary institutions they attend could also inform policy and practice.

It is possible that college completion rates of DE students are linked to the number of DE credits accepted by four-year transfer institutions. Even though DE credits are intended to be applied to the student's degree program, further research is needed to understand which credits are actually accepted by other postsecondary institutions and whether they are accepted as general education credits or program major credits. Many DE students participate because of the cost reduction so knowing whether students need to take additional courses based on what applied or did not would be important. This research could also yield valuable information regarding time-to-completion and potential cost savings for students who began their college coursework while in high school.

Lastly, the value of DE programs extends beyond college enrollment. However, college enrollment was the focus of the current study because as Karp (2015) poignantly explained, students cannot graduate from college if they have not enrolled. Although the timeframe for this study was too early to explore college completion rates, there will be an opportunity to study college completion, or degree attainment, of these students in another year or so. Further longitudinal research should seek to better understand not only enrollment of DE students but completion as well.

## **Conclusion**

Participants in a DE program were asked about their lived experiences while in the DE program and about their experiences after transferring to a four-year institution. The key findings of the study are listed below.

1. Students enrolled in DE programs are able to facilitate and foster the transition from high school to college.

2. Students enrolled in DE programs matriculate to a four-year institution and have the option of completing the degree sooner.
3. Students enrolled in DE programs are able to experience a reduction and cost savings for postsecondary education expenses.
4. Students enrolled in DE programs need more information about the transfer process.
5. Students perceive courses at the community college to be less rigorous than their coursework at the university.

These key findings represent the experiences of 20 students across three UNC System institutions who participated in DE. The participants found that enrollment in DE programs was effortless, and they found ease at being able to take courses in a variety of course delivery formats. However, participants in this study did report that the transferability of dual program course credits to the four-year university needs further attention. Perhaps if students were better advised by a dedicated liaison between the high school and community college, loss of credits would become a practice of the past. Communication between all stakeholders is important if students are to be successful in obtaining the benefits of DE. With a rising demand for postsecondary education and training beyond high school, policymakers, administrators, and educators continue to look for opportunities to improve college access and success for all students. Community colleges play a significant role in the college access and completion agenda as they help students transition from secondary to postsecondary education and/or entry into the workforce, namely through DE programs that provide high school students the opportunity to complete at least some postsecondary education and training before graduating from high school.



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**APPENDICES**

## Appendix A: Interview Protocol for DE Students

**Participant:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Location:** \_\_\_\_\_ **Scheduled Time:** \_\_\_\_\_  
**Interviewer:** \_\_\_\_\_ **Start Time:** \_\_\_\_\_ **End Time:** \_\_\_\_\_

### Research Question:

Qualitative [Battle]: What are the transfer-specific experiences of students who participate in dual enrollment (DE) programs? What are the motives of enrollment for students to enroll in DE programs? What specific aspects of their DE program participation most influenced students' motivation to persist?

### Opening Questions

1. Tell me a little about yourself.
  - a. Family
  - b. Educational background of your family
  - c. Work history
2. If you could use one word to describe yourself, what would it be?

### Questions about the Career and College Promise (Dual Enrollment) Experience

3. When did you participate in a Career and College Promise program?
4. How did you hear about the Career and College Promise program?
5. What was appealing about taking dual enrollment courses?
6. How did you qualify for the Career and College Promise program?
7. What were the expenses related to taking dual enrollment courses?
8. Did you take the courses at your high school or on a college campus?
9. What community college courses did you take?
10. Did you have a favorite course? If so, what was it and why was it a favorite?
11. Did you have a least favorite course? If so, what was it and why was it a least favorite?
12. What were your goals when you entered the dual enrollment program?
13. Describe any challenges you experienced in this program?
14. Describe any benefits of participating in a dual enrollment program?
15. How many college credits did you earn?
16. Did you complete a credential while in the Career and College Promise program? If so, which one(s)?
17. Describe the support you received as a CCP student.
18. Describe your experience on the community college campus.
19. What advice would you give a student thinking about dual enrollment?

### Questions about the Transfer Process

20. What four-year college or university did you transfer to after the Career and College Promise program?
21. Was this college your first choice?
22. Did you use any of the college course credit you earned in the dual enrollment program?
23. Did participating in the dual enrollment program influence where you went to college? How?
24. What status were you when you started college? (i.e. freshman, sophomore, junior)
25. How did you feel the Career and College Promise program prepared / failed to prepare you for transferring to a four-year college/university?

#### Questions about the Four-Year Experience

26. Have you graduated from the four-year college or university? If not, when do you anticipate graduating?
27. What do you see as the value of a higher education degree?
28. Describe your experience on the four-year college or university campus.
29. Compare the culture of the community college to the culture on the four-year college or university campus.
30. What are your future goals?

#### Closing the Interview

31. Is there any aspect of your time in the CCP program that we have not covered that you feel had an impact on your experiences at the 4-year institution or on your ability to attain your educational goals that you would like to add at this time?

#### Additional Probing Questions

Can you elaborate?

What do you mean?

I am not sure that I am following you. Would you explain that?

Give me an example.

Tell me about it.

Who else was involved?

#### Interviewer notes



## Appendix B: Focus Group Protocol

**Participants:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
 \_\_\_\_\_ **Scheduled Time:** \_\_\_\_\_  
 \_\_\_\_\_ **Start Time:** \_\_\_\_\_ **End Time:** \_\_\_\_\_  
**Interviewer:** \_\_\_\_\_ **Location:** \_\_\_\_\_

### Research Questions:

1. Qualitative [All Collaborators]: How and why were these pairs effective for transfer students?
2. Qualitative [Bartek and Swing]: What transfer practices (structures, processes, and behaviors) were common among the top three pairs identified in Research Question 2?
3. Qualitative [Bartek]: What partnership practices (structures, processes, and behaviors) were common among the top three pairs identified in Research Question 2?

### Warm Up

Optional: Have all participants introduce themselves: name, title, and job duties as related to transfer. (Depending on the familiarity of the group this may not be necessary but may increase comfort of participants and foster better discussion.)

Thank you for taking time for this focus group. We are engaging people who are involved in transfer from many different perspectives in the college.

1. Can you each tell me about your work as it relates to transfer students?

### Questions About Transfer Practices

1. [Warm-up] Describe for me your view of the purpose of student transfer at your college.
2. [MAKE TRANSFER PRIORITY: MISSION] How do your leaders communicate the importance of student transfer?
3. How does your college live out the transfer mission?
4. Why is transfer important to your institution?
5. Why is transfer important to your students?
6. [MAKE TRANSFER A PRIORITY: PRESIDENT] Which leaders communicate the importance of student transfer?
7. How does your president or senior leadership talk about transfer and its importance?
8. How does your president or senior leadership demonstrate transfer as a priority for your institution?
9. Who else supports the transfer mission and how do they do so?
10. [MAKE TRANSFER A PRIORITY: DATA] What data does your institution collect on transfer? How do you review the data on transfer students at your college?
11. What have you learned by reviewing data on transfer?
12. [MAKE TRANSFER A PRIORITY: RESOURCES] How does your college invest in its transfer function? For example, does your college provide release time to faculty and staff to work on student transfer, provide a transfer resource center, etc.?
13. What positions, areas, or services have been created as a result of your focus on transfer?

14. [CLEAR PATHWAYS: COLLABORATE] Help us understand how your students find their way to a bachelor's degree:
  - a. When is a student identified as a transfer in the enrollment process?
  - b. How do you help students select a career or program pathway?
  - c. How do you assist students who are undecided?
  - d. How do you help students determine where to transfer?
  - e. How do you help students understand the steps they should take to attain bachelor's degrees? To what extent do you work with [partner] to do this?
  - f. What do you do to help students in programs whose course requirements cannot always be completed at a community college?
  - g. What transfer advising model do you use?
  - h. How, and how often, are program maps between your college and [partner] updated and improved?
  - i. How do you prepare students for the increased cost of attendance at the university?
  - j. What engagement do you have with students once they transfer?
  - k. Describe the collaboration that exists between faculty and staff at [partner institution].
15. [CLEAR PATHWAYS: PREPARATION-NCCCS COLLEGES]: How do faculty at your college design and deliver their courses to "prepare students to meet the expectations at the [4-year partner] college"?
16. How do local universities engage students on campus? Off campus?
17. What kind of college success courses, workshops, or experiences do you offer to transfer students? Are they mandatory?
18. What are the current initiatives at your college to help students transition? (pathways, NC GPS, ATD, RISE, etc.)
19. What kind of financial or financial aid planning do you provide for your transfer students?
20. [TAILORED TRANSFER ADVISING: UNC COLLEGES] How do you help transfer students transition to your college, finance your college, move through their programs, attain bachelor's degrees, and attain jobs in their career field.
21. What kind of financial or financial aid planning do you provide for your transfer students?
22. [PELL STUDENTS] Are any practices or interventions tailored or targeted to low-income students, defined as those receiving Pell grants?
23. How do you help low income students transition, move through their program, and attain bachelor's degrees?
24. [DUAL ENROLLMENT] Are there any practices, policies, or interventions targeted to dual enrollment students?
25. How do you help dual enrollment students transition, move through their program, and attain bachelor's degrees?
26. Think back to the four year period of time before implementing the new requirements of CAA in 2014, and then the period between 2014 and now. What has remained the same in your transfer practices? What has changed in your transfer practices? Why were these changes made?

### Questions About Transfer Partnership Practices

1. [Warm-up] Describe how you interact with [partner institution] college.
2. What is your relationship is like regarding the transfer functions at your college?
3. [COMMON AGENDA]: Do you and [partner] have a common understanding of the problems with transfer and a vision for what you want it to look like in the future?
4. How do you and [partner institution] agree on what needs to change for transfer students at your colleges?
5. What are the main transfer goals that you have developed with [partner institution]?
6. [SHARED MEASUREMENT]: How do you know whether or not your work with [partner] is working for transfer students?
7. [MUTUALLY REINFORCING ACTIVITIES]: How do you implement activities on your campus that are both unique to your campus but also coordinate with what [partner] is doing?
8. [COMMUNICATION] How do you communicate with [partner]? Who communicates? How often do you communication? What is communicated?
9. [BACKBONE]: How are the transfer functions and activities coordinated and managed between you and [partner]?
10. Think back to the four year period of time before implementing the new requirements of CAA in 2014, and then the period between 2014 and now. What has remained the same about your partnership with XX transfer partner? What has changed about your partnerships with your XX transfer partner? Why were these changes made?

### Additional Probing Questions

Can you elaborate?

What do you mean?

I am not sure that I am following you. Would you explain that?

Give me an example.

Tell me about it.

Who else was involved? And what was their role?

### Interviewer notes

### **Appendix C: Student Recruitment Email**

Dear UNC student,

I am currently a doctoral candidate at North Carolina State University in the College of Education and conducting a dissertation study to gather feedback from students who were dual enrolled in high school and transferred to a four-year UNC school about their experience. The purpose of this study is to explore the experiences of community college transfer students who were dual-enrollment students. Since you have been identified as a dual-enrollment student, I would like to invite you to participate in an interview for this study.

I anticipate an interview lasting about 60 minutes during [insert dates] in fall of 2019 at a time and location which is most convenient to you at or near your college. I will ask questions related to your experience with dual enrollment as well as other experiences relating to your transfer experience.

Please complete a quick questionnaire by [date] to be considered for participation in the study. You will receive a \$25 Amazon gift card as a thank you upon completion of the interview.

Thank you so much for considering this request! Feel free to contact me at [kabattl2@ncsu.edu](mailto:kabattl2@ncsu.edu) if you have any questions.

Thank you,

Kara A. Battle  
Doctoral Candidate  
Educational Leadership, Policy, & Human Development – Adult and Community College  
Education  
North Carolina State University  
[kabattl2@ncsu.edu](mailto:kabattl2@ncsu.edu)  
919.215.5445

## Appendix D: Student Interest Questionnaire

Thank you for your interest in participating in the transfer student research study. This research is being conducted by a doctoral candidate at North Carolina State University in order to learn more about the experiences of community college students who participated in dual-enrollment or are Pell-eligible, and transferred to a UNC college or university. Participation in the study includes taking part on one 60-minute interview with the researcher at your college in a mutually convenient space. The following questionnaire will be used to determine your eligibility for this study. You will be notified about your status as a study participant by [date]. You will also receive a \$25 Amazon gift card as a thank you if you complete the interview. Thank you for responding to the questions below.

1. What is your current enrollment status at this institution?
  - a. Full Time
  - b. Part Time
  - c. Not currently enrolled
2. Are you eligible for financial aid?
  - a. Yes
  - b. No
3. Are you receiving Pell Grant as part of your financial aid award package?
  - a. Yes
  - b. No
4. Did you transfer from a community college to your current school?
  - a. Yes
  - b. No
5. What community college did you attend?
6. Did you complete a degree?
  - a. Yes
  - b. No
  - c. If yes, what degree did you complete? \_\_\_\_\_
7. Did you enroll in college courses as a high school student?
  - a. Yes
  - b. No
8. What high school did you attend? \_\_\_\_\_
9. What is your major(s) or specific program of study? \_\_\_\_\_
10. What is your expected graduation date? \_\_\_\_\_

11. What is your hometown (city/state)? \_\_\_\_\_
12. Are you interested in participating in an individual interview to discuss your involvement in dual-enrollment and transfer from a community college?
- a. Yes
  - b. No
13. Are you interested in providing a resume?
- a. Yes
  - b. No
14. What is your birth year? \_\_\_\_\_
15. What is your email? \_\_\_\_\_

## Appendix E: Adult Informed Consent Form

# NC STATE UNIVERSITY

## Informed Consent for Participation in Research Guidance

### Adult Informed Consent Form

**Title of Study:** Seeking to Understand the Experiences of Dual Enrollment Transfer Students Studying at Baccalaureate Institutions in North Carolina (**eIRB # 11984**)

**Principal Investigator:** Kara A. Battle, kabattl2@ncsu.edu, 919-215-5445

**Funding Source:** None

**Faculty Point of Contact:** Dr. Audrey J. Jaeger, ajjaeger@ncsu.edu, 919-515-6240

### **What are some general things you should know about research studies?**

You are invited to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate, and to stop participating at any time without penalty. The purpose of this research study is to gain a better understanding of the experiences of dual enrollment community college students who transferred to a UNC system university. We will do this through asking you to participate in an interview.

You are not guaranteed any personal benefits from being in this study. Research studies also may pose risks to those who participate. You may want to participate in this research because you may find the discussion interesting and insightful about your transfer experiences. You may not want to participate in this research if you do not wish to share any information about your transfer experiences.

Specific details about the research in which you are invited to participate are contained below. If you do not understand something in this form, please ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If, at any time, you have questions about your participation in this research, do not hesitate to contact the researcher(s) named above or the NC State IRB office. The IRB office's contact information is listed in the *What if you have questions about your rights as a research participant?* section of this form.

### **What is the purpose of this study?**

The purpose of the study, which is a dissertation in partial fulfillment of the Ed.D. program at NC State in the Adult and Community College Education program, is to investigate the experiences of dual enrollment community college students who transferred to a UNC system university.

### **Am I eligible to be a participant in this study?**

There will be approximately 18-24 participants in this study.

In order to be a participant in this study, you must agree to be in the study and be a current student at a UNC system university or have graduated an undergraduate program in 2018 or 2019, were enrolled in a dual enrollment program at a NC community college, and be at least 18 years of age or older.

You cannot participate in this study if you do not want to be in the study, if you are not a current student at a UNC system university or recent graduate, did not attend a North Carolina community college as a dual enrollment student, or are younger than 18 years of age.

### **What will happen if you take part in the study?**

If you agree to participate in this study, you will be asked to do all of the following:  
 Participate in a single 60-minute interview during the 2019-2020 academic year, which I will audio or video record in order to produce a transcript for later use.  
 Review the transcript and provide the researcher any clarification, if needed  
 The total amount of time that you will be participating in this study is 60 minutes.

### **Recording and images**

If you want to participate in this research, you must agree to be audio recorded and/or video recorded (video conference interviews). If you do not agree to be audio recorded or video recorded, you cannot participate in this research.

### **Risks and benefits**

There are minimal risks associated with participation in this research. The risks to you as a result of this research include anxiety or feeling uncomfortable answering questions about sensitive topics such as experiences while enrolled in a dual enrollment program in high school and your experiences with the transfer process to a UNC system school. The steps taken to minimize these risks include allowing you to take your time with responses during interviews. You can also skip a question or stop participation at any point.

There are no direct benefits to your participation in the research. The indirect benefits are helping inform recommendations and future research for community colleges and universities.

### **Right to withdraw your participation**

You can stop participating in this study at any time for any reason. In order to stop your participation, please tell me to stop the interview and that you are no longer interested in participating. If you choose to withdraw your consent and to stop participating in this research, you can expect me to thank you for your time and reiterate the confidentiality procedures described below. No one on your campus will be told about your participation withdrawal. If you decide to revoke your consent after the interview has been completed, we will attempt to remove your data from the data set. This is possible in some but not all cases.



procedures described below. No one on your campus will be told about your participation withdrawal. If you decide to revoke your consent after the interview has been completed, we will attempt to remove your data from the data set. This is possible in some but not all cases.

### **Confidentiality, personal privacy, and data management**

Trust is the foundation of the participant/researcher relationship. Much of that principle of trust is tied to keeping your information private and in the manner that we have described to you in this form. The information that you share with me will be held in confidence to the fullest extent allowed by law. Protecting your privacy as related to this research is of utmost importance to me.

How we manage, protect, and share your data are the principal ways that I protect your personal privacy. Data generated about you in this study will be de-identified.

De-identified. De-identified data is information that at one time could directly identify you, but that I have recorded this data so that your identity is separated from the data. I have a master list with your code and real name that connects your information to the research data. While I might be able to link your identity to your data at earlier stages in the research, when the research concludes, there will be no way your real identity will be linked to the data I publish. The master list will be destroyed along with all recordings at the conclusion of my research. The transcript which will not contain any identifiable data will be kept for future research.

Data that will be shared with others about you will be de-identified because it will be aggregate with other interviews and cannot be linked to your identity. If any direct quotes are used, a pseudonym will be assigned.

To help maximize the benefits of your participation in this project, by further contributing to science and our community, de-identified information will be stored for future research and may be shared with other people without additional consent from you.

### **Compensation**

For your participation in this study, you will receive a \$25 Amazon gift card. If you withdraw from the study prior to its completion, you will receive a \$10 Amazon gift card.

### **What if you are an UNC System student?**

Your participation in this study is not a course requirement and your participation or lack thereof, will not affect your class standing or grades.

### **What if you have questions about this study?**

If you have questions at any time about the study itself or the procedures implemented in this study, you may contact the researcher, Kara Battle via email [kabattl1@ncsu.edu](mailto:kabattl1@ncsu.edu), or by phone at 919-215-5445. You may also contact the faculty advisor, Dr. Audrey J. Jaeger, [ajjaeger@ncsu.edu](mailto:ajjaeger@ncsu.edu), 919-515-6240.

### **What if you have questions about your rights as a research participant?**

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact the NC State IRB (Institutional Review Board) Office. An IRB office helps participants if they have any issues regarding research activities. You can contact the NC State IRB Office via email at [irb-director@ncsu.edu](mailto:irb-director@ncsu.edu) or via phone at (919) 515-8754.

**Consent to Participate**

By signing this consent form, I am affirming that I have read and understand the above information. All of the questions that I had about this research have been answered. I have chosen to participate in this study with the understanding that I may stop participating at any time without penalty or loss of benefits to which I am otherwise entitled. I am aware that I may revoke my consent at any time.

**Participant's printed name** \_\_\_\_\_

**Participant's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Investigator's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

### Appendix F: Code Book

name	comment				
CC campus	CC campus	CC Experience	CC Experience	DE Experience	DE Experience
CC challenges	CC challenges	CC Experience			DE Coursework
CC culture	CC culture	CC Experience			Demographic Info.
dev edu	course taken during DE Program	DE Coursework	DE Coursework	DE Coursework	Future
autonomy	DE Appeal	CC Experience			UNC Experience
DE cost	DE appeal	CC Experience			Transfer Process
goal/gen Eds out of way	DE appeal	CC Experience			
HS challenges	DE appeal	CC Experience			
DE benefit	DE benefit	CC Experience			
DE costs/transportation	DE benefit	CC Experience			
DE courses relieved pressure of taking full-load	DE benefit	CC Experience			
DE challengesak	DE Challenges	CC Experience			
failed a DE course	DE Challenges	CC Experience			
DE community	DE Community	CC Experience			
DE courses with gen pop.	DE Course	DE Coursework			
DE/AP	DE Course	DE Coursework			
took courses with hs students	DE course population	DE Coursework			
DE taught	DE courses	DE Coursework			
exposure to social justice issues	DE courses	DE Coursework			

engaged	DE Courses/Instructors	DE Coursework			
reverse transfer	DE degree option	CC Experience		DE Experience	
DE/4 years	DE Enrollment	CC Experience			
DE exp.	DE experiences	CC Experience			
DE advice	DE Future	CC Experience			
DE goal	DE goals	CC Experience			
DE goals/knock our gen Eds	DE goals	CC Experience			
DE qualify	DE qualify	CC Experience			
DE Qualify/Advisor recommendation	DE Qualify	CC Experience			
DE Qualify/placement test	DE Qualify	CC Experience			
GPA qualify	DE Qualify	CC Experience			
Transfer services	DE Resource	CC Experience			
college skills	DE skills	CC Experience			
Completed degree	Degree earned	CC Experience			
earned degree	Degree earned	CC Experience			
DE courses/13 credit hours	Degree not earned	CC Experience			
did not complete degree	Degree not earned	CC Experience			
role model	Affect on Siblings	DE affect	DE Affect	DE Experience	
DE diversity/age	appeal of DE	DE Appeal	DE Appeal	DE Experience	
Diversity	Appeal of DE	DE Appeal			
transferability of DE coursework	appeal of DE	DE Appeal			
UNC cost	appeal of DE	DE Appeal			
DE courses	modality of DE course	DE Coursework	DE Coursework	DE Coursework	

DE courses on HS campus	modality of DE course	DE Coursework			
DE courses/online	modality of DE course	DE Coursework			
DE exp./Early College	modality of DE course	DE Coursework			
DE exp./Middle College	modality of DE course	DE Coursework			
extracurricular activities (hs)	extra-Curricular Activities/DE	DE experience	DE Experiences		
DE information	Knowledge of program	DE experience			
DE information/e-newsletter	Knowledge of program	DE experience			
DE information/word of mouth/brother	Knowledge of program	DE experience			
DE lessons learned	Lessons Learned - DE	DE experience			
DE regrets	Lessons Learned - DE	DE experience			
graduating in two years	meeting goals of DE	DE experience			
DE Enrollment	time spent in DE	DE experience			
DE participation	Time spent in DE	DE experience			
DE courses/on cc campus	DE Resource	DE Resources	DE Resources	DE Experience	
advisor	DE resource	DE Resources			
DE Advisor	DE resource	DE Resources			
DE appeal	DE resource	DE Resources			
HS guidance counselor	DE resource	DE Resources			

HS liaison	DE resource	DE Resources			
HS liaison at HS	DE resource	DE Resources			
HS principal	DE resource	DE Resources			
DE resource	DE Resources	DE Resources			
DE resources/review sessions	DE Resources	DE Resources			
DE resources/tutoring	DE resources	DE Resources			
college liaison	DE Resource	DE Resources			
DE support	DE Resource	DE Resources			
college-educated parents	Demographic Information	Demographic Info.	Demographic inf.	Demographic Info.	
DAD at UNCCH	demographic Information	Demographic Info.			
first generation college	demographic Information	Demographic Info.			
home schooled	demographic Information	Demographic Info.			
Immigrant	Demographic Information	Demographic Info.			
no brothers or sisters (only child)	Demographic Information	Demographic Info.			
one word description: caring	demographic Information	Demographic Info.			
parent/Mom/college-educated	demographic Information	Demographic Info.			
sibling influence	demographic Information	Demographic Info.			
sibling/ college graduate	demographic Information	Demographic Info.			

siblings	demographic Information	Demographic Info.			
siblings/college	demographic Information	Demographic Info.			
graduate school	Beyond 4-year	Future	Future	Future	
future goals	Future goals	Future			
value of HE degree	Value of degree	Future			
Work	support/work	life outside college	Life Outside of college	DE Experience	
work/4-year	support/work	life outside college		UNC Experience	
work/part-time	support/work	life outside college		UNC Experience	
courses harder at UNC	DE Preparation for UNC	Transfer process	Transfer Process	Transfer Process	
DE not prepare for UNC	DE Preparation for UNC	Transfer process			
DE preparation for UNC	DE Preparation for UNC	Transfer process			
courses did not transfer	Disadvantage of DE	Transfer process			
Summer bridge program	exposure to UNC	Transfer process			
close to home	Selecting UNC school	Transfer process			
UNC	selecting UNC school	Transfer process			
UNCCH	selecting UNC school	Transfer process			

UNCCH not first choice	selecting UNC school	Transfer process			
UNCW	Selecting UNC school	Transfer process			
advantages of transfer hours	Transfer Credits	Transfer process			
Transfer process	UNC Process	Transfer process			
Transfer swirl	Transfer Swirl	Transfer Swirl			
major	4-year ,major/minor	UNC experience	UNC Experience	UNC Experience	
ASU coursework	4-year coursework	UNC experience			
ASU experience	4-year experience	UNC experience			
graduation	4-year goal	UNC experience			
Early college living community	4-year living	UNC experience			
living on campus	4-year living	UNC experience			
medicine learning community	4-year living	UNC experience			
minor	4-year major/minor	UNC experience			
no diversity	Challenge of UNC schools	UNC experience			
intern at ASU TV	Extra-Curricular Activities	UNC experience			
extracurricular activities (UNC)	Extra-Curricular Activities/UNC	UNC experience			
toured campus	prep. For UNC support	UNC experience			
DE preparation	Preparation for UNC	UNC experience			
UNC campus	UNC campus	UNC experience			
cost of UNC	UNC Challenges	UNC experience			



first time freshman	UNC Classification	UNC experience			
first-time student	UNC Classification	UNC experience			
Transfer student	UNC Classification	UNC experience			
UNC classification	UNC Classification	UNC experience			
UNC culture	UNC Culture	UNC experience			
UNC resources	UNC Resources	UNC experience			
UNC resources/tutoring	UNC Resources	UNC experience			
ASU	UNC Selection	UNC experience			
ASU - first choice	UNC Selection	UNC experience			
college choice	UNC selection	UNC experience			
DE influence	UNC Selection	UNC experience			
first choice	UNC selection	UNC experience			
first choice/only choice	UNC selection	UNC experience			