

HOW DOES PARTICIPATION IN DUAL ENROLLMENT AFFECT STUDENT
PERCEPTIONS OF COLLEGE READINESS AND COLLEGE DECISION-MAKING? A
PHENOMENOLOGICAL CASE STUDY

By

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A Dissertation Submitted in Partial Fulfillment of the Requirements of the Degree of Doctor of
Education in Assessment, Learning, and Student Success

Middle Tennessee State University

December 2024

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ACKNOWLEDGEMENTS

What a privilege it is to have the opportunity to contribute to a shared body of knowledge, no matter how small a corner it inhabits. But why do any of this? That is what I found myself asking at times during the completion of this work, when progress halted and obstacles loomed. Ultimately, I believe that most of us choose to embark on this path because of our desire to improve our world and the lives of others; it is, in fact, what we feel we owe to each other. With that in mind, none of us are in this alone. This accomplishment, like so many others, was made possible by a community of supportive folks.

To my committee chair, Dr. Krahenbuhl, I'd like to share my appreciation for your consistent support throughout the process. Your thoroughness and willingness to explain and clarify important concepts was incredibly helpful to a novice researcher. Dr. Godwin- you always made yourself available to me for bouncing off ideas and reassuring me that I was headed in the right direction, and it steadied me on more than one occasion. Dr. Boyle, I owe a good deal of my professional journey thus far to you. You have always been supportive of me and made me feel as though I had something to offer in the context of higher education, and I will remember our time spent working together fondly.

To my colleagues, faculty and staff alike, I am also more grateful than I can adequately express. I am perpetually in awe of the incredible folks I have the chance to interact with on a daily basis. Dr. Rick Sluder and John Burchfield- you have inspired me with your leadership and empowered me to strive to make a difference for students. David Cicotello- my deepest gratitude for taking a chance on me and your wisdom and friendship ever since. The MTSU Dual Enrollment team- Matt Hannah, Kayla Fisher, and Niki Morris- I could not ask for a better group with which to spend each day. Mark Clark, Kristen Keene, Mark Murphy, Paul Wydra- you all

invigorate me with your friendship and our shared desire to leave our university better than we found it. There are so many other people that have made an impact in my personal and professional life, and you forever have my gratitude and respect. A special word of thanks in particular to Trisha Murphy; going through this experience together made it so much easier. We did it!

I would also like to express my love and recognition to my family. Katie, Kyle- I never had siblings of my own, but I cannot imagine having any sister or brother as incredible as you two. Jameson- you have brought me so much joy in being Uncle Casey, and I can't wait to see where your keen mind and pure heart lead you. Beth (Mother)- thank you for never ceasing to believe in me and welcoming me as one of your own.

Mom, Dad- I wish that you could have been here. To whatever extent that I have succeeded, I owe much of it to you two. Thank you for the virtues and perspectives that you instilled in me, and I hope you are proud.

To my Brown girls, Sass Frances and Bunny Dean, and my original Brown boy, Murphy- thank you for the joy you have brought to our lives. Finally, this work is dedicated to my wife, Courtney. You have seen me through so many plans, schemes, aspirations, and challenges- and you have always been my biggest supporter. My life would look vastly different today if not for your love and guidance. You have made me a fundamentally better person over the years, and you inspire me daily in how you give of yourself to others. We may take different approaches, but our hearts lead us in the same direction. Being one-half of the Browns is a wonderful adventure, and we have much more ahead.

ABSTRACT

As states and higher education institutions continue to face headwinds in attempting to develop and refine initiatives targeting student success metrics and enrollment management objectives, dual enrollment programs have become increasingly prevalent nationwide. Stakeholders have turned to these early postsecondary programs based on their potential to enhance college readiness, as well as a means for recruiting undergraduates. Given their expansion in Tennessee and other states and the corresponding investment of institutional and state resources, it is timely to consider how participation in dual enrollment could affect students' perceptions related to those aims.

Utilizing an interpretive framework of pragmatism and a theoretical framework grounded in Iloh's Model of College-Going Decisions and Trajectories, this phenomenological case study attempted to identify shared themes regarding self-perceptions of college readiness and effects on college decision-making among students who had the lived experience of participation in the Dual Enrollment program at Middle Tennessee State University during the 2022-23 and/or 2023-24 academic years.

Three primary findings emerged from the data: enhanced readiness due to exposure to campus processes, structure, and resources; a lack of evidence of dual enrollment as a determinant of matriculation decisions; and unfamiliarity with the dual enrollment institution despite proximity among students. Implications include recommendations for policies that afford students increased opportunities to participate in on-campus college experiences; increased collaboration between program administrators and faculty; and streamlining of undergraduate admissions policies for participants.

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CHAPTER 1: INTRODUCTION

In an era of transition and uncertainty, it appears that higher education in the United States has reached an inflection point. Nearly four hundred years have passed since the founding of the first colonial “schools of the Reformation” (Geiger, 2016), with an ever-evolving landscape shaped by legislation, industry, and cultural evolution among myriad other factors. From the origins of American higher education in religiously-affiliated institutions; to the development of land-grant public institutions; to the reimagining of the postsecondary consumer in the wake of a post-World War II enrollment explosion; to an increasingly inhospitable climate marked by frustration and skepticism among various stakeholders, the interplay among colleges and universities, the students they serve, and the larger framework they inhabit in society has arguably never been more critical to examine.

There are a number of key factors shaping the current postsecondary environment. Over the last decade, undergraduate enrollment decreased by approximately 15%, or over 2.5 million students nationally. Contributing to this top-line decrease are fewer first-year students, fewer students transferring from two-year to four-year institutions, and an increase in students leaving college without obtaining a degree, or “stop-outs” (Meyer, 2023). The reasons for the general downward trend in enrollment are varied and complex. Stronger labor markets and higher wages are often cited as deterrents to college registration (Beebe, 2022), while a demographic decline in the college-age population has frequently been cited as another challenge to enrollment managers (Eide, 2018).

Perhaps the most pervasive of these drivers of decline is the continually rising cost of a college degree, paired with the unavoidable issue of student debt. Across the board, almost all

states have initiated significant decreases in funding for higher education over the last decade. (Huelsman, 2018) This has had the effect of shifting an increased budgetary burden to tuition-paying students (Mitchell et al., 2019), while requiring institutions to reduce faculty and pare down course and degree offerings (Mitchell et al., 2019) Meanwhile, a generation of students have amassed a debt burden that now represents the second-largest source of consumer debt in the country. As of 2022, approximately 48 million individuals has amassed \$1.6 trillion in federal student loans, plus another \$100 billion in private loans for education (Federal Student Aid, 2023). A consensus has emerged that the state of postsecondary student debt represents a material harm to individuals while also threatening the stability of the national economy in coming years (Jedrych et al., 2022).

In the face of these challenges to institutions and students alike, it should perhaps come as no surprise that many colleges and policymakers are seeking creative solutions to mitigate declining enrollments while also making college credits more affordable and attainable to students. One such initiative, though it has existed in various forms for over half a century, has attracted increased attention over the last decade as a potential panacea. Dual enrollment (DE), defined generally as a program that allows high school students to enroll in college courses (Museus et al., 2007; D'Amico et al., 2013; Crouse & Allen, 2013), is being deployed by institutions in school districts across the country with a number of aims. Proponents have pointed in particular to an increase in overall institutional headcount (Kinnick, 2012) and the potentially significant cost savings to students and parents (Loveland, 2017). Additionally, two other primary benefits of DE programs have been often cited by institutions- the utility of DE as a recruitment tool for undergraduate matriculation (Pretlow et al., 2022) and the benefits accrued by participants that manifest in the form of increased college readiness that positively affects

future persistence and completion (Allen & Dadgar, 2012; Karp et al., 2007; Karp & Hughes, 2008).

Problem Statement

There is ample, unambiguous evidence of the first two benefits of dual enrollment programs mentioned above, increased headcount for institutions and a reduced financial burden on students (Kinnick, 2012; Loveland, 2017). Any student participating in dual enrollment is by definition not a traditional undergraduate, and thus represents an additional enrollment for the institution. In terms of cost, only twenty-six states require students to contribute any portion of the fees associated with taking dual enrollment courses, with only four states placing the entire cost burden on the student; even then, institutions frequently offer modified tuition rates to high school students (Jamieson et al., 2022). And while there have been a host of studies that demonstrated the efficacy of DE in increasing college readiness among participating students (Abbott-Chapman, 2011; Soto, 2012; Judge, 2020), the literature concerning its utility in undergraduate recruitment efforts is relatively scarce, as is any examination of the relationship between the two functions. Thus, the problem driving this study is as follows: is there an identifiable relationship between student perceptions of a DE program's effect on college readiness and the decision-making process of participants as prospective undergraduate students?

Statement of Purpose

A study examining this problem is both timely and worthwhile. As higher education institutions (Hoffman et al., 2009) and state governments (Cassidy et al., 2010) continue to invest resources in dual enrollment programs in an attempt to boost enrollments while also enhancing student success outcomes, it is worth qualitatively examining students' perspectives concerning

how their DE experiences prepared them for undergraduate study and encouraged them to consider matriculation to their DE institution while exploring any potential interplay between those two phenomena. A host of previous studies have quantitatively demonstrated the positive relationship between dual enrollment and persistence and completion (Zinth, 2014; Ganzert, 2014; Hunter & Wilson, 2019), and a few have directly addressed the role of DE as a recruitment tool for institutions (Stephenson, 2013; Moore, 2021). However, a gap in the literature seemingly exists concerning a qualitative inquiry into concurrent perceptions of college readiness and college choice as influenced by dual enrollment participation. The purpose of this qualitative study is to gain insight into the perceptions of former dual enrollment students concerning college readiness and their DE institution itself among two groups: students that matriculated to their DE institution, and students that matriculated to another institution. Given the apparent lack of scholarly inquiry to date concerning dual enrollment's role in undergraduate recruitment as well as its interplay with college readiness, the following research questions are guiding this study:

RQ1: How does participation in Dual Enrollment affect students' perceptions of college readiness?

RQ2: How does participation in Dual Enrollment affect students' perceptions of the institution as part of the college decision process?

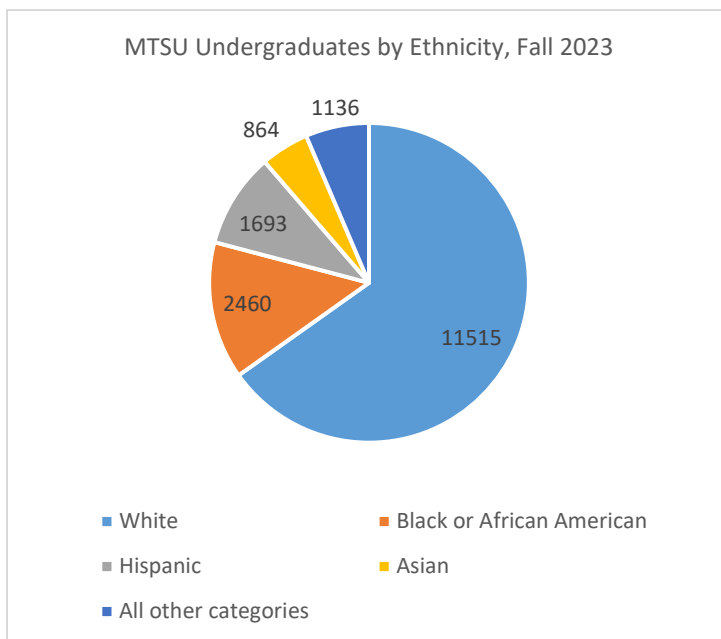
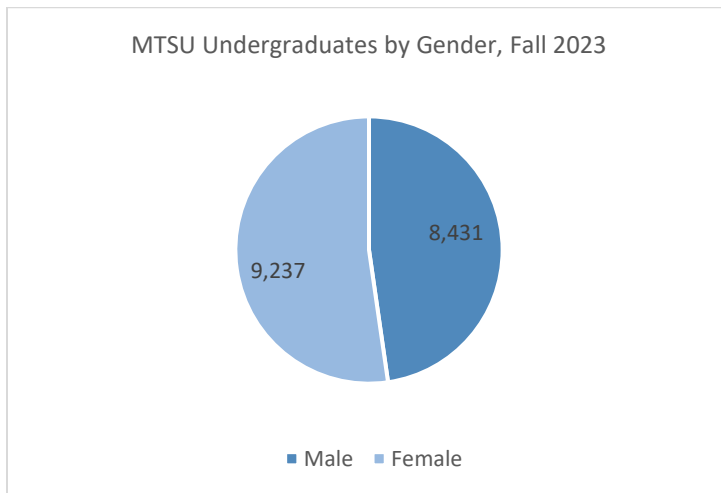
Context

The focus of this study is the Dual Enrollment program at Middle Tennessee State University (MTSU) in Murfreesboro, Tennessee. MTSU is a large, comprehensive four-year public university located in the geographic center of the state of Tennessee. It was founded by

the Tennessee General Assembly in 1911 as Middle Tennessee State Normal School. (Middle Tennessee State University, 2023) In 2022, the university was classified as R2: “Doctoral Universities- High research activity” by the Carnegie Classification of Institutions of Higher Education. (Wagner, 2022). As of the Fall 2023 semester, MTSU had an enrollment headcount of 20,183 students, comprising 17,668 undergraduate students and 2,515 graduate students. Included in the undergraduate number is 1,452 Dual Enrollment students. (MTSU Fact Book, 2023)

Among the undergraduate population of 17,668, 52.3% of students were female and 47.7% were male. 65.2% of students were White, while 13.9% were Black or African American, 9.6% were Hispanic, and 4.9% were Asian. All other ethnicity categories totaled 6.4% of the total population. In terms of residency, 90.3% of undergraduate students were in-state residents, while 7.4% were classified as out-of-state and 2.2% classified as out-of-country. Traditional students, defined by the institution as under 25 years of age, represented 86.2% of the undergraduate population, with non-traditional students accounting for 13.8%. In terms of outcomes, the Fall-to-Fall retention rate for new first-year students in 2022-23 was 77.3%. The four-year graduation rate was 38.5%, while the six-year graduation rate was 54.0%. (MTSU Fact Book, 2023)

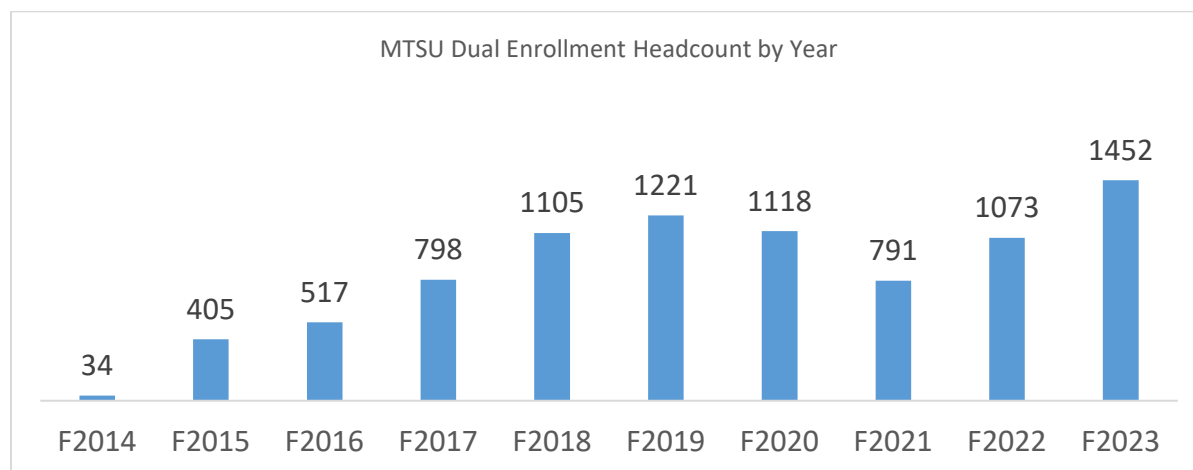
Figure 1.1- MTSU Undergraduate Demographics, Fall 2023



Dual Enrollment at MTSU emerged in its current form as a stand-alone program in 2015. In that year, the Tennessee Student Assistance Corporation (TSAC), the state entity responsible for administering state and federal financial aid programs, expanded the statewide Dual Enrollment Grant program to allow qualifying students to enroll in two college courses with no

out-of-pocket tuition expense while simultaneously standardizing the Dual Enrollment tuition rate at all two and four-year state institutions (Tamburin, 2015). In the first year post-expansion, the Dual Enrollment program at MTSU enrolled 405 high school students, reaching an initial peak of 1,221 students in Fall of 2019. Post-COVID, enrollment declined to 791 in Fall 2021, before trending up again and peaking at 1,452 in Fall 2023.

Figure 1.2- MTSU Dual Enrollment Participation by Year



DE courses are offered in a number of different formats. The majority of DE courses are taught in-person across 13 local high schools. A handful of common general education courses are offered as online sections exclusively for high school students, while approximately 5-7% of students in the program enroll in “regular” on-campus and online course sections, in which they are integrated with the general undergraduate population. This represents a combination of two distinct program structures as described by Cassidy et al. (2010). For the purposes of this study, the latter group was excluded from consideration. The format, processes, and overall experiences of these students are materially different, to the extent that it arguably constitutes an entirely different program that would require a separate study.

Currently, the program is coordinated by an office of four full-time staff members- a Director, a Program Coordinator, a Coordinator, and an Administrative Assistant. Having staff members tasked exclusively with DE responsibilities reflects recommendations made for program structure in existing literature (Kinnick, 2012; Lile et al., 2018; Hooker, 2019). In addition to the long-term planning responsibilities as well as coordination among various stakeholders including local school districts and academic departments and faculty performed by the Director and Program Coordinator, all staff members are responsible for assisting students through all stages of the college enrollment process. This includes recruitment and dissemination of information, applying for admission, and submitting required documentation to the institution; registering for the appropriate course(s); ensuring that students can access and navigate web-based campus communication and course software programs; and introducing students to campus resources and opportunities. Additionally, the Dual Enrollment office monitors student academic progress, reports midterm and final grades to high schools, and assists students in obtaining institutional transcripts.

To participate in Dual Enrollment at the university, students must be classified as a high school junior or senior and possess either a 3.0 grade point average or an ACT composite score of 22. Additionally, individual courses typically require minimum ACT/SAT/PSAT/Accuplacer sub-scores for enrollment. Such criteria for participation are consistent with Karp et al. (2004)'s description of mechanisms to ensure program quality. Dual Enrollment students at MTSU are responsible for completion of the application process to the institution. However, the Dual Enrollment office typically register students for the courses they take, in conjunction with high school counselors and administrators. All courses are taught by MTSU instructors. Most are either full-time faculty sent to the high school (approximately 60%), or embedded high school

instructors that meet accreditation requirements for hire as university adjuncts (approximately 40%).

All other curricular aspects of the program are intended to align as closely as possible with courses taught on the university's campus and comply with the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) guidelines for Dual Enrollment programs, as articulated in the SACSCOC Dual Enrollment Policy Statement, published in 2019. (See Appendix A) Additionally, a working group comprised of university administrators, faculty members, high school principals, and high school counselors established an internal Dual Enrollment Guiding Principles document to establish roles and responsibilities of various stakeholders and outline the general structure of the Dual Enrollment program.

This study utilized purposeful sampling to select a group of seven participants. All participants are first or second-year undergraduate students who were formerly participants in the Dual Enrollment program at Middle Tennessee State University (MTSU). Four of the students are currently enrolled at MTSU. The other three are currently enrolled at another four-year college or university. All students meet the following criteria:

- Were enrolled in a local high school that partners with MTSU to offer dual enrollment courses
- Were enrolled in at least one dual enrollment course during the 2022-2023 and/or 2023-2024 academic year
- Graduated high school in Spring 2023 or Spring 2024, and enrolled at their undergraduate institution in Fall 2023 or Fall 2024

The group of participants represent a purposeful sample, intended to capture individuals that can best inform the research concerning to problem under consideration, as described by Creswell & Poth (2017).

Statement of Reflexivity

The author of this study is the program coordinator for the dual enrollment program that is being examined. He is responsible for many aspects of the program, including but not limited to outreach and communication to school administrators, students, and parents; monitoring and evaluation of program outcomes and goals; development and implementation of program policy and procedures; and reporting of program activities and results to senior administration. In 2015, the university created the dual enrollment office, committing three and later four full-time administrative positions to the management of the institutional dual enrollment initiative, with the intention and expectation of continued growth. As one of these administrators, the author is committed to the long-term success of the dual enrollment program itself, as well as the students that participate. Before beginning work with the dual enrollment program, the author spent five years as a counselor/recruiter in the University's undergraduate admissions office. As such, he maintains a personal stake in the student recruitment and enrollment outcomes of the institution.

On a personal level, the author is rooted in a family tradition of higher education. His father, as well as both paternal grandparents, were faculty members at a variety of institutions, from community colleges to highly selective private institutions. The author has never lived outside of the Middle Tennessee region. He attended high school locally but did not participate in dual enrollment as it was not offered at his school. He did enroll in numerous Advanced Placement (AP courses), and ultimately earned bachelor's and master's degrees from the institution he is now employed by (the institution featured in the study). The author recognizes

that his close proximity and affinity for the program and institution being examined must be acknowledged at all stages of the process.

Conceptual Framework

This study is based foundationally in a pragmatic worldview. Pragmatism is essentially concerned with outcomes and actions. In a research context, this means that the ability to address and solve problems is of greater importance than the specifics of methods (Creswell & Poth, 2018) Pragmatic inquiry is described as “having an emphasis on actionable knowledge” (Kelly & Cordeiro, 2020). In terms of educational research, pragmatism is not beholden to a single specific methodology or method, as it embraces the idea that research cannot be treated with absolute certainty to inform practice; “all it can provide is possible lines of action” (Badley, 2003).

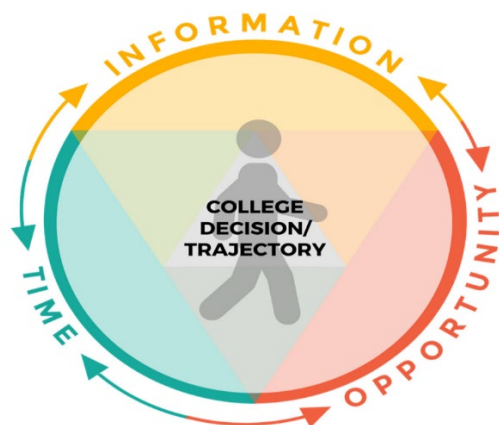
It is the author’s inclination to possess such a conceptual view, for two primary reasons. First, as a practitioner embedded in the program being examined, there is a natural inclination towards actionable research. The ultimate aim of assessing the lived experiences of the subjects is to identify implications for future practice within the program that will benefit both the institution and the student participants. Second, the context-bound nature of this study both allows and necessitates a pragmatic paradigm; a willingness to approach research pragmatically could potentially bridge the gap between a constructivist approach that is beholden to context, and a positivist one that allows for greater generalizability (Morgan, 2007). In addition to a belief in the utility of a pragmatic view, the researcher also makes the following assumptions:

- That there is a relationship between a student’s participation in the dual enrollment program and that student’s readiness for the undergraduate experience.

- That there is a relationship between a student's participation in the dual enrollment program and that student's college decision-making process.
- That further exploration of student perceptions of those two phenomena has the potential to benefit students and institutions alike.
- That a traditionally accepted model of college choice (i.e., Hossler & Gallagher (1987)) lacks relevance in the present era of student enrollment.

It is the last assumption listed above that begins to establish the theoretical groundwork for this study. The primary theoretical underpinning of this study is the Iloh Model of College-Going Decisions and Trajectories. This model, developed by Dr. Constance Iloh in 2018, is an attempt to reframe existing theoretical explanations centered on the concept of student "choice" in attending college (Iloh, 2019) In her view, the prevailing framework (the aforementioned Hossler & Gallagher model) is unable to account for a number of important factors and is limited in its utility across socioeconomic categories. Iloh (2019) asserts that a linear model, and especially the conception of choice, "minimizes the role of privilege in shaping college-going 'options' and realities." Iloh's model (depicted in Figure 1.3 below) adopts anthropological and ecological lens to posit that interactions among three non-linear dimensions- information, time, and opportunity- are instrumental in how students make decisions about how, when, and where to attend college.

Figure 1.3- Iloh's Model of College-Going Decisions and Trajectories (2018)



It is the potential for dual enrollment programs to influence students along these dimensions that represents a natural theoretical fit for this study. In Iloh's (2018) conception of the Information dimension, it is the "who" and the "how" in terms of how students learn about colleges that can impact decisions, potentially more so than the actual message. As dual enrollment often represents students' first meaningful interactions with an institution, and those interactions are necessarily active and experiential, the potential impact of DE on this dimension is evident. Likewise, the potential effect of such a program on the dimensions of time and opportunity as described by Iloh (2018) is not difficult to articulate; DE represents an opportunity for exposure to an institution at critical juncture in the college decision-making process.

Definitions and Abbreviations

1. Case study- a qualitative research design in which an in-depth analysis of a time and activity-bound case (such as a program, event, or process) is performed using a variety of data collection procedures (Creswell & Creswell, 2018); this takes place within a real-life setting (Yin, 2014) and is defined predominantly by the bounds of the subject as opposed to the methods employed (Thomas, 2015).

2. College readiness- the ability of a student to qualify for and succeed in entry-level college courses leading to a degree without the need for remedial coursework, keyed by cognitive strategies, content knowledge, learning skills, and transition knowledge (Conley, 2012); a multifaceted state that can encompass academic readiness, knowledge, abilities, and dispositions that impact postsecondary achievement (Mishkind, 2014)
3. Dual Enrollment (DE)- a program in which high school students enroll in college courses and earn college credit (Karp et al., 2008); a postsecondary course taught either at the postsecondary institution or at a high school, by postsecondary faculty or credentialed adjunct faculty (Tennessee Department of Education, 2022)
4. Pragmatism- an interpretive framework used in qualitative inquiry that focuses on outcomes of research as opposed to antecedent conditions, and is primarily concerned with applications and solutions (Creswell & Poth, 2018)

Research Design

This study employs a phenomenological case study design. This hybrid of two distinctive qualitative designs, phenomenology and case study, is described by O'Reilly et al. (2020) as an “intra-paradigm” approach to research. Other descriptions for this combination of methodologies have included “combined qualitative methodology” (Swanson-Kauffman, 1986), “multiple method design” (Morse, 2009), and simply “multi-methods” (Anguera et al., 2018).

Phenomenology is a frequently utilized approach to research in education (Dall’Alba, 2009; Padilla-Diaz, 2015). Among the most consequential contributions to the concept is the foundational work of Husserl, which introduced phenomenology as a distinct alternative to empirical studies driven by positivism. Also relevant is Heidegger, who introduced the distinction of hermeneutical phenomenology (McConnell-Henry et al., 2009). The hermeneutical approach

moves the study of phenomena from description to interpretation. A phenomenological study can be described as one that “describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon.” (Creswell & Poth, 2018) Phenomenology is unique in that it is both a philosophy and a research method (Eddles-Hirsch, 2015); for the purposes of this study, it is used as a philosophical underpinning. Indeed, all qualitative research could be argued to possess aspects of phenomenology in this regard, as subjective human experience is at the heart of qualitative inquiry (Padilla-Diaz, 2015). Creswell and Poth (2018) identify a number of features that comprise a phenomenological approach. This includes the articulation of a single concept or idea as a phenomenon to be examined; a group of subjects that have all experienced it; the interviewing of those subjects as a means for collecting data; and analysis that moves from narrow to broad in its scope. In this instance, the phenomenon that has been experienced and is to be interpreted is participation in a dual enrollment program as a high school student.

The other element of the research design in this study is that of a case study. This type of research focuses on an individual case or cases, which could be represented by a small group, an organization, a community, or a project among other elements (Yin, 2014), which necessarily occurs “within a real-life, contemporary context or setting” (Creswell & Poth, 2018) Some consider a case study merely a “bounded system” that represents a choice of what is being studied as opposed to a methodology in and of itself (Stake, 2005). Case studies are among the most well-known and prolific types of inquiry, with a long history of utility across disciplines (Crowe et al., 2011). As is the case with phenomenological research, Creswell and Poth (2018) offer defining characteristics of this type of research design such as the case in question being currently in progress; the bounded nature of the case; the identification of themes among the case; and conclusions arrived at by the researcher, sometimes referred to as “assertions,”

“patterns,” or “explanations.” The participation of a specific group of students, within a specific institutional program during a specific time represents a bounded case for study.

The use of a combined phenomenological case study approach in this study is appropriate and necessary for a number of reasons. First, the pragmatic paradigm being deployed, as described in the preceding section, commonly lends itself to mixed methods approaches to research (Creswell & Poth, 2018). It then follows that pragmatism would also be a logical antecedent for an intra-paradigmatic study that blends qualitative approaches. Second, as described above, both types of inquiry are viewed by some as nebulous; there is debate as to whether phenomenology constitutes a philosophical endeavor or a methodological one (Saevi, 2014). Likewise, case studies are viewed fundamentally differently by different researchers, with some considering it a stand-alone type of design while others view it merely a choice, “the edges you put around the case” (Thomas, 2015)

Thus, a blended design allows the elements of the two approaches to reinforce one another, while the subject of the study- dual enrollment- represents a natural fit within both designs as a phenomenon itself and a naturally bounded case. Such a triangulation of multiple qualitative approaches has become accepted as a legitimate and useful means of studying complex issues (Annells, 2006; O’Reilly et al., 2020). This is particularly true in educational research, where phenomenological case studies have been deployed to examine teacher attrition (Sumison, 2002), holistic education (Nielsen, 2006), the experiences of tutors (DeFeo & Caparas, 2014), and the experiences of international students (Eviwie, 2009). Especially significant among this group is a study by Barroso (2018), which utilized a phenomenological case study approach for exploring the college decision and recruitment process of graduating seniors in a dual credit program

CHAPTER 2: REVIEW OF LITERATURE

The aim of this study was to explore students' perceptions of dual enrollment participation on college readiness as well as the college decision-making process. In order to provide an appropriate contextual background to this study, this section reviews notable existing literature concerning a number of relevant concepts. Specifically, current literature addressing these topics will be discussed: postsecondary student success and how it is measured; an overview of dual enrollment programs themselves, to include the history of these programs, varying program structures, and federal and state-level policy concerning dual enrollment; the observed effects of dual enrollment participation on student success metrics; an overview of recruitment and enrollment management in higher education; and the implementation and effects of dual enrollment programs as mechanisms for recruiting undergraduate students. This review begins with an examination of the concept of student success at the postsecondary level.

Student Success

Over the last decade, the concept of student success has emerged as a dominant topic among stakeholders in higher education. (Kuh et al., 2006) Though most definitions of student success tend to possess certain commonalities, there still remains a broad range of conceptions embraced by researchers and practitioners. Figure 2.1 provides a summary of these varying definitional features and a common features row.

Figure 2.1- Comparison of Student Success Conceptions

2007	Cuseo	"Desirable student outcomes," holistic development
2006	Kinzie & Kuh	Student outcomes and actions <i>and</i> institutional measures
2016	Venit	Cumulative, advancing, "graduate more students, at

		lower cost, with better outcomes.”
Common features	Positive student outcomes, ongoing/evolving process	

The precursor to current conceptions of student success at the postsecondary level can be traced to the 1930s, when the federal government conducted the first surveys of what was then described as “student mortality.” (Venit, 2016) As college enrollment experienced a dramatic increase post-World War II and in the following decades, higher education institutions began to occupy a more prominent space in national infrastructure and discourse while offering the opportunity for socioeconomic advancement to a wider array of citizens (Hutcheson & Kidder, 2011). During the period from 1945-1970, generally regarded as “American higher education’s ‘Golden Age’ of expansion and financial support” (Thelin, 2010; Potts, 2004; Freeland, 1992; Altbach, Gumport, & Berdahl, 2011), attitudes began to shift concerning rates of student attrition. Thelin (2010) describes a gradual transformation from the prevailing notion that a higher dropout rate reflected positively on an institution’s rigor (and allowed for open classroom and dormitory space on suddenly overcrowded campuses), to a newfound recognition by the beginning of the 1970s that high levels of student attrition might indeed necessitate additional consideration and intervention.

Theorizing and Measuring Student Success

The theoretical model of Vincent Tinto, in particular, is regarded as one of the most impactful contributions to student success literature. In a highly influential work, Tinto (1975) focuses on the process of student withdrawal and makes the case that dropout should be conceived of as

“A longitudinal process of interactions between the individual and the academic and social systems of the college during which a person’s experiences (as measured by his normative and structural integration) continually modify his goal and institutional

commitments in ways which lead to persistence and/or to varying form of dropout.” (p. 94)

Tinto (1997) later refined and expanding his original schema, reflected in Figure 2.2

below.

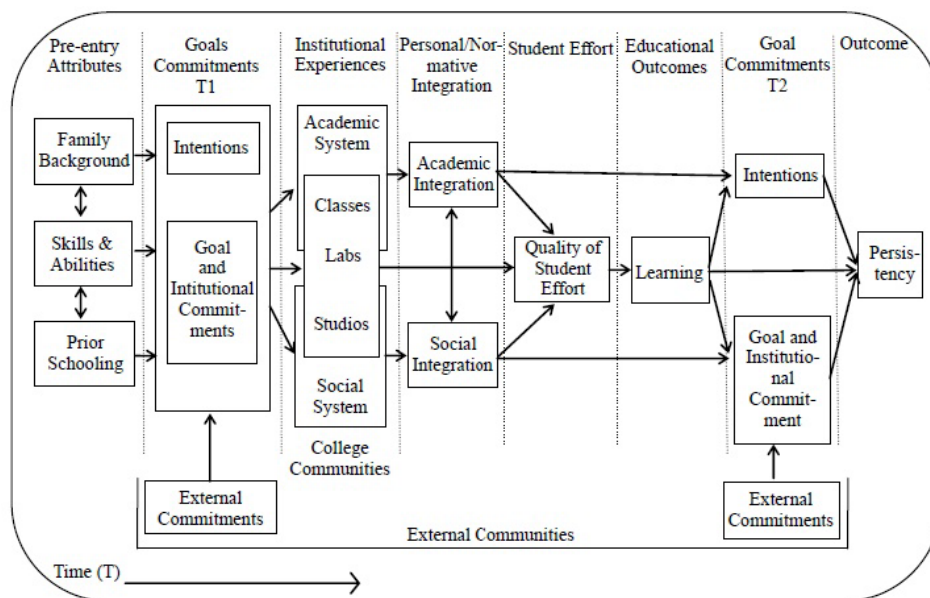


Figure 2.2- Refined version of Tinto's Model (1997)

Also notable in this early space is the work of Spady (1970), whose initial theoretical model of dropout considered four primary factors: intellectual development, social integration, satisfaction, and institutional commitment. Together, Spady and Tinto's models comprised the initial foundation of retention theory, which suggests that among many relevant variables, the most important is the extent to which students integrate to their college environment. (EAB) In later years, many researchers have added to that framework, building synthetic models of attrition (Bean, 1982), applying the integration principle to first-generation students (Billson & Terry, 1982; Longwell-Grice, R. & Longwell-Grice, H., 2008; Woosley and Shepler, 2011;

Stebbleton, et al., 2014), expanding it to be adaptable to the knowledge-based economy (Kerby, 2015), and highlighting the role that individual student backgrounds play (Hadjar, et al., 2022)

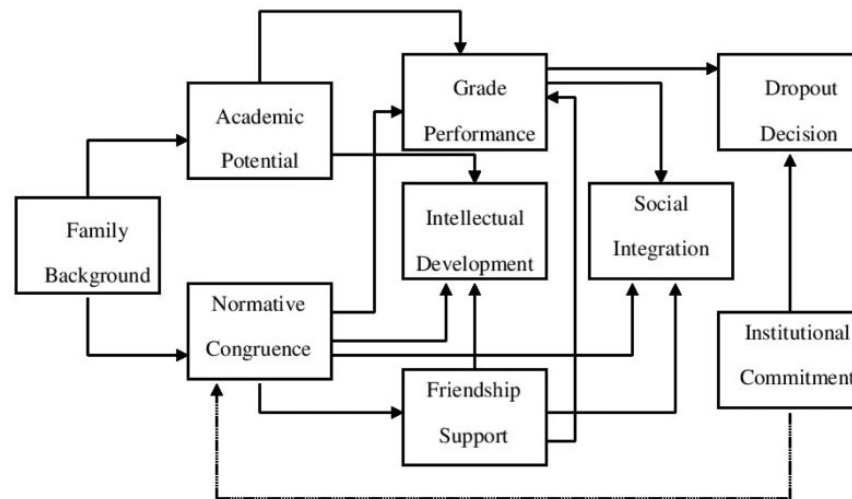


Figure 2.3- Spady's Theoretical Model of Dropout

It is evident that early conceptions of student success leaned on what is now referred to as retention, or persistence. Retention can be defined as the percentage of students that continue consistent enrollment at the same institution each semester, while persistence refers to the percentage of students that continue on at any institution (Reason, 2009). The National Student Clearinghouse, among others, identifies continuation from an undergraduate student's first year to their second. (National Student Clearinghouse, 2022) In the decades since those foundational conceptions were established, while persistence remains a cornerstone for measuring student success, many other metrics have been identified as meaningful. In particular, many institutions view the pairing of retention and graduation rates as the key elements (Tinto, 2004; Millea, et al., 2018). Indeed, many states, including Tennessee and its Complete College Tennessee Act of 2010, have keyed in on these two quantifiable values as the variables of choice in the

determination of performance-based funding for higher education institutions (Meehan & Kent, 2020). From 1979 to 2007, over half of all states had implemented some sort of funding model based on these outcomes (with the majority abandoning them at some point) (Center for American Progress)

While persistence and graduation remain arguably the most pervasive metrics for evaluating student success (Baldwin, et al., 2011; Johnson & Stage, 2018; Millea, et al., 2018) other characteristics of interest have emerged in the last several decades. In 2006, members of the National Postsecondary Education Cooperative (NPEC) produced a landmark, broad-based review of student success literature that addressed a variety of aspects of student success; theoretical bases and foundations such as student demographic backgrounds, institutional determinants, and outcomes were all included, as well as recommendations for adoption and additional research. (Kuh, et al., 2006) In addition to the aforementioned measures of success, the authors also identified other quantitative metrics that could be observed both during (such as grades earned and credit hours completed) and after (graduate school admission rates, performance on field exams, and employment and wage data) enrollment (Kuh, et al., 2006)

Other Measures of Student Success

Shifting focus to more qualitative considerations, the NPEC report also cited Astin (1993) as one of the first to highlight student satisfaction as a potential measurement of success, which was reinforced by the work of Hossler, Schmit, and Vesper (1999) in viewing that satisfaction, along with students' view of their institution as antecedents for eventual success. Yet another dimension of student success can be classified as the process of personal development among students, in terms of acquisition of both cognitive and non-cognitive skills.

This development echoes the work of many theorists, particularly Chickering's seven vectors (Wise, 2017)

Another broadly accepted metric in evaluating student success is student engagement, or the degree to which students are integrated into the campus through both educational and social happenings (Kuh, et al., 2006). Notably student engagement, and specifically how it contributes to student learning, is perceived by some stakeholders as a reflection of success in and of itself (Kuh, 2003; Carini, et al., 2006), while many others (Becker, et al., 2009; Price & Tovar, 2014; Caruth, 2018) view engagement as formative aspect of success as measured by more conventional outcomes such as graduation rates. Hatch (2017) summarizes this perception of student engagement as “an emergent intermediate outcome for fostering successful college going.”

Arguably the most prominent manifestation of broad institutional interest in student engagement is the National Survey of Student Engagement (NSSE). Initially launched in 1999 with support from The Pew Charitable Trusts, NSSE utilizes a student survey distributed to hundreds of institutions nationwide. First-year and senior students are asked about their level of engagement with institutional programming, with the results compiled into a number of different reports that allow colleges to compare results and trends with peer institutions. (Center for Postsecondary Research) Housed within Indiana University's Center for Postsecondary Research, the NSSE has drawn considerable attention from scholars whether examining the relationship between survey results and student outcomes (Gordon, et al., 2007; Shinde, 2010); considering it as an alternative to college rankings systems (Pike, 2004); or exploring the utility of NSSE data to determine best practices in serving specific student groups, such as first-generation students (Filkins & Doyle, 2002) or distance learners (Morris & Clark, 2018).

While the success of all enrolled students is undoubtedly the goal of any institution, another hallmark of student success efforts in recent decades has been a particular emphasis on the outcomes of specific populations of students. Kuh, et al. (2006) write that “indeed, greater attention to diversity- race/ethnicity, socioeconomic status, age- has led to alternative, more nuanced understandings of student success.” The postsecondary achievement gap faced by students who are part of underrepresented minority groups is among the most well-documented phenomena in higher education (Carey, 2008; Yeado, 2013; Wagner, 2015; Banks & Dohy, 2019). In particular black students (Spenner, et al., 2004), Latino students (Rodriguez, et al., 2015), and students from disadvantaged socioeconomic backgrounds (Titus, 2006) have all been the subject of scholarly interest and institutional interventions along with first-generation college students, a category which overlaps significantly but not entirely with the preceding groups (RTI International) Yet another subgroup that has recently drawn attention from researchers and practitioners could be broadly described as nontraditional students (Braxton, et al., 2011). While varying attributes lead to student categorization as such, three commonly included groups are students of an older age than traditional undergraduates; working students, especially those that are employed full-time; and students that do not live on campus and commute to classes (U.S. Department of Education) Overall, targeted efforts to better serve specific populations of students is a critical aspect of the current student success landscape.

Considering the pervasiveness of student success as the driving engine at institutions across the country, it is not surprising that stakeholders are constantly testing new initiatives and reimagining the utility of existing programs to move the success needle. One such program, currently burgeoning at colleges across the country despite having been conceived decades ago, is dual enrollment.

Dual Enrollment: An Overview of History, Structure, and Policy

While no consensus exists in the literature regarding the origins of dual enrollment, the University of Connecticut claims to have developed the first such program, as the brainchild of Provost Albert Waugh. Waugh first discussed the idea with University President Albert Jorgensen in 1944, developed the program's structure alongside the Secondary Schools Principals Association in 1953, and eventually launched the first cohort of what was then called the Cooperative Program for Superior High School Students in 1956 (Grant, 2019) Another twenty years would pass before statewide programs began to emerge. Among these notable early adopters were California (Stevens, 2019) and Minnesota (Rivera, et al., 2019). The former adopted a more informal approach to dual enrollment, creating what were essentially open-enrollment courses outside of traditional high school hours. Stevens (2019) describes these offerings as similar to Advanced Placement (AP) courses in that they were geared towards already high-performing students as an opportunity for accelerated study. In Minnesota, by comparison, the Post-Secondary Enrollment Options program was established in 1984 as the first state-initiated dual enrollment program, allowing any high school juniors and seniors meeting the postsecondary institution's admissions criteria to take courses on-campus. (Kim, et al., 2006)

More common in the emergent days of dual enrollment were programs established by the institutions themselves. Syracuse University launched Project Advance (SUPA) in 1972 to provide targeted high-achieving high school seniors an opportunity to earn postsecondary credit as a collaborative effort with area school districts. (Holloway, 1975) Elsewhere, Florida International University took a different approach in designing a dual enrollment program, launching Partners in Progress in 1982 to reach minority students in urban areas that were not otherwise expected to matriculate to postsecondary education. (Kim, et al.,

2006) One of the most significant institutionally coordinated dual enrollment programs was developed in 1984 at Kingsborough Community College within the City University of New York (CUNY) system. Known as College Now, the program expanded in 1999 to each of CUNY's 17 campuses and persists in the present, with nearly 500 high schools and over 22,000 students earning college credit in the 2021-22 academic year (Kim, et al., 2006; College Now, 2022)

By 2005, all but 10 states had enacted dual enrollment policies, though the rate of adoption varied in the preceding decades based on political and organizational concerns as well as each states' culture of openness to reform (Mokher & McClendon, 2009) Though they vary greatly in size, scope, and composition, 47 of the 50 states, plus Washington, D.C., now have established statutes concerning dual enrollment programs and policies (Rivera, et al., 2019) The primary professional organization currently occupying the dual (concurrent) enrollment space is the National Association for Concurrent Enrollment Partnerships (NACEP). Founded by twenty postsecondary institutions in 1999, NACEP is responsible for bringing together secondary school districts, college and universities, and state officials to "share best practices, present research findings, and discuss state policy developments." (NACEP) Additionally, the organization serves as the nationally recognized accrediting body for dual enrollment programs.

Dual Enrollment (DE) programs have been described as "the fastest growing movement in higher education in the 21st century (Jones, 2014, p. 24), to the extent that they are now present in nearly 90% of high schools in the U.S. (U.S. Dept. of Education). A variety of definitions have been applied to such programs, but the general consensus describes Dual Enrollment as an opportunity for high school students to enroll in postsecondary courses, earning high school and college credits simultaneously (Bailey & Karp, 2005). The courses can be taught in the high school facility, at the postsecondary campus, or online by existing postsecondary

faculty or high school instructors that have been hired as adjunct faculty (Tennessee Department of Education).

DE Structure and Policy

DE programs are intended to challenge students academically and provide them with the opportunity to get a head start on undergraduate degree requirements. (Karp & Hughes, 2008). Increasingly, these programs are also expected to demonstrate a host of other benefits to students. As Kleiner and Lewis (2005) describe, DE can be considered as “promoting efficiency of learning and enhancing admission to and retention in college. By providing a pathway for students to move seamlessly between K-12 and postsecondary systems, dual enrollment is thought to provide greater support for students’ college aspirations.”

As early as twenty years ago, Bailey, et al. (2002) began examining distinct types of DE programs in multiple states. Both New York City’s College Now program, which focuses on general education courses and readying students for the academic rigor of college, and the Youth Options initiative, with an emphasis on vocational education and broadening access, demonstrated evidence of effectiveness. The theme of integrating DE curriculum with high school career and technical education (CTE) programs is a recurring one, as Karp and Hughes (2008) outlined the benefits of DE programs in both promoting access to and aiding persistence in college for CTE-oriented high school students. Originally conceived specifically as a way for academically talented students to advance their postsecondary aspirations earlier, the focus began shifting to leveraging DE as a way to reach a more scholastically diverse population of students. Bailey and Karp (2005) cited the often free or low-cost tuition as a powerful justification for expanding access in this way, as they analyzed existing DE legislation at the time across all fifty states.

One of the seminal DE research projects was conducted in 2004, as a close examination of current DE policies and procedures was conducted at the request of the U.S. Department of Education. The resulting publication identified ten dimensions along which DE programs can vary: “(1) target population; (2) admissions requirements; (3) location; (4) student mix; (5) the background characteristics of the instructors; (6) course content; (7) method of credit-earning; (8) program intensity; (9) funding; and (10) state mandates.” The study went on to identify five key recommendations to policymakers and educational administrators seeking to implement new or improve existing programs: “(1) Clarify program goals so that the policies and regulations support the stated goals of the program; (2) Identify funding mechanisms that meet the needs of all stakeholders; (3) Think through the implications of both minimal and detailed dual enrollment policies; (4) Develop ways to ensure the rigor of dual enrollment courses; (5) Consider the needs of students beyond academic course taking; and (6) Meet the needs of students interested in technical courses as well as academic courses.” (Karp, et al., 2004)

There were also early indications that DE programs are a good fit with state and federal goals concerning college readiness (Bailey, Hughes, & Karp, 2003) This supposition was echoed by Karp (2015), but qualified with the observation that realizing such a benefit would require all parties- high school districts, college administrators, state policymakers in particular- to reconsider long-standing principles and procedures of how they operate. The degree to which these various parties must coordinate and communicate was also identified as posing the primary challenge to evaluating the efficacy of DE programs. (Karp & Jeong, 2008)

DE Impact on Student Development

Another emerging area of research within the context of dual enrollment concerns student development. Worth mention is an article published by Mechur Karp (2012) in *New Directions in Higher Education*, titled “‘I Don’t Know, I’ve Never Been to College!’ Dual Enrollment as a College Readiness Strategy.” One particular excerpt is of unique significance, in which the author writes, “Dual enrollment can be seen as a social intervention in which potential college students learn about the norms, interpersonal interactions, and behaviors expected for college success. By “trying on” the role of a college student, dual enrollees benefit from early exposure and practice, coming to feel comfortable in a college environment and ultimately becoming successful once they matriculate.”

Also on the topic of the impact of dual enrollment on student development, Henneberger, et al. (2022) underscored the psychological benefits of DE participation in emerging adults, in three specific ways. First, that DE programs could help with academic motivation that could potentially otherwise be waning; second, that they can better inform students in making college choices, leading to better fits between student and undergraduate institution; and third, that the early introduction to a postsecondary environment can inspire added confidence as students progress to that new stage.

A handful of other works begin to approach an examination of dual enrollment student development without committing fully to the concept. Lile, et al. (2018) discuss the potential for dual enrollment to enhance the “clarity of the college-student role.” A consideration of the role of dual enrollment in shaping student self-efficacy was made by Ozmun (2013), and a similar connection between the two was made by Gronlund (2017).

Echoing the theme of dual enrollment as a transitional aid, others have described DE as “an on-ramp to college for underprepared students and a fast track for those already college bound” (Hoffman, et al., 2008), a potential facilitator for college success (Harnish & Lynch, 2005), and a key factor in defining the space between high school and college (Tinberg & Nadeau, 2011).

While it would appear the majority of research conducted on dual enrollment indicates the potential for a positive effect on students, DE programs have not been immune to critique. Denecker (2007) asserts that the “purported seamlessness” of the transition between the high school and college classroom may actually be overstated. Another common refrain from critics of dual enrollment is that such programs tend to further stratify higher education by enhancing access to historically privileged groups of students, rather than creating a bridge to a college degree for underrepresented groups, a concern discussed by Rivera, et al.. (2019) and echoed by Ratliff and Smith (2020). Considering the degree to which so many states and institutions have committed resources to dual enrollment and the stakes involved, it is appropriate to further examine the relationship between these programs and the outcomes for students that result.

The Effects of Dual Enrollment on Student Success

There is broad general consensus that participation in dual enrollment programs has a number of positive effects on future student success. The tangible benefit of participation that is cited nearly universally is the acquisition of college credit by high school students prior to college enrollment. In addition, however, from a holistic standpoint these programs are considered to perform a number of critical functions. Kleiner and Lewis (2005) describe DE as “promoting efficiency of learning and enhancing admission to and retention in college. By

providing a pathway for students to move seamlessly between K-12 and postsecondary systems, dual enrollment is thought to provide greater support for students' college aspirations.”

The modern concept of self-efficacy was introduced as a theoretical framework by psychologist Albert Bandura (1977), who in later work defined it as “an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments.” (1997) As it pertains to an educational context, Schunk and DiBenedetto (2016) identify self-efficacy as being predictive of student achievement. They identify distinct types of self-efficacy in education, two of which, self-efficacy for learning and self-efficacy for self-regulated learning, are especially applicable to dual enrollment students. The relationship between dual enrollment and academic self-efficacy is a recurring theme in the literature.

One study suggested that students who took DE courses demonstrated enhanced levels of self-efficacy across a variety of dimensions relative to students who did not, including greater general confidence in their actions, greater belief in their capability in their coursework, and an enhancement in their perceived ability to navigate the social aspects of college such as building relationships and communicating with professors (Soto, 2012). Another study specifically examined first-generation students, concluding that dual enrollment had a positive effect on the academic self-efficacy of that specific group (Judge, 2020). Wallace (2017) describes different benefits of DE participation depending on the modality of instruction, with students enrolled in college courses at their high schools having the support of a familiar environment while transitioning into more challenging coursework, and students taking courses on the college campus benefitting from exposure to the authentic “college experience.” Similarly, Fuline (2018) suggests that positive transition experiences of DE students characterized by the presence of

motivating factors and a robust support system result in an increased likelihood of persistence and completion.

Ozmun's (2013) findings suggest that college self-efficacy, unlike academic motivation, is not necessarily a precursor to participation in dual enrollment programs. Thus, these early postsecondary experiences themselves may be responsible for increasing this trait. The author notes that high schools in general primarily target high-performing students for participation, and that DE could be more impactful were it encouraged among lower-performing underrepresented student groups that are academically motivated but lack the self-efficacy that can have a positive impact on student success.

Critically, there is evidence to suggest that participation in these programs can have a measurable effect on a variety of individual student outcomes, among them postsecondary matriculation, institutional choice, and persistence (Lee, Fernandez, Ro, & Suh, 2022), as well as more intangible benefits such as enhanced self-efficacy in interacting with the college landscape, particularly among students from underrepresented backgrounds (Abbott-Chapman, 2011) (Moreno, et al., 2021) In general, some of the most popular conceptions of dual enrollment include "a bridge between high school and college...to understand the financial, academic, psychological, and social demands of college" (Henneberger, Witzen, & Preston, 2022), an opportunity to "try on" the role of college student (Karp, 2012) and even a "liminal space," replete with opportunities to confront tension and unease surrounding transitions (Hofmann & Voloch, 2012).

In quantifiable terms, dual enrollment programs have demonstrated an increase of first-year college GPA, as well a decrease in the need for remedial coursework (An, 2013). Beyond the initial transition, there is evidence that completion of dual enrollment courses can enhance a

student's chances of degree completion (Zinth, 2014). A study of dual enrollment students in North Carolina who matriculated to one of the state's community colleges indicated improvements in both metrics, with DE students earning a first-year GPA over half of a point higher than non-participants, as well as a graduation rate that was 11.2% higher (Ganzert, 2014). Likewise in Tennessee, an examination of nearly 15,000 students who enrolled across the state's 13 community colleges as first time freshmen in 2012 found that 67.9% of students who had dual enrolled in high school continued to a second year, while 47.4% of students without DE experience persisted. (Hunter & Wilson, 2019) A similar comparison was made in Texas, where dual enrollment students matriculating to four-year public universities in the state again demonstrated higher GPAs and retention rates across the first two years. Notably, students who had taken more than one DE course performed better in these measures than students who had enrolled in a single course (Peng, 2003)

As an early adopter of DE as a statewide initiative, the state of Florida has garnered scholarly interest, with one study in particular demonstrating that DE students in that state were more likely to earn a diploma, enroll in college, continue enrollment to the second semester, and have a higher grade point average; regardless of how many DE courses the student had taken. (Karp, Calcagno, et al., 2007) Allen and Dadgar (2012) performed a quasi-experimental analysis of the aforementioned CUNY College Now program, with the intention of examining the effectiveness of the program in enhancing student achievement at the undergraduate level. Their findings indicated that College Now reduced students' time to degree, while also increasing college GPA.

As a subset of dual enrollment in general, so-called early college programs, which target specific populations such as low-income students and students of color, have demonstrated a

pronounced positive impact on postsecondary outcomes. Hoffman and Vargas (2010) reviewed data from approximately 3,000 students who had graduated from these programs, noting that they had earned an average of twenty credit hours. Forty-four percent had completed at least one full year of college by credits, with a quarter completing two years or an associate degree. Early college programs, with the complementary aims of exposing a wider array of students to postsecondary opportunities and equipping those students with college credit to establish a solid footing, are inevitably viewed as a recruitment opportunity and enrollment stabilizer by the higher education institutions that offer them.

Recruitment and Enrollment Management

One of the key student success-adjacent trends in higher education began to take hold in the 1970s, with the advent of enrollment management as a widespread administrative function of colleges and universities (Coomes, 2000; Hossler, 2015). Referred to by many practitioners as strategic enrollment management (SEM), it can be defined as “simultaneously a set of processes and policies associated with the recruitment and admission of college students, as well as the retention, academic success, and graduation of students” (Hossler & Bontrager, 2014) in addition to the organizational structure at institutions that performs these functions. It was no coincidence, but rather a confluence of factors that led to the prevalence of the SEM paradigm.

As the postwar enrollment boom began to subside nationwide several phenomena including a decrease in the raw number of high school graduates (Bontrager, 2004), shifts in public policy (Hossler & Bontrager, 2014), and financial conditions such as a sluggish economy (Card & Lemieux, 2001), among other factors, led institutions to develop a formal approach to student recruitment, student services, and advising that would be first be described as “enrollment management” by Maguire (1976). The first documented application of the term is

found in a case study of enrollment at California State University at Long Beach (Kruetner & Godfrey, 1980)

Holistically, enrollment management is considered to be comprised of seven key areas- institutional research and planning, marketing, admissions, registrar, financial aid, student orientation, and retention and advising (Huddleston, 2000) While each of these units on a college campus contributes to overall institutional enrollment goals in various manners, it is arguably the admissions office that occupies the most visible role in a university's enrollment landscape, as the enrollment process begins with the recruitment of new students facilitated by admissions officials.

Over time, the metaphor of the "admissions funnel" has become the dominant representation of how prospective students move through the recruitment process, culminating in enrollment at the institution. The earliest reference to the funnel in the literature can be found in the work of Turner (1978), who describes a progressive narrowing of student populations from prospects to applicants, to admitted students, to enrollees. The initial group of prospective students may be generated from recruitment events such as college fairs or campus tours, or often from purchased lists of student names from College Board or ACT. Those that respond to the institution seeking additional information are then described as inquiries (Duniway, 2012), with a smaller number deciding to apply to the institution. Even fewer of that group are accepted to the institution. The percentage of those admitted students that end up enrolling at the college represents what is referred to as the yield (Steinberg, 2010).

Throughout each segment of the admissions funnel, the work performed to increase the number of students moving further into the process can be referred to generally as recruitment. Given the importance of maintaining steady enrollment numbers for most institutions, it is

perhaps not surprising that the work of recruitment in HEIs commands outsized attention and institutional resources. In 2020, a survey of sixty-six public and private four-year institutions found that the median marketing cost of recruiting one undergraduate student was \$470 for a public institution, and \$2,114 for a private institution (RNL). In total, approximately 2.2 billion dollars were spent on marketing efforts by universities in 2019 (Washington Post) At the same time, admissions offices are struggling to meet personnel demand due to a combination of budgetary limitations and challenges with turnover. In a report recently produced by the College and University Professional Association for Human Resources, 71% of admissions coordinators and counselors surveyed had been in the position for three years or less (Zahneis, 2023).

One of the factors influencing personnel challenges is the so-called “Great Resignation” that occurred in the wake of the COVID-19 pandemic, which describes the phenomenon of record numbers of individuals leaving their employment from 2020 to the present. In October 2022 alone, approximately four million Americans resigned from their jobs (World Economic Forum). Another key factor appears to be the inability or unwillingness to competitively compensate admissions professionals. Anselment (2022) describes the disconnect between institutional operating budgets for recruitment and labor budgets, noting that “the average salary for an entry-level admissions counselor had only increased about \$6,000 (unadjusted for inflation) from...20 years ago.”

Ultimately, the landscape of undergraduate recruitment has shifted over the years to become more market-driven, with institutions in the present competing amongst themselves for students directly. The basis for this change (and the genesis of the aforementioned “enrollment management” concept) was the reauthorization of the Higher Education Act that occurred in 1972 (Schulz & Lucido, 2011). This legislation, among the most consequential for HEIs,

intended to expand access to college to students regardless of economic status. One of the levers for that aim was the reallocation of federal funds from institutions themselves directly to students, leading to a more capitalistic, consumer-driven approach to enrollment (Gandara & Jones, 2020).

In an era marked by the importance of student recruitment and defined by rapidly evolving technology, it is perhaps not surprising that HEIs are constantly evaluating practices and seeking new ways to reach students. The last decade has ushered in an unprecedented trend of colleges utilizing social media to reach prospective students in new ways. As early as 2013, over half of college presidents were actively posting content on social media accounts (Barnes & Lescault, 2013), and more recently 94% of polled enrollment managers said they utilized institutional social media platforms to connect with potential students (Ellucian, 2023). While embracing social media in recruitment may seem to be an obvious approach, there is increasing evidence that institutions are performing even deeper assessments of how to attract the current generation of college-bound students.

In “The New Generation of Students: How Colleges Can Recruit, Teach, and Serve Gen Z,” the Chronicle of Higher Education describes the current strategies of undergraduate recruitment as still being primarily catered to Millennials, a cohort that has advanced well past the point of traditional undergraduate enrollment (Chronicle, 2019). Rather than emphasizing a consumer mindset focused on amenities, the authors suggest an approach focused on value, relevance, transparency, and support services that appeals to a demographic more concerned about financial security and the immediate utility of a degree. The necessity of this focus is echoed in the work of Seemiller & Grace (2016), Loveland (2018), and Trevino (2018). Undoubtedly, it is critical for higher education institutions to continually assess their recruitment

strategies and continue to evolve their approaches for meaningfully reaching prospective students.

Dual Enrollment as Recruitment Tool

Perhaps unsurprisingly, one such emergent strategy for bringing undergraduate students into the institution is the utilization of dual enrollment programs to expose and attract prospective undergraduates to the college and its academic offerings. While the previous section addressing the effects of dual enrollment on student success demonstrate a significant volume of research supporting the notion that DE has a positive effect on traditional metrics such as persistence and graduation, comparatively little attention has been directed at the deployment of these programs to assist in student recruitment. The discussion that does exist in the literature is highlighted below.

Previous Studies on DE and Recruitment

One of the earliest examinations of the utilization of dual enrollment in recruitment efforts is found in the work of Huntley & Schuh (2002). In assessing the experiences of dually-enrolled students from three Midwestern high schools, they determined that the colleges administering the program did not engage with the students in any meaningful way in an attempt to convert them into full-time undergraduates, and in some cases could not even identify these students or determine how many were enrolled. The authors make three recommendations based on the students' experiences:

- (1) Developing an orientation session for dual enrollment students prior to the initial semester of enrollment
- (2) Utilizing the services of an academic advisor in a dedicated role for this group

- (3) Facilitating opportunities for high school dual enrollment students to identify one another and connect (Huntley & Schuh, 2022)

In assessing the Kentucky Community and Technical College System (KCTCS)'s dual-credit program, Stephenson (2013) emphasizes the imperative for early college enrollment to move beyond a source of enrollments to a program that attracts students to the institution in the future. The author explains that the benefits of DE concerning time-to-degree and cost savings make the decision to participate an easy one for many students, but questions what takes place once those students are enrolled. It is suggested that institutions consider assisting students in understanding college expectations; offering student services comparable to those available to undergraduates; dedicating full-time staff to program operations; and developing robust program evaluation mechanisms.

In a qualitative study of a group of students who dual enrolled with Appalachia Community College (ACC) and later matriculated to ACC following high school graduation, Moore (2021) noted that the dual enrollment experience “exposed the students to ACC characteristics that they ultimately found appealing. Students particularly appreciated the supportive faculty. Additionally, the participants selected ACC because of the environment, ability to save money, location, the gained momentum towards a degree, and the available programs and transfer opportunities.”

Indeed, over the last decade, institutions have seemingly begun to embrace the opportunities presented by enrolling high school students in their courses. A joint report from the American Association of College Registrars and Admissions Officials (AACRAO) and Hobsons cited over 75% of respondents as considering dual enrollment a recruitment tool for their institutions (AACRAO, 2016). However, Martinez (2018) notes a lack of evidence-based

argument from the report and recommends a more robust examination of DE's role within institutions. Lichtenberger, et al. (2014) state that many institutions supplement some or all of the tuition and fee cost of DE not already defrayed by state funds because they view the program as a means to attract students in the future. Indeed, as Kinnick (2012) highlights, the decision by institutions to go "all-in" on dual enrollment initiatives underscores the necessity of being able to justify the resources committed, particularly in an era when state budgets for higher education are static or more often, in decline. Kinnick goes on to echo the assertion discussed previously in this review that while the benefits of DE to students have been well-documented by this point, there is still a need for quantifiable evidence of benefit to the institutions coordinating these programs.

Notably, two recent additions to the literature have applied a critical lens to this very question. Pretlow et al. (2022) cited a number of previous findings as the impetus for utilizing the student transcript study of the High School Longitudinal Study, in an attempt to identify the extent to which DE students were later enrolling in the same institution as an undergraduate. The authors noted the previously referenced AACRAO report indicated that approximately 60% of HEIs surveyed described dual enrollment as a "strategic enrollment initiative." Pretlow et al. (2022) also referenced the findings of Cowan and Goldhaber (2015) from a study conducted in Washington, which indicated that a roughly a third of DE students returned to the same institution after high school graduation. In their own study, the authors produced a number of notable results.

First, the HSLs study concluded that over 95% of DE students enrolled in a postsecondary institution within three years after graduation. Second, 80.5% of that group enrolled in their DE institution, with the percentages comparable for two and four-year

institutions. The authors suggest this represents an opportunity for four-year institutions to more robustly adopt DE as a recruitment strategy. Other findings indicate that males and nonwhite students matriculate first to their DE institutions at higher rates; that middle and low achieving DE students are more likely to stay at their DE institution; and that students in geographic areas with a higher concentration of college options were slightly more likely to enroll elsewhere (Pretlow et al., 2022).

Another finding by Jagesic et al. (2022) involves the concept of undermatch, defined by Fosnacht (2014) as “when a student chooses to attend a less selective postsecondary institution than permitted by their academic credentials as a contributing factor to disparities observed in baccalaureate attainment rates.” The authors reported that dual enrollment students may be significantly more likely to undermatch in selecting a postsecondary institution, with the implication that staying at the college at which they dual enrolled is responsible for the undermatch. Their research identified a 29% increase in undermatch among students dual enrolling with two-year institutions and staying there as undergraduates, but only an undermatch rate increase of 9% among DE students who matriculate to the four-year institutions at which they participated. The phenomenon of undermatching is of concern to student success advocates, as undermatching students have been demonstrated to graduate at lower rates (Bowen et al., 2009), learn less (Hoxby & Turner, 2013), experience less personal and social development (Fosnacht, 2014), and demonstrate adverse outcomes in employment and wages (Ovink et al., 2018).

However, Jagesic et al. (2022) also clearly articulate the potential triangulation that exists between participation in dual enrollment, undergraduate recruitment based on that participation, and student success post-recruitment to the institution:

“Higher education institutions offering dual enrollment programs are able to rely on two factors that are key to college enrollment and persistence to convert dual enrollment participants to full-time students. Students and parents are likely to see the dual enrollment institution as a desirable option due to its proximity to their home and the host of benefits this brings, and they are also more likely to feel engaged and connected to that particular institution given that they have had some experience with it in terms of taking classes, earning college credits, and potentially, depending on the structure to the dual enrollment program, the ability to interact with faculty and other students.” (Jagesic et al., 2022)

Summary

The concept of student success in higher education, whether quantified by broadly accepted metrics such as persistence and graduation rates or examined in more abstract terms such as student satisfaction and self-efficacy, remains the driving force behind many of the activities conducted and decisions made by institutional stakeholders. As emphasis on student success has increased, a concurrent trend in higher education has emerged over the last few decades and accelerated even more recently, with institutions across the country embracing dual enrollment programs for a variety of purposes. Colleges and universities have implemented these initiatives and, alongside many states, committed resources to their growth with the goals of improving undergraduate outcomes and recruiting college-ready students to bolster their enrollment portfolios, a long-time institutional objective that has taken on critical importance once again in recent years.

CHAPTER 3: METHODOLOGY

Restatement of the Problem and Research Questions

A review of dual enrollment-focused literature demonstrated broad evidence that participation in such programs can have a positive effect on postsecondary readiness (Allen & Dadgar, 2012; Karp et al., 2007; Karp & Hughes, 2008). Likewise, there is a less robust but extant body of evidence that DE participation is related to institutional recruitment efforts and the corresponding enrollment decisions made by entering first-year students (Kinnick, 2012; Pretlow et al., 2022). However, most examinations of a DE-enrollment management relationship have been limited to the generation of narrow quantitative metrics, such as the percentage of DE participants that remain at the same institution for undergraduate enrollment (Cowan & Goldhaber, 2015). Additionally, there has been little or no qualitative inquiry concerning a potential relationship between two of dual enrollment's most prominently referenced desired outcomes, enhanced readiness/success and influence on enrollment decisions. Such a potential relationship was the driver of this study, which was guided by these two research questions:

- RQ1: How does participation in Dual Enrollment affect students' perceptions of college readiness?
- RQ2: How does participation in Dual Enrollment affect students' perception of the institution as part of the college decision process?

Research Design

This study utilized a phenomenological case study design. As referenced in the introduction, this approach represents a hybrid of two distinct qualitative approaches to inquiry, phenomenology and case studies. Morse (2009) refers to this combined approach as "multiple method design," noting that such a design allows researchers to identify limitations inherent to a

single method and utilize an additional component to fill in the spaces left behind. As such, elements of both designs were utilized in an attempt to accomplish two aims: identify and describe shared meanings among a group of students that have the lived experience of participating in a dual enrollment program, and explore the specific bounded case of those same students within the context of the program, institution, and semester of their participation. These aims represent the purpose of phenomenological and case study inquiry, respectively (Creswell & Creswell, 2018).

In determining an appropriate procedure for conducting phenomenological research, the work of Moustakas was instructive. Moustakas (1994) outlines specific methods and procedures for conducting such research, which are widely accepted as foundational among phenomenological researchers (Dangal & Joshi, 2020; Yuksel & Yildirim, 2015; Eddles-Hirsch, 2015; Brinkmann & Friesen, 2018). In this study, attention was given to Moustakas's (1994) guidance along the following dimensions, listed in Figure 3.1 below.

Figure 3.1- Application of Moustakas's Phenomenological Principles

Procedural Element	Researcher Action/Consideration
Methods of Preparation <ul style="list-style-type: none"> • Formulating the Question • Illustrating the Topic and Question 	Topic has both personal and broad-based significance; question is clearly stated
Ethical Principles	Full disclosure and agreement from participants; observance of ethical standards; designs and processes open-ended and open for discussion
Validation of Data	Participants given opportunity to add/provide clarification to data
Review of Literature	Assessment of relevant prior studies; situation of current study in context
Methods of Data Collection	Informal, interactive interviews based in protocol but flexible to situation
Interview Guidance	Use of broad questions that facilitate rich descriptions from participants

Data Organization and Analysis	Horizontaling, clustering of themes, textural descriptions
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The other design element of this study was that of a case study. Creswell & Creswell (2018) present competing views of case studies as representing merely a decision of what to study versus an actual defined methodology. Inasmuch as this paper treats case studies as the latter, guidelines established from previous literature have been adopted. The case study-specific elements of this study are grounded primarily in the work of Stake (1995), Yin (2003), and Baxter and Jack (2008).

A dual enrollment program, such as the one being examined in this study, fits accurately into one of Stake's (1995) examples of a case- that of "an innovative program...a complex, functioning thing." This study specifically represents an intrinsic case study described by Stake (1995), due to the researcher's intrinsic interest in the case. In other words, the goal of this study was not to gain insight about other cases or address a general line of inquiry, but rather a self-imposed directive to acquire knowledge about the specific case. Other elements of this study that are derived from Stake (1995) are the choice of sequence in developing the case study report (a mostly chronological approach) and in part, the organization of the report. As Yin (2003) notes, "a comprehensive 'catalog' of research designs for case studies has yet to be developed. However, there are considerations to be made regarding the components of the design. In addition to design, the evidence collection, analysis, and reporting stages of this study are also influenced by Yin (2003).

More recently, Baxter and Jack (2008) articulated broad guidelines for designing and implementing case studies that are specifically geared towards researchers with a still-emerging conception of that methodology. Based heavily on the previously mentioned strategies of Stake

and Yin, the authors nevertheless offer a distinct perspective, particularly in their description of single cases with embedded units that allow for within and between-case analysis as well as cross-case analysis, which is instructive in this design. A summary of Baxter and Jack's guidelines for case study design are included in Figure 3.2 below.

Figure 3.2- Baxter and Jack's Guidelines for Case Study Design

Procedural Step	Consideration	Application to Study
Determining when to use a case study	<ul style="list-style-type: none"> -For "how" and "why" questions -When subject behavior cannot be manipulated -To cover relevant contextual conditions -Phenomenon and its context are intertwined 	Case study is appropriate because: <ul style="list-style-type: none"> -student perception and decision-making must be considered within DE context -student behavior is not being manipulated
Determining the case/unit of analysis	An individual, a program, a process, a difference between organizations, etc.	Unit of analysis is DE program, representing "a phenomenon...occurring in a bounded context" (Baxter & Jack, 2008)
Binding the case	Placing boundaries to ensure study is not overbroad in scope, by: <ul style="list-style-type: none"> -Time and place -Time and activity -Definition and context 	Case is bound by: <ul style="list-style-type: none"> -Academic year -College -Target population having had a materially different experience in program
Determining type of case study	<ul style="list-style-type: none"> -Explanatory, exploratory, or descriptive (Yin) -Intrinsic, instrumental, or collective (Stake) -Single case, single w/embedded units, or multiple case 	Study type could be described as: <ul style="list-style-type: none"> -Descriptive -Intrinsic -Single case w/embedded units
Utilizing propositions and/or issues	-Specific propositions (Yin) can assist in limiting scope of study and increase likelihood of completion	Propositions include: <ul style="list-style-type: none"> -DE programs attempt to positively impact student success -DE programs attempt to recruit students

	-Issues (Stake) can assist in development of conceptual framework	-DE students' perceptions of institutions can be affected by participation
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Population and Sample

The population from which this study's sample was drawn can be described generally as students who participated in the MTSU Dual Enrollment (DE) program during the 2022-2023 and/or 2023-2024 academic year. Specifically, this population included students who were enrolled in DE courses that were conducted in-person at the students' high schools and initially excluded students who were enrolled in courses exclusively on the university campus or online. The excluded group represents 6.8% of participants in 2022-23 and 6.4% of participants in 2023-2024 and were initially excluded from this study because their experience of the program could be described as materially different. However, in the course of the interview process, one student was identified for participation that definitionally fell into the excluded group. However, given:

1. That the student's experiences were not determined to be materially different based on study findings,
2. her enrollment at one of the institution's in-person partner schools, and
3. her participation in at least some in-person dual enrollment coursework,

the decision was made to keep the student in the sample. This is addressed further in Chapter 4.

The included group could then be defined as the target population, described by Banerjee and Chaudhury (2015) as "the defined population from which the sample has been properly selected." Figure 3.3 below represents the percentages of the included and excluded groups over the last two years, while Figure 3.4 highlights the contrasts between the two groups in how the program is administered.

Figure 3.3- Target and Excluded Population of DE Students from General Population

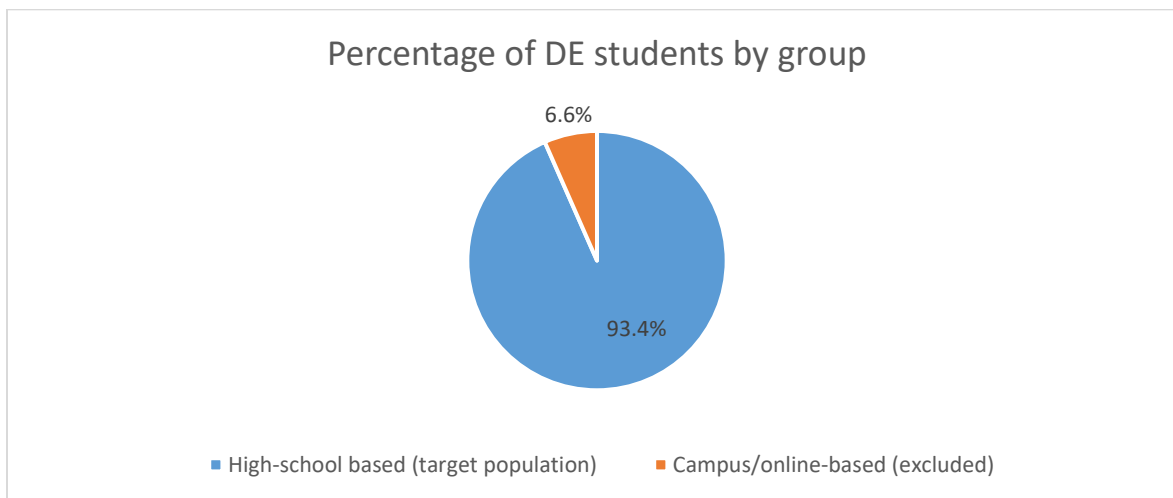


Figure 3.4- Comparison of Student Experiences in High-School Based and Online/Campus-Based DE

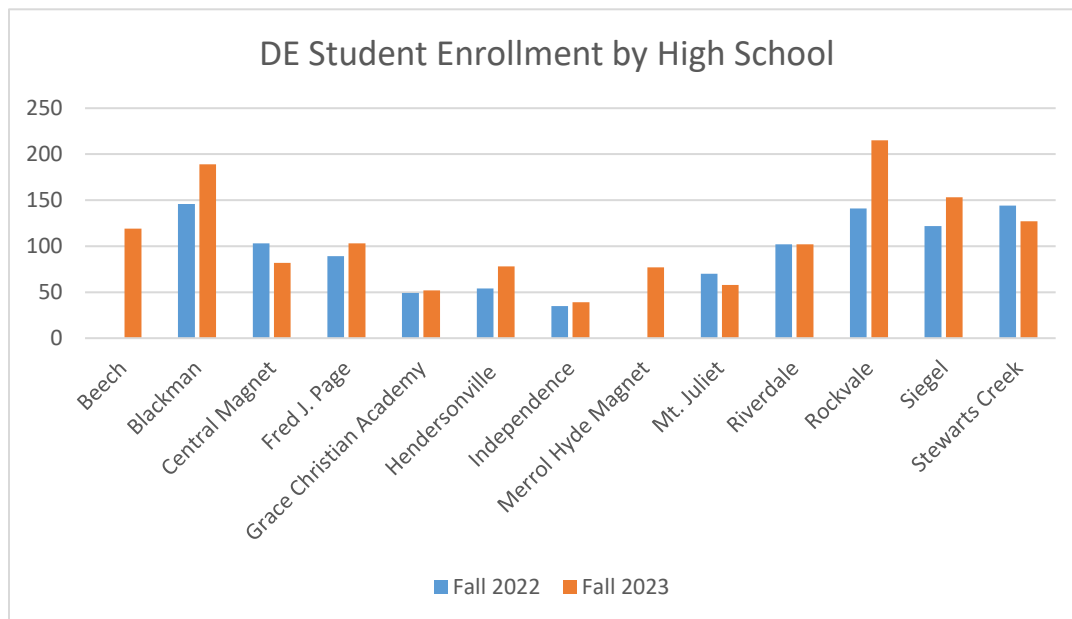
Characteristics of HS-based program	Characteristics of campus/online program
Students are registered by DE office	Students register themselves
Students' classmates are HS classmates	Students' classmates are undergraduates
Students' presence on campus is limited	Students' presence on campus is immersive

Within the total DE population from the 2022-23 and 2023-24 academic years, the following demographic characteristics are self-reported:

- 38.8% male, 61.2% female
- 65.5% White, 6.6% Black or African American, 6.8% Hispanic, 5.7% Asian, 15.4% All other categories

The target population was comprised of students from thirteen different high schools, which represent the schools that offer DE course instruction in-person on their campuses. Figure 3.5 below illustrates the high schools represented in this population and the number of participants from each school in Fall 2022 and Fall 2023.

Figure 3.5- Program Enrollment by High School



The sample for this study was comprised of seven students from the target population described above. All seven students in the sample have matriculated to a higher education institution and are currently enrolled. There are two categories of students among the sample, with multiple students classified in each category:

- Students who matriculated to MTSU (4)
- Students who matriculated to another four-year institution (3)

This represents a purposive or purposeful sample of the target population. Purposive sampling, which involves the deliberate selection of subjects for a sample because of qualities or characteristics they possess (Etikan et al., 2016), is widely regarded as appropriate for qualitative

research; while it cannot allow for statistical inferences applied to a broader population, it is intended to capture the individuals “that can best inform a researcher about the research problem under examination.” (Creswell & Poth, 2018)

In order to obtain the sample, an initial email inviting participation was sent to all students within the included group, using personal email addresses from the student’s MTSU record. Students who responded affirmatively to the invitation were asked to provide the name of the institution they are currently attending as an undergraduate. Respondents’ enrollment at MTSU was confirmed by checking internal institutional records. Additional demographic considerations were made in identifying participants in an effort to obtain an appropriately representative sample of the target population. Factors considered included the respondents’ high school, gender, and ethnicity.

Instrumentation

A variety of data sources are frequently utilized in qualitative inquiry, including observations, interviews, documents, and audiovisual and digital materials (Creswell & Creswell, 2018). Given the nature of this study, it was determined that interviews would constitute the primary means of data collection. Conducting interviews is considered one of the most common sources of qualitative data (Byrne, 2001; Harrell & Bradley, 2009), and is capable of yielding valuable insight, as Alshenqeeti (2014) describes:

“That is, the value of interviewing is not only because it builds a holistic snapshot, analyses words, reports detailed views of informants; but also because it enables interviewees to ‘speak in their own voice and express their own thoughts and feelings’ (Berg, 2007)”

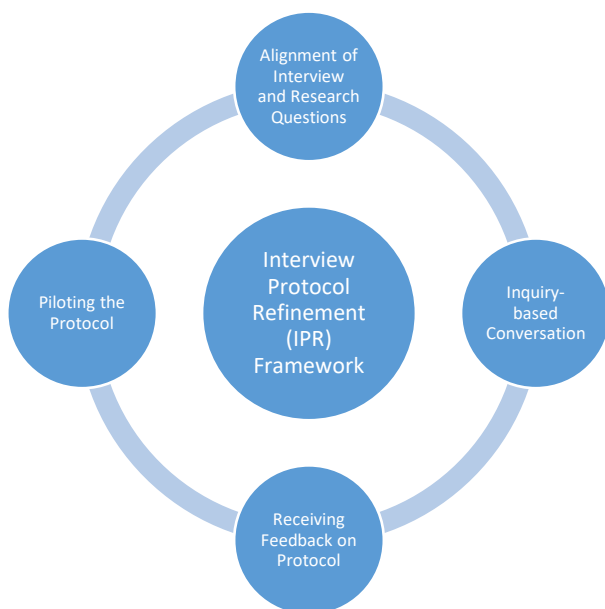
While observations were not applicable to this specific study as a means of qualitative data collection, the author notes that conducting observations could have utility in another circumstance. For example, a longitudinal study examining a similar group of a dual enrollment

students that commenced while the students were still enrolled in high school and participating in dual enrollment would almost certainly benefit from observation of the subjects in the DE environment.

For this study, semi-structured interviews were conducted with each student individually. While the use of focus groups was initially considered, the potential limitations of that approach to data collection were considered too significant to overcome. This includes tendencies toward individual domination of conversation and normative discourse (Smithson, 2000); difficulty in managing the group and encouraging participation by all members (Queiros et al., 2017); and the additional challenge of data integration among methods when triangulating sources of data (Lambert & Loiselle, 2008). Additionally, gathering students in a variety of locations together in-person posed a significant logistical obstacle. Thus, individual interviews emerged as the means of data collection.

Prior to conducting the interviews with each student, an interview protocol was developed by the researcher. (See Appendix B) This protocol is based primarily in the example of Creswell & Poth (2017). Additional consideration in developing the protocol was given to the recommendations of Jacob and Furgerson (2012). Additionally, the interview protocol refinement (IPR) framework proposed by Castillo-Montoya (2016) and outlined in Figure 3.6 was utilized after the protocol was drafted.

Figure 3.6- Adaptation of Castillo-Montoya's IPR Framework



Data Collection Procedures

The process of collecting the data that form the basis of this study was adapted from Creswell & Creswell (2017)'s data collection circle. Figure 3.7 lists the collection procedure referenced and the researcher's actions.

Figure 3.7- Data Collection Procedure Adapted from Creswell & Creswell

Collection Procedure	Action Taken by Researcher
Identifying a group/individuals	The study population was identified (DE students at MTSU in 2021-22 and/or 2022-23 that had matriculated to a HEI; this represents both the "phenomenon" and the bounded system described by Creswell & Creswell (2017))
Gaining access and developing rapport	Members of the population were contacted en masse by the researcher for solicitation of participation in interviews; possibility existed of familiarity with researcher
Sampling purposefully	Interview subjects were selected that met one of three criteria:

	-Matriculated to MTSU Matriculated to another 4-year institution Matriculated to a 2-year community college
Collecting data	Interviews were conducted with participants using specified protocol
Recording information	Interview protocol, field notes, memos among strategies used; interviews were recorded and transcribed
Minimizing issues	Bracketing was performed by researcher; logistics of interviews were considered
Storing of data	Interview transcripts, field notes, memos, and all other data sources were stored securely in digital format
Centering ethics	IRB approval was obtained for study

Data Analysis Procedures

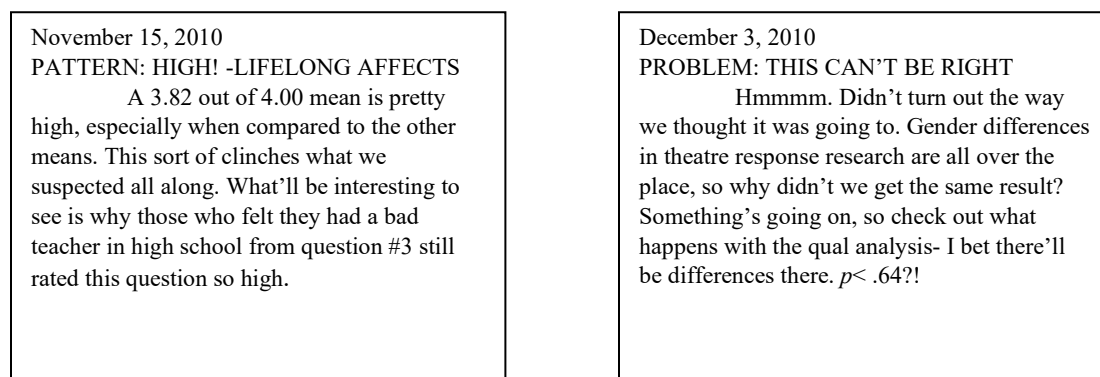
A variety of established data analysis procedures were used in the construction of this study. The first step in the analysis process was the application of coding schemes to the interview transcripts. The use of coding is typically considered an essential part of the analytical process in qualitative inquiry (Basit, 2003; Sgier, 2012). For this study, an open-ended initial coding process was employed during the transcription process; these “preliminary jottings” as described by Saldana (2013) allowed the researcher to capture initial ideas for consideration during the progression of the data analysis process.

This open-ended initial coding process utilized multiple forms of coding as necessary as part of First Cycle Coding. The researcher drew upon Descriptive Coding and In Vivo Coding schemes in initial analysis of the raw data. Descriptive Coding was used to summarize primary topics within the data (Saldana, 2013), while In Vivo Coding allowed the researcher to use phrases directly spoken by the participants (Miles et al., 2014). The latter scheme, in particular, is well-aligned with a phenomenological design that seeks to explore the lived experiences of subjects (Creswell & Creswell, 2018). After First Cycle codes were generated, a Second Cycle

coding process was conducted to group initial codes into broader Pattern Codes. These Pattern Codes were intended to connect recurring themes, explanations, and concepts together as described by Miles, et al. (2014).

As a complement to coding, the researcher produced analytic memos as part of the data analysis process. These memos were intended to allow for reflection on “coding process and code choices; how the process of inquiry is taking shape; and the emergent patterns, categories, and subcategories, themes, and concepts.” (Saldana, 2016) Additionally, analytical memoing allowed the researcher to identify unanswered questions and other challenges with the data collection process (Saldana, 2016). An additional benefit to the memo process is its function in enhancing the trustworthiness of the research (Rogers, 2018), which will be discussed further in the following subsection. While there is considerable latitude in how analytical memos are produced, two examples of informal analytic memos produced by Saldana (2021) are included in Figure 3.8 below.

Figure 3.8- Two examples of informal analytic memos



Finally, an applied thematic analysis (ATA) was conducted on the data. Thematic analyses are often utilized in case study designs, particularly in educational settings (Peel, 2020), and allow the researcher to identify patterns in qualitative data (Braun et al., 2019). The ATA

approach is a specifically defined type of such analysis. It is foundationally guided by the work of Guest, et al. (2012). The thrust of this analytical method is twofold. It attempts to examine data inductively across multiple analytical techniques, while also being geared toward practical application of the findings it generates (Guest, et al., 2012). This is well-aligned with the pragmatic worldview informing this study.

Critical throughout the analytical process was the use of bracketing, described by Eddles-Hirsch (2015) as the intentional recognition and discarding of preconceptions, preliminary knowledge, and beliefs of a phenomenological researcher in order to remain open-minded and receptive to participants' descriptions. As the researcher has extensive experience with the phenomenon being observed, such an approach was essential to the integrity of the study.

In summary, the data analysis procedures utilized were First Cycle Coding, which employed an Open coding approach that draws upon Descriptive and In Vivo schemes; Second Cycle Coding, which consisted of pattern coding; analytical memos, which supplemented other steps of analysis throughout the process; and applied thematic analysis. In addition, bracketing was performed throughout the analytical process by the researcher. A table outlining the logic of the research design is included below in Figure 3.9.

Figure 3.9- Logic of the Research Design

Research Question	Corresponding Source of Information	Corresponding Data Analysis Procedure(s)
RQ1: How does participation in Dual Enrollment affect students' perceptions of college readiness?	Interview Questions 3-6	First Cycle Coding (Initial, Descriptive, In Vivo), Second Cycle Coding (Pattern), Analytic Memos, Applied Thematic Analysis
RQ2: How does participation in Dual Enrollment affect students' perception of the	Interview Questions 7-10	First Cycle Coding (Initial, Descriptive, In Vivo), Second Cycle Coding (Pattern),

institution as part of the college decision process?	Analytic Memos, Applied Thematic Analysis
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Trustworthiness

There are four generally accepted criteria for establishing trustworthiness in qualitative studies (Lincoln & Guba, 1985; Shenton, 2004; Forero et al., 2018; Morse, 2015), identified as credibility, transferability, dependability, and confirmability. These correspond to (and serve as substitutes for) the quantitative/positivist criteria of internal validity, external validity, reliability, and objectivity, respectively (Shenton, 2004). These four criteria are addressed briefly below.

Credibility: Shenton (2004) recommends a number of provisions for ensuring credibility, including the use of established research methods; development of familiarity with participants/organization; random sampling; tactics to foster honesty in responses; frequent debriefings with project supervisors; and peer scrutiny. This study used those recommendations in the following ways, outlined in Figure 3.10 below.

Figure 3.10- Shenton's recommendations for credibility

Shenton's provisions for ensuring credibility	Researcher action
Use of established methods	Research design, data collection, data analysis methods all supported in literature
Familiarity with participants/organization	Researcher has existing familiarity with participants and program in role as coordinator
Random sampling	Though purposeful sampling is necessarily utilized, participants from within bounded case who have experienced phenomenon are selected randomly
Fostering honesty in responses	Opportunities to decline participation were provided; an attempt to build rapport was made; researcher's independence was emphasized

Debriefings/feedback from supervisor and peers	Frequent discussions with study chair and colleagues throughout project; suggestions for improvement provided
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Transferability: There is significant disagreement in the literature concerning the concept of transferability (Shenton, 2004). As an analogue to external validity, it could be considered a more measured approach to generalization of findings. Some have argued that this concept is wholly impossible to achieve in a naturalistic setting (Erlandson, 1993). Others recommend only a limited application, as it undermines the contextual factors that underpin qualitative research (Gomm et al., 2000), while others suggest that unique cases can still potentially be representative of more expansive populations (Stake, 1995; Denscombe, 1998). Ultimately, Shenton (2004) suggests that the most effective tool for achieving a modicum of transferability is the careful, robust description of the contextual setting of a study, which could allow other researchers to make informed assessments about any potential generalizability of findings. The researcher attempted to produce such a contextual description herein.

Dependability: As is the case with transferability, the concept of dependability in qualitative inquiry can be problematic due to the unique and ever-changing nature of the phenomena being examined. Lincoln and Guba (1993) suggest that there is an overlap between credibility and dependability, and Shenton (2004) simply stresses the need for researchers to report in fully detailed sections the research design and implementation, the data collection process, and reflection on the project. The researcher included these sections and attempted to cover the topics in detail.

Confirmability: Shenton (2004) describes confirmability succinctly, as “Steps must be taken to ensure as possible that the work’s findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher.”

This criterion for trustworthiness is especially important given the researcher's professional interest in the subject being examined. Accordingly, two strategies were employed in concordance with the design of the study in an attempt to ensure the influence of the researcher was minimized, and the perceptions and experience of the researcher were appropriately acknowledged when deployed. Bracketing and analytical memos were both used in the study to highlight the researcher's experiences with dual enrollment programs and reflect on personal perceptions that shape his understanding of the phenomena described by the participants.

Summary

As described above, this study utilized a phenomenological case study design to examine research questions concerning dual enrollment (DE) students' perceptions of college readiness and the college decision-making process to explore a potential relationship between the two. From the broader population of DE students at Middle Tennessee State University from 2022-2024, a purposeful sample of students meeting one of three criteria was identified, and selected subjects were interviewed about their experiences, guided by the research questions. A variety of established data analysis processes were employed to inductively develop categories of meaning from the data. Throughout the process, careful consideration was given to the trustworthiness of the study. The findings from the research form the basis of the following chapter.

Chapter 4: Findings

Overview

Potential research participants were identified using purposive sampling. The sample was obtained from a target population that met the following characteristics:

- Enrolled in at least one course as a Dual Enrollment student at MTSU
- Enrolled in the 2022-23 and/or 2023-24 academic year
- Enrolled in a course/courses instructed in-person, at participant's high school*

After obtaining Institutional Review Board (IRB approval), the researcher invited students to participate in the study by sending an email from his institutional email account to the personal email addresses each student had on file with the institution. The initial recruitment email (see Appendix C) was sent in July 2024. In the three days following the initial invitation, 21 students replied expressing interest in participation.

As responses were received, the research began compiling a list of potential interviewees in a spreadsheet. The document included the students' names and university ID numbers, gender, race/ethnicity, semester of high school graduation, high school attended, whether the respondents had matriculated and/or applied to MTSU as a freshman (based on institutional records), how many and which semesters they were enrolled in DE courses, which classes were taken, and the students' GPA in their DE coursework.

Because the invitational email was sent to all DE students from the 2022-23 and 2023-24 academic years, responses were received from two groups that were necessarily excluded from participation, based on the parameters of the study. Three students who were enrolled in courses on-campus and online, and three additional students that were entering their senior year of high school and had not yet graduated, expressed interest in participation but were ultimately not

interviewed. Two more students specifically asked about a financial incentive for participation and were also not selected for interview.

Of the remaining students, nine were selected for an interview. In follow-up correspondence, the researcher confirmed the participants' interest and offered them a variety of times and dates to schedule an interview, defaulting to students' availability when possible. Interviews were conducted over Zoom, with recordings and audio transcripts stored in the cloud. Ultimately, seven students were interviewed, as two others failed to maintain contact with the researcher after initially agreeing to be interviewed.

Initial interviews ranged from 15 to 25 minutes in length. Upon completion of the initial Zoom interviews, the researcher began the initial first cycle coding process, at which time the decision was made to follow up with the participants to obtain additional contextual information via emailed questions and responses.

Of the seven participants, four matriculated to MTSU as first-time first-year students. Three others enrolled in undergraduate study at other institutions; one at an in-state private institution, Lipscomb University; one at an out-of-state public university, University of Alabama-Huntsville; and one at an out-of-state private institution, University of Southern California. Additional demographic information, as self-reported by the participants, is as follows:

- Four female students, three male students
- Five white students, one Hispanic/Latina student, one student identifying as two or more races
- Three first-generation college students, three non-first-generation, one undisclosed

In addition, four of the participants graduated high school in Spring 2023 and were classified as sophomores in college. Three participants graduated high school in Spring 2024 and were currently first-year students in college. Four different high schools were represented amongst the participants, with three having participated in DE at Crescent High School, two at Horizon Prep School, and one each at Willowbrook High School and Ironwood High School. Figures 4.1 and 4.2 outline descriptive characteristics of each of the seven participants.

Figure 4.1- Descriptive characteristics of participants

Participant (Pseudonym)	Gender	Race/Ethnicity	High School (Pseudonym)	1 st Generation
Liam	Male	Two or more Races	Ironwood HS	Yes
Sasha	Female	White	Crescent HS	Yes
Dean	Male	White	Crescent HS	No
Sophie	Female	White	Willowbrook HS	No
Diana	Female	Hispanic/Latina	Crescent HS	Yes
Ben	Male	White	Horizon Prep	No
Eleanor	Female	White	Horizon Prep	No

Figure 4.2- Descriptive characteristics cont.

Participant (Pseudonym)	Undergraduate Institution	Number of DE classes taken	GPA in DE classes	Semester of HS graduation
Liam	Univ. of Southern California	8	3.88	Spring 2023
Sasha	MTSU	3	4.00	Spring 2023
Dean	MTSU	4	3.50	Spring 2024
Sophie	MTSU	2	4.00	Spring 2023
Diana	MTSU	4	3.58	Spring 2023
Ben	Univ. of Alabama-Huntsville	2	3.50	Spring 2024
Eleanor	Lipscomb Univ.	1	4.00	Spring 2024

Interview Questions

The interview protocol used for the initial Zoom interviews with participants (Appendix B) consisted of 10 questions. The first question was open-ended, allowing participants to set the initial tone for the discussion and giving the researcher the opportunity to assess general perceptions of the DE program. The second question was intended to allow participants to distill their experiences into one word or phrase, with the intention of generating In Vivo codes and giving the researcher the opportunity to compare responses and identify potential “top line” themes.

The remaining questions were divided into two sets of four questions each. The first set, comprised of Questions 3-6, were written and utilized to specifically address Research Question 1. These questions centered on students’ experiences with dual enrollment. Question 3 asked students to discuss the process of enrollment- application and course registration. Question 4 shifted focus to the courses themselves- the content, the instructor, and the difficulty level of the course. The next question, Question 5, asked students to compare their experiences in dual enrollment to their undergraduate experience to date, while Question 6 directly addressed participants’ perceptions of whether they felt dual enrollment made them more prepared for college.

The second set of items, Questions 7-10, turned the focus of the interview to the dual enrollment institution in order to address Research Question 2. Question 7 attempted to ascertain students’ familiarity with the institution prior to participating in dual enrollment. Then Question 8 asked participants if their perceptions of the institution changed and how as a result of taking dual enrollment courses. The final two questions attempted to gain insight into the participants’ process of making a decision about where to attend college for undergraduate study. Question 9

asked interviewees to describe their college selection process in broad terms, identifying each student's timeline and factors that led them to enrolling at the institution they had chosen. The final question, Question 10, then attempted to directly connect this process to participation in dual enrollment, asking students explicitly if that participation affected how they considered MTSU as part of the process.

As mentioned previously, the researcher determined after the initial round of interviews and first cycle coding that additional data was needed in order to establish a narrative background of participants. As Tenny et al. (2017) describe, one of the most useful aspects of qualitative inquiry is its "ability to tell a story," and details from the setting are essential in fleshing out the data and drawing meaningful conclusions.

Thus, the researcher followed up with each of the seven interview participants with an informal email, asking four additional questions. At the conclusion of each Zoom interview, the researcher had mentioned the possibility of reaching back out to participants for additional information and each student responded affirmatively. The four follow-up questions posed to participants were as follows:

1. Did you grow up in Murfreesboro/Rutherford County? If not, could you tell me about the place(s) you lived prior to moving there?
2. Could you tell me a bit about your parents/family in general? What is their educational background, as far as you know? Would you describe your family as supportive of your educational pursuits?
3. What kind of student would you describe yourself as in high school? Were you involved in activities/clubs? Did you work full or part time?
4. Outside of school, what are some of your interests and hobbies?

The four follow-up questions above were intended to obtain information from the students that could help provide additional insight into their lived experiences, in order to satisfy the phenomenological aspect of the study. The full transcript of the initial interview protocol for Zoom interviews is included in Appendix B.

Interviews

Initial interviews were conducted virtually, with all seven participants being interviewed through Zoom. Interviews ranged in length from approximately 15 to 25 minutes. Most interviewees appeared to be participating from their homes. After completing the first interview with Liam, it was discovered that the interview was not recorded. As a result, the researcher requested that the student participate in a “do-over” the following day, to which the student agreed. From the researcher’s initial comparison of notes, it appears the student’s answers remained largely similar, though it is worth noting that having already answered the questions may have given the student more opportunity to prepare and refine a “better” answer in his perception.

Interviews were recorded and transcribed via Zoom. The researcher then performed an initial viewing of each video recording and downloaded the audio transcript of each interview. An original, unedited version of each transcript was saved, and then the researcher reviewed the recording and used the audio to make line-by-line corrections, ensuring the participants’ statements were accurately and completely represented. This also allowed for the correction of typos and grammatical errors made by the Zoom transcription software.

Participants

This section provides an overview of each of the seven student participants and their responses to the interview questions. Each participant (Liam, Ben, Diana, Sophie, Sasha, Dean,

and Eleanor) is discussed under an individual heading. The details included therein are derived entirely from three sources: the actual responses made by the students; the observations made by the researcher during the interview; and the demographic data available to the researcher via institutional records.

Liam

Liam graduated from Ironwood High School in Spring 2023. As an Ironwood student, Liam enrolled in eight different dual enrollment courses across three semesters (Spring 2022, Fall 2022, and Spring 2023). The courses he took included two introductory English courses, a lower division math course, three survey courses in history, a general psychology course and a sociology course. All eight courses are general education degree requirements at the university and all eight were taken in-person at Ironwood HS. Objectively, Liam performed well in his dual enrollment coursework, earning a GPA of 3.88. Liam did complete an application to MTSU as an undergraduate, but decided to attend the University of Southern California, where he is currently a sophomore.

Liam is a lifelong resident of Rutherford County, where MTSU is located. Liam is a first-generation college student; neither of his parents graduated high school, though his father did obtain a GED. He feels strongly that both of his parents are supportive of his educational journey because “they feel I can do more than succeed.” He balanced a number of academic and extracurricular obligations in high school. In addition to dual enrollment, Liam took multiple Advanced Placement (AP) courses, participated in student council, competed in both cross-country and track, and worked part-time at a restaurant. He enjoys video gaming, poker, and spending time in nature.

As mentioned in the introduction of this section, Liam's interview was the first conducted by the researcher. During the first interview, the researcher erroneously believed that it was being recorded, only to discover that the conversation with the student was not captured. The researcher immediately reached out to Liam via email and asked if he would be willing to engage in another attempt at the interview, to which the student agreed.

In both interviews, it appeared that Liam participated from the Zoom app on his mobile device. During the second interview, he appeared to be speaking from an outside recreational area at his house, under what appeared to be a gazebo or pergola. The camera's view appeared to be from below, as the participant could only be observed from the neck upwards. Liam's style of communication in the interview felt relaxed and conversational. He paused briefly before answering most questions and appeared to be smiling at numerous points. He frequently scratched his head and presented a thoughtful facial expression when responding. He interjected humor into the conversation on occasion, and ultimately presented as self-aware and confident. He expressed interest in the research at the end of the interview, asking questions about the study and wishing the researcher luck, stating that "it's something I believe in" in reference to academic research.

Sasha

Sasha graduated from Crescent High School in Spring 2023. As a student at Crescent, she enrolled in three different dual enrollment courses across three semesters (Fall 2021, Spring 2022, and Fall 2022). The courses she took were a communications course, a course in general psychology, and an introductory course in government and politics. All three of the courses taken by Sasha are general education degree requirements at the university, and the first two were taken in-person at Crescent HS, while the PS 1005 class was taken as an asynchronous online

course. Sasha made a grade of A in all three courses, which resulted in a dual enrollment GPA of 4.0. Sasha applied to MTSU and did matriculate to the university as a first-year student in Fall 2023.

Sasha was born in Egypt. When she was about two years old, her father's side of her family moved to the United States. At about 10 years old, Sasha followed them to Nashville, and eventually settled in Rutherford County in 2019. Neither of her parents attended college, making Sasha a first-generation college student. She describes her parents as very supportive- especially her mother, who Sasha calls "my #1 first supporter in any decision I make." Sasha participated in a variety of extracurricular activities in high school and participated in the patient care tech program offered through her school, which led to her spending several hours each week at hospitals and retirement homes. In free time, Sasha enjoys spending time with friends, shopping, and being active in church activities.

Sasha's interview was the sixth conducted by the researcher. The student joined the Zoom meeting from what is believed to be her mobile device. She was also using wireless earbuds during the interview. It was difficult to ascertain her location during the interview. The student remained close to the camera, taking up much of the visible space, and the background blurring function was being used. The room did not appear to be a part of a house. The only visible details were a white wall, a blue accent wall, and possibly a whiteboard. Sasha was wearing a gray sweatshirt and a necklace, with sunglasses on top of her head.

Sasha appeared cheerful but reserved throughout most of the interview. She seemed eager to answer the questions as they were asked but kept her answers fairly direct and to the point. At the conclusion of the interview, she thanked the researcher for having her.

Dean

The fifth interview conducted by the research was with Dean, a Spring 2024 graduate of Crescent High School. As a high school student, Dean enrolled in a total of four dual enrollment classes, all taken during his senior year. He completed one course, an introductory math course, in Fall 2023, and then had three courses during his final semester of high school- an introductory course in Psychology, a survey course in history, and a communications course. Three of the four courses taken by Dean were conducted in-person at SCHS, while was delivered as an asynchronous online course. The participant earned an overall GPA of 3.5 in his dual enrollment coursework. He did apply to MTSU as a first-year student and ended up matriculating to the university for the Fall 2024 semester.

Dean has lived in Rutherford County his entire life. His father moved to Kentucky, but he opted to stay put and maintain a routine. Both of his parents are MTSU graduates, his father with a degree in theatre and his mother in nursing. Dean mentioned that both parents ended up in careers influenced by their degrees, which also influenced his choice of career as a nurse. He finds it helpful to have parents that are alumni of the university in his own pursuit of a degree.

He noted the COVID-19 pandemic as a factor in how his first two years of high school unfolded and described himself as not being as academically focused as he needed to be. With guidance from his school counselor, he pivoted into a more challenging academic path that incorporated dual enrollment classes. Dean took the ACT several times to achieve a score that would grant him scholarship opportunities, while also participating in three extracurricular organizations specifically chosen for personal growth. He enjoys drawing, gaming, and crossword puzzles, and maintains a small, close-knit group of friends. He remarked that “setting aside time for myself has proven to be monumental to my success as a student.”

Dean's interview, like each of others, was conducted over Zoom. The interviewee appeared to be participating in the meeting with a laptop computer with built-in camera. The observable background was entirely white and appeared to be a blank wall. Dean wore a tie-dyed shirt with yellow, orange, and pink swirls. He appeared to be reserved during the interview, and possibly nervous as determined by nonverbal cues such as darting eyes and swallowing frequently. This was particularly notable at the outset, and he appeared to become more relaxed over the course of the conversation. His vocal delivery was monotone, and he kept his responses to non-interview questions fairly curt. By comparison, he did seem willing to go into more detail when answering the interview questions. In contrast with some of the other participants, the student did not "linger" at the conclusion, though he thanked the researcher.

*Sophie**

Sophie's interview was the fourth conducted by the researcher. Sophie graduated from Willowbrook High School in Spring 2023. As a dual enrollment student, Sophie was enrolled in two courses. She completed two first-year courses in English in the Fall and Spring of her senior year, respectively. The student earned an A in both courses, which resulted in a dual enrollment GPA of 4.0. She applied to MTSU as a first-year student and did matriculate to the institution in Fal 2023.

Sophie's inclusion in the study is notable, as it is contrary to the original methodology that was established as part of the study proposal. The original sampling process intended to exclude students who had only participated in dual enrollment courses online or on the college campus, as the focus was on students who had completed their coursework in-person at the high school. Sophie's two courses were both taken in an asynchronous online format, but this was not originally known by the researcher as she attended high school at Willowbrook, where the vast

majority of participants (all but 1-2 annually out of 150-200) are enrolled in on-ground courses at the high school. The researcher did not discover that Sophie had only enrolled in online courses until it was discussed during the course of the interview.

The student's interview, however, yielded valuable insight, and the researcher felt it would be desirable to include her experience as part of the study. It is noteworthy that while completing ENGL 1010 and 1020 courses in an online format through MTSU, Sophie was also enrolled in in-person courses through another institution, Motlow State Community College, as part of an Emergency Medical Technician (EMT) certification program. Most notably, however, were that the findings from her interview did not suggest the material difference in experiences between the included and excluded populations as described in Chapter 3. Instead, the findings were confirmatory of the emerging themes discussed later in Chapter 4. After discussion with the committee, the decision to include Sophie's interview in the study was affirmed.

Sophie originally grew up in the Virginia Beach area. In third grade, she and her family moved to the Murfreesboro/Rutherford County area, where she has lived since then. Her mother earned a bachelor's degree in psychology, and Sophie emphasized that her mother had been incredibly supportive of the educational path, frequently giving her guidance. Sophie's father attended trade school to pursue a career in welding, and she indicated that he had not been as quick to support her postsecondary journey. Sophie had a part-time job throughout high school, while also running cross-country and track, and was a student athletic trainer for her high school's football team. When not engaged in academic activities, she enjoys hiking and exercising, which she describes as her coping mechanism for stress.

The initial interview with the participant was scheduled for 11:00 a.m. on a Monday. However, after starting the Zoom meeting at 10:59 the researcher waited an additional 15

minutes, but the student did not join the meeting. The researcher then made the decision to end the meeting, assuming the subject had either had connectivity issues, had a last-minute conflict, or merely forgotten the appointment. Shortly after ending the Zoom meeting, the researcher sent a follow-up email to the student, asking if it would be possible to reschedule. Two minutes later she responded, apologizing profusely for the oversight, and offering to meet again two days later, on Wednesday at 10:30 a.m.

It was then that the interview was conducted. Sophie joined the meeting from her mobile device and seemed surprised and flustered upon joining the meeting. She appeared to be conducting the interview from her dining room table. In the background, a kitchen was visible, as well as two doors and an oscillating ceiling fan. The participant was effusively apologetic about missing the previously scheduled interview, describing how her “heart dropped” when she received the email from the researcher.

Throughout the interview, which was the longest conducted in the study, the student had a cheerful disposition. She seemed eager to answer the questions that were asked and referred to the researcher as “sir” on multiple occasions. She was dressed in layered tank tops that were pink and white and wore two silver necklaces. After the interview questions, she voluntarily continued the conversation, touching on her work as an EMT and asking the researcher about his project and hopefully impending graduation.

Diana

Diana was a Spring 2023 graduate of Crescent High School. As a student at SCHS she participated in the dual enrollment program, taking a total of four courses all in her senior year. In the Fall 2022 semester, the student was enrolled in introductory courses in English and math, The following semester she completed two additional courses, again taking a course each in the

English and math departments. All four courses taken by the student were delivered on-ground at her high school. Her cumulative GPA across dual enrollment coursework was a 3.58. Diana did apply to MTSU during her senior year, and eventually matriculated to the institution as a first-year student.

Diana grew up in Rutherford County, attending school locally for the entirety of her education to date. Like some of the other participants, neither of Diana's parents attended college. Her mother did earn a high school diploma, while her father finished the sixth grade. She describes her parents as being people that value education and wanting her to take advantage of opportunities that they did not have. Diana described herself as "very quiet" as a high school student. She mentioned spending much of her extracurricular time participating in the band as well as the DECA organization, which she "fell in love with." She said she prioritizes time with family, horseback riding and caring for her animals, and especially self-care in her free time.

Diana's interview was scheduled to take place on Zoom on a Wednesday afternoon at 3:00 p.m. The researcher began the meeting two minutes early and waited an additional 13 minutes for the student to join. When she had not logged in by that time, the researcher made the decision to end the meeting. That evening, the researcher reached out to the participant and asked about the possibility of trying to meet again the following week. Just over 20 minutes later, Diana replied apologetically, and asked if the researcher had availability on the following Tuesday at 1:00 p.m.

Eventually, both parties settled on a meeting time of 10:30 a.m. This time, the interview proceeded as planned. The student logged on from what appeared to be a laptop or desktop computer with a webcam. She appeared to be recording from her bedroom, as two twin beds were visible behind her, as was a collection of photographs displayed on a line using clothespins.

The student was dressed in a dark gray or black crew neck sweatshirt and wore dark-rimmed glasses with hair in a ponytail. She spoke in a calm tone with warmth in her voice, and often paused to choose her words when answering questions. At the conclusion of the interview, the researcher and the student discussed their summer activities. The student shared that she had traveled to Paris for a week, which was her first time traveling out of the country. She also wished the researcher luck on his study.

Ben

Ben graduated from Horizon Prep School in Spring 2024. As a dual enrollment participant, he took two courses through MTSU, one each during his junior and senior years of high school. During the timeframe in which he was enrolled, the only classes offered to CMS students at their high school were science courses with laboratory components. The courses were four credit-hour courses, and instruction spanned the course of the entire academic year as opposed to a single semester, the only such example of that instructional schedule within MTSU's dual enrollment program.

The student was enrolled in a Physics course during his junior year, and an introductory Chemistry course during his senior year. Both courses encompassed a lecture portion which took place at CMS, and Saturday laboratory meetings throughout the semester that were hosted on MTSU's campus. He earned an A and a B, respectively, in the two courses for a cumulative dual enrollment GPA of 3.5. Ben was the only student in the study that did not complete a first-year application to attend MTSU, and thus did not enroll at the university after graduation, choosing to attend University of Alabama-Huntsville as a first-year student for the Fall 2024 semester.

Ben did not grow up in Murfreesboro; he was born in Knoxville, Tennessee and lived in Tampa, Florida and Winston-Salem, North Carolina before settling in Rutherford County. Both

of his parents hold advanced degrees, with his mother having a PhD and his father a master's degree. Notably, he described them as not being particularly active at the forefront of his own educational experience, "only interfering when they thought my grades were at risk." Ben described himself as an average student. While he indicated he generally performed well academically, he remarked that he did not attempt to go "above and beyond" what was expected of him. He did play soccer for his high school and worked full-time during the summer and part-time during the school year.

Ben's interview was scheduled via Zoom for a Wednesday afternoon at 1:45 p.m. The interview was the second to be completed by the researcher. Along with Sophie's, this session was one of the two relatively longer interviews that took place. Upon beginning the recording, the student seemed alert and energetic, asking the researcher how he was doing by name. He was seated in what appeared to be a bedroom or office space in his home and seemed to be participating from a mobile device. The camera view from below did not allow for much detail in terms of the surroundings and the participant's appearance, though it was noted that there was a blank gray wall in the background with spotlights recessed in the ceiling on either side, and an oscillating ceiling fan. At the conclusion the interview, Ben expressed interest in the research being conducted, asking about a timeline for when they study might be completed and wishing the researcher luck.

Eleanor

Eleanor attended Horizon Prep School and graduated in Spring 2024. As a dual enrollment student, she completed one course during her junior year. The class she took, a general Chemistry course, was a four credit-hour offering that spanned the entire academic year.

Eleanor made a grade of A in that lone course, which resulted in a dual enrollment GPA of 4.0. While she did apply to MTSU as a first-year student, she did not end up matriculating to the university, instead opting to attending Lipscomb University, a private Christian institution in nearby Nashville.

Eleanor was born in Arlington, Virginia, moving to Rutherford County around the age of four. About her parents, she said “(they) are incredibly supportive of my educational pursuits and have pushed me all my life to strive for excellence academically.” Both of her parents are college graduates, with her mother holding a PhD in Mathematics. She described herself as a very good student in high school, stating that she put in her best effort at all times and attempting to stay ahead of coursework. Eleanor also held leadership positions in various extracurricular clubs and played tennis. She devotes much of her time in various community service projects and is working to become fluent in Spanish.

The interview with Eleanor, as all others, was conducted via a Zoom meeting. The interview was the last of the seven coordinated by the researcher. The interview was scheduled for a Friday afternoon at 2:00 p.m. and was completed according to schedule. The interview began a few minutes early, and the participant seemed friendly, but fairly quiet at the outset. As had been the case with several other interviews, the student appeared to be participating on either a laptop or desktop computer. There was little detail observable in the background setting. Behind the student was a blank white wall, with an outside window visible above the student’s right shoulder. From the researcher’s perspective, the space likely appeared to be a dorm room. The student wore a white t-shirt with the words “student government” visible on the left chest, though the rest of the text was not visible. As the interview progressed, Eleanor became more

animated, frequently using hand gestures as part of her communication; this was a notable departure from other interviewees.

Research Questions and Findings

As contextual information concerning participants' educational background, the specifics of their participation in the dual enrollment program, and the conditions of the interviews have been shared, the next section focuses on the findings of the study as they relate to the previously established research questions. These seven sets of interviews, comprising an initial live interview and a messaged follow-up, were conducted to address these two research questions:

- **RQ1: How does participation in Dual Enrollment affect students' perceptions of college readiness?**
- **RQ2: How does participation in Dual Enrollment affect students' perception of the institution as part of the college decision process?**

To address both research questions, the researcher's first step was to employ first-cycle coding in the form of open coding. This allowed for flexibility in analyzing the data. The predominant forms used were descriptive coding and In Vivo coding. This enabled the researcher to summarize the primary topics found within the data (Saldana, 2013) and capture the actual words and phrases used by the participants (Miles et al., 2014), respectively. Next, second-cycle coding was utilized, as the researcher identified and developed pattern codes in an effort to categorize initial codes as an intermediate step towards identifying broad emerging themes.

What follows is a narrative summary of each participants' interview as it relates to findings that address the research questions. At the end of each individual section is a table identifying relevant initial codes, shared pattern codes, and emerging themes for all participants collectively.

Following the individual sections, three primary emerging themes are identified and described, along with a brief description of additional observed themes.

Individual Findings

Liam

Liam had a positive impression of his instructors, referring to them as “very cool.” He described them as guiding him towards an alternative style of learning that he had not previously experienced. Of particular note was his use of “eye-open” as a verb, as in, “they’ll eye-open you.” He also felt that in general, his instructors were helpful, and he especially appreciated the organizational aspects of their instruction as well as what he perceived to be a willingness to communicate effectively with students.

According to Liam, the degree of difficulty in the coursework that he faced was actually easier than he had anticipated, and noted the lack of assignments that were due in relation to most of his high school courses. He stressed an appreciation for what he described as “self-paced courses,” taught in a unique way. Of particular note was Liam’s observation on the role of syllabi in his dual enrollment courses, quoted below:

“College courses use syllabuses, and they follow that pretty much to a T, whereas a high school syllabus is like a joke, like, you throw that away. A college syllabus you need to, like, keep that and follow it. So the structure of, oh, we’re doing this on this day and it’s set in stone...is like okay, I need to plan for that.”

Liam expressed mixed feelings regarding the process of being and becoming a dual enrollment student. While he felt that the application process with the university was straightforward, for him navigating the state’s Dual Enrollment Grant application process was more cumbersome. He found the Grant confusing overall and suggested that there had been miscommunication in how it would be applied. Notably, he was also the only participant in the study who mentioned difficulty in communication with the Dual Enrollment office regarding

scheduling changes. He also described his school counselors as “unwilling” to make changes to his course schedule. Overall, he characterized the experience as making him feel uneasy at times, but that it was ultimately doable.

Despite residing locally, Liam expressed unfamiliarity with MTSU in general prior to participating in dual enrollment. While he had heard about the DE program, he had never visited the campus for any reason, and did not seek out any additional information about the program or the university prior to his enrollment. He noted that taking dual enrollment classes were a “pretty good way” of learning more about the institution, specifically referencing the process of obtaining a student ID card and using it to access facilities on campus as well as the navigation and use of MTSU’s course learning platform, Desire2Learn (D2L).

When asked about his perception of MTSU after participation in dual enrollment, Liam emphasized the concept of respect. He described having positive associations with the institution- that it is a “respected school.” He singled out his instructors as having positively shaped his learning style and referred to his ENGL 1010 class as “literally the most helpful class I have ever taken.” That experience led him to feel a degree of respect for the institution that he had not had previously.

When his college search process began, Liam made it a point to apply to as many institutions as possible. He estimated that he submitted applications to approximately 35 colleges and universities. At the beginning, Liam focused on completing applications to in-state public institutions such as MTSU, University of Tennessee-Chattanooga, and University of Memphis. Next, he utilized the Common Application to apply to “big-name” schools that he recognized, such as the University of Oregon, Clemson University, and his eventual destination, University of Southern California.

The next step in the process was taking campus tours. Liam forewent an official tour of MTSU as he had already toured the campus informally. While narrowing down his options, he received notice of being selected as a recipient of a prominent national scholarship; Liam says this new development in financial aid led him to narrow his scope further, focusing primarily on out-of-state institutions that had become more accessible as a result of the scholarship. Eventually, he settled on USC, where he had recently been accepted, and Vanderbilt University. When he was not admitted to Vanderbilt, Liam made what he describes as a “spur-of-the-moment” trip to California to visit USC’s campus. He recounted seeing the beach during his visit and noting the presence of a train on campus. As he recalled amusedly, “That was pretty much a school-picking thing right there, that stupid train.”

Though he did not matriculate to MTSU, Liam feels as though his dual enrollment experience did cause him to consider attending there to a slightly greater degree. He reemphasized that his respect for the institution had grown, and that he had a positive experience with the campus systems and processes. Ultimately, however, it was the proximity to home that seemed to tip the scales of his decision, as he stated “I still wanted to kind of leave the area a little bit, just because I didn’t want to sleep in my own bed. I felt like that wouldn’t be ‘growing up.’”

Figure 4.3- Summary of Findings- Liam

Initial Codes	Common Pattern Codes	Primary Emerging Themes
“Cool professors”	Connecting with instructors	Enhanced readiness due to exposure to campus processes, programs, and resources
Unexpected activities		
Lack of busy work		
Professor communication		
Self-paced	Adapting to structure	
Using a syllabus		
“I need to plan for that”		
Learning the systems	Experiencing college coursework	
Different way of learning		
“They’ll eye-open you”		
Taught differently		
Writing papers		
Classes easier than anticipated		
Changed ways of learning	Being unfamiliar with institution	Unfamiliarity with institution despite proximity
Not familiar with school		
Never been on campus	Seeking new opportunities	College decision not based on DE experience, but student perception is improved
Lots of applications		
Touring schools		
Accessibility to explore		
“That wouldn’t be growing up”		
More positive association	Engendering appreciation of and/or respect for DE institution	
Respected the school		
More consideration		
More respect		
Liked the system		
Helpful class		

Sasha

Sasha was positive about her dual enrollment experience and characterized it as being “informative.” She felt as though the process of application and registration was a smooth one

and made reference to a friend that assisted her with the admissions application and dual enrollment grant application. She also described receiving help from her high school counselor at times, which ultimately made her feel at ease with the entirety of the process. The greatest procedural challenge Sasha identified was having to coordinate the scheduling of her dual enrollment courses with her high school schedule.

Sasha described her first dual enrollment class, COMM 2200, as being more challenging than she had initially anticipated. She went on to clarify that it was not the course content itself that gave her initial difficulties, but the difference in expectations. Overall, she recognized the need to prepare herself for college-level content and did not feel overwhelmed academically by the experience.

Having completed her first year at MTSU at the time of the interview, Sasha felt as though she could make an adequate assessment of her dual enrollment courses compared to her undergraduate classes. She noted that her first semester as a first-year student felt “a lot smoother” as a result of having already taken the classes in high school. She also expressed that the difficulty level of her undergraduate experience had been higher than that of dual enrollment, but mostly attributes that to the curriculum of the classes themselves; she felt that in general, the instructors were more “laid-back” during her first year than those she had in DE courses. Overall, Sasha felt that dual enrollment “definitely” made her more prepared for success in college.

Despite living approximately 20 minutes from campus her entire life, Sasha explained that she was completely unfamiliar with MTSU prior to her enrollment. She had heard of the university but was adamant that she knew essentially nothing about it. As a result, she felt she was starting with a clean slate of sorts in terms of her perception of the institution. She

emphasized the comfort level she felt, and perceived others felt, during her first year as a result of her participation:

“Coming in, I could tell a difference between someone who took dual enrollment and someone who didn’t, just from my friend group and whatnot, because I was a lot more familiar with, like the Pulse app, and the bus route. They were not as familiar with it as I was.”

At the outset of her college decision-making process, Sasha had a fairly well-defined idea of what would be driving her decision. She knew she wanted to remain close to home, and that she was not interested in living on campus. She was interested in attending Vanderbilt University as well as MTSU, and applied to both schools, while also touring additional universities. She explained that MTSU “felt a lot more like home” than any other institution she had considered.

Ultimately, Sasha felt that her decision to enroll at MTSU after high school graduation was based primarily on two factors, both driven by her participation in dual enrollment. The first was her newly acquired familiarity with the university, while the other was what she described as a “really good first impression.”

Figure 4.4- Summary of Findings- Sasha

Initial Codes	Common Pattern Codes	Primary Emerging Themes
Informative	Experiencing college classes	Enhanced readiness due to exposure to campus processes, programs, and resources
Counselors' help	with assistance	
Juggling schedules	Adapting to structure	
Preparation		
Difference between friends		
Campus resources		
College-level classes		
Heard of institution	Being unfamiliar with institution	Unfamiliarity despite Proximity
No knowledge of campus		
Lived near campus		
Fewer applications	Limiting decision based on location	College decision not determined by DE, but reinforced
Close to home		
Live at home		
Felt like home	Gaining confidence in institution	
First impression		
Smooth process		
Good experience		
Background of institution		

Dean

Dean started the interview by recalling his thought process which led to his participation in dual enrollment. He recounted being presented with Honors, Advanced Placement, and DE course options and evaluating the benefits of each. He said he felt choosing dual enrollment made the most sense to him, as he has already decided to attend MTSU after graduation and he felt he would benefit from already having “banked” credits at the institution.

The participant expressed initial confusion with the process of becoming a dual enrollment student and “how the whole thing would intertwine.” However, he explained that he

felt more comfortable in his understanding of the process after attending a meeting hosted by MTSU's Dual Enrollment office. In particular, he felt reaffirmed in how the classes he would be taking would be applied to his undergraduate degree and appreciated the "streamlined" nature of the program.

When asked about his experience in the courses themselves, Dean described them as being about what he had expected. He noted that his COMM 2200 course was "very easy," but he attributed that in large part to the pedagogical style of his instructor. He said he had expected College Algebra to present a greater challenge academically, which it did, but that he was reassured that the course was still "on my level." The one class that proved more challenging, according to Dean, was his General Psychology class. He felt that the online nature of the course was the primary source of the difficulty, but that it still provided him with all of the concepts and knowledge he needed.

Notably, Dean did not feel that his dual enrollment experience was a clear analogue for his undergraduate one. While he affirmed that the content and difficulty level of the courses he took in high school seemed comparable to those he had enrolled in as a first-year student thus far, he felt that the difference in the learning environment were stark. Specifically, he felt as though while his dual enrollment classes posed an appropriate challenge, the high school environment felt much more lackadaisical, influencing his overall experience. Still, Dean emphasized when asked that his dual enrollment experience did make him feel more prepared for college. He highlighted the use of campus resources and course learning platforms in making him feel significantly more comfortable with "how college works."

Prior to participating in dual enrollment, Dean described himself as already having a degree of familiarity with the institution. He stated that MTSU was his top choice for

undergraduate study, and that he had had several friends who had attended there. From those relationships, he had already been on campus on several occasions. The student did emphasize that he had actually researched the institution and the dual enrollment program itself prior to registering, as he wanted to ensure that his participation would benefit him in his pursuit of a degree.

From Dean's perspective, the primary shift in his perspective as a result of being a dual enrollment student resulted from his exposure to the scope of college. He described himself as feeling more comfortable in setting expectations about what being a college student would look like:

"I guess in my head I assumed college was going to be this monumental, like, it's going to be too stressful. It's going to be too much going on. But then once I actually did the class in dual enrollment, knowing that it's the same material, it helped me realized the workload I'm going to be expecting."

Dean described his college search process as beginning during his junior year. He was initially focused on MTSU and Vanderbilt University, and he knew he wanted to pursue a career in a medical field. His interests specifically narrowed to obtaining a nursing degree fairly early on, and only the former offered a bachelor's degree in that discipline. Dean admitted he was "literally just looking for the closest classes to my house" initially as he wanted proximity to his family but added that he was surprised and pleased by the quality of the academic program at MTSU upon further research, which reaffirmed his decision.

As the participant had already decided on attending MTSU as an undergraduate prior to participating in dual enrollment, the role his participation played was also one of reaffirmation. He credited his experience with solidifying his comfort level with the campus and what to expect over the next few years, and reassuring him of his choice:

“Seeing what I was actually going to be doing for the next four years- D2L, MTSU email, and seeing the coursework and assignments and applications we were going to use, it made me feel like this is something I can handle. So I’d say dual enrollment definitely made me more entrenched...I felt like ‘this is a good choice, I’m going to do this.’”

Figure 4.5- Summary of Findings- Dean

Initial Codes	Common Pattern Codes	Primary Emerging Themes
Enjoyed material	Experiencing college classes with assistance	Enhanced readiness due to exposure to campus processes, programs, and resources
Initial confusion		
Streamlined		
On my level		
Help from DE office		
Difficulty as expected		
Challenging online		
Different environment	Adapting to structure	
More prepared		
Scope of college		
Familiar with systems		
Familiar with resources		
Comfort level		
Very familiar	Being familiar with institution	Familiarity through proximity
Exposure to campus		
Friends attended		
Family	Limiting decision based on location	College decision not determined by DE, but reinforced
Proximity		
Fewer applications		
Confirmation of choice	Gaining confidence in institution	
“Top choice”		
Head start on degree		
Confidence in future		
“More entrenched”		

*Sophie**

Sophie clarified from the outset of the interview that all of her dual enrollment experience through MTSU happened online. She explained that her high school schedule built in a study hall period, which allowed her to log into her course and complete work on a daily basis. She felt that she adapted to this format with little difficulty, attributing her success to her internal motivation to meet deadlines. She then described her other experience with dual enrollment, which was the aforementioned EMT courses offered through Motlow State. She explained that the EMT program required in-person coursework, clinical rotations, and final exams. By successfully completing the requirements, Sophie earned her EMT license prior to high school graduation.

When asked to describe her dual enrollment experience in one word, Sophie chose to use “eye-opening.” She made specific reference to the rigidity of assignment deadlines and what she perceived to be stricter grading criteria in her college courses. However, she also appreciated the ability to work ahead in the online setting, and that all of the assignments and expectations were clearly articulated from the outset. In terms of the application and registration process, Sophie did not have any specific recollections that stood out to her. She described that process as being fairly straightforward.

While the student generally described her online English courses as being less challenging than her brick-and-mortar EMT program, she also emphasized a feeling of productivity in completing the assignments:

“I felt like I was being more productive and learning more, because in high school the teachers don’t teach very well. They make you read a passage about it, answer some questions. But in my research class I learned how to do an annotated bibliography. I learned what sources to use...I feel like it prepared me a lot for college and my future classes I’m going to have to take.”

Sophie recounted that there were days that she was able to attend her study hall period and “do nothing,” because she had worked ahead and completed the assignments for that week. However, she also described experiencing the detrimental effects of procrastination at one point, as well. Sophie feels as though her dual enrollment classes were similar to her first year of undergraduate coursework “for the most part.” As a biology major, she acknowledges that the science courses she is currently faced with are significantly more challenging, but she feels her dual enrollment classes were an accurate barometer in preparing her for other classes, such as speech and history.

When the researcher asked her what she knew about MTSU prior to participating in dual enrollment, Sophie replied flatly with “Nothing. I didn’t know anything.” Despite living in the area, she described all her experiences with MTSU as being brand new. She indicated she had browsed the university’s website in searching for scholarships, but that was the extent of her inquiry. She eventually toured the campus during her senior year while enrolled in her dual enrollment courses. With something of a blank slate in terms of her perception of the institution, Sophie felt her experience in DE was a key element in crafting her initial impression. She praised the classes and her instructors, as well as the preponderance of available financial aid that she discovered.

As the interview shifted towards discussion of her college search process, scholarship opportunities continued to dominate the conversation. Her initial desire to major in nursing led her to consider MTSU and University of Tennessee-Chattanooga as her primary options. She also “looked in Nashville a little bit,” but eliminated University of Tennessee-Knoxville from consideration because of the cost of attendance. Ultimately, her decision to choose MTSU was influenced by a number of factors. She felt, again, that the volume of scholarships offered by

MTSU surpassed that of the other institutions, and she appreciated the flexibility of being able to live off-campus, as she is responsible for the cost of her tuition and fees as well as housing. In addition to these colleges, she applied to Motlow State as a “backup option,” noting the availability of the Tennessee Promise program in the event that her MTSU fees were not covered entirely by scholarships.

With this, the researcher asked Sophie to clarify if her participation in dual enrollment had affected her consideration of MTSU as her college of choice. She drew an interesting distinction with her response, remarking “I would say honestly if I was looking at other schools it probably wouldn’t have affected my decision to go to MTSU. But since I wasn’t really looking at other schools, it kind of made me more confident with my decision of going to MTSU.”

Sophie followed by exclaiming that she “loves” MTSU and that she had recommended taking dual enrollment classes to her friends that were still in high school. After her initial semester, she made the decision to shift into a degree track that would allow her to become a physician’s assistant and expressed a desire to remain at the university to complete the physician’s assistant program.

Figure 4.6- Summary of Findings- Sophie

Initial Codes	Common Pattern Codes	Primary Emerging Themes
Adapted easily	Experiencing college classes	Enhanced readiness due to exposure to campus processes, programs, and resources
Development of writing	with assistance	
Helpful instructors		
Streamlined process		
Not overly difficult		
Eye-opening		
Deadlines		
Stricter grading		
Procrastination		
Semester laid out		
No “random assignments”		
Online pace		
Campus software		
“All brand new to me”	Being unfamiliar with institution	
Never been to campus		
Proximity	Limiting decision based on location and cost	College decision not determined by DE, but reinforced
Fewer applications		
Scholarship options		
More confidence in decision	Gaining confidence in institution	
Well-prepared		
Had experienced classes		
Trusted instructors		

Diana

The first statement Diana made in the interview was that she “loved” her dual enrollment experience. She explained that during her first three years of high school, her teachers had emphasized that college could be “scary” if a student didn’t have a well-developed vocabulary. Once enrolled in her first two classes, Diana said she realized she had nothing to fear from college-level coursework. She credited her instructors with helping her adjust and understand

how the learning process worked at the postsecondary level. This led her to summarize her experience, in one word, as “fascinating.”

Diana expressed initial trepidation in being faced with the application and enrollment process required of dual enrollment students. She remarked that as a first-generation student, no one in her family had ever been through a similar process, and she initially felt overwhelmed with the volume of steps seemingly needed for completion. However, she noted that the registration checklist provided by MTSU was useful as she followed the steps carefully, and that she also benefited from the dual enrollment office visiting her high school to assist students.

When asked to compare the dual enrollment courses to her regular high school coursework, Diana made a distinction between the course content and the volume of assignments. She was pleasantly surprised that the workload was lighter than she had anticipated. However, she acknowledged that many of the concepts covered in her Math and English courses were “a little bit too much” initially. Still, she felt like all of her classes were something that she could handle with guidance from her instructors. Notably, she described her undergraduate courses as being “exactly the same” as her dual enrollment ones, and that she felt that the expectations in the former were “so easy” given her experience with the latter.

Diana indicated that the primary benefit from her participation in the program could be summarized as confidence. She referenced the language barrier that many students face at higher education institutions, and implied that she was a non-native English speaker. For her, dual enrollment made college feel more accessible:

“It definitely made me more confident in terms of what I was going into, because before I was like, ‘Oh no, college, I’m not...I speak two languages so language like, too much. I don’t know too much English, like high English, so I’m scared of that.’ But then that prepared me, and they said, ‘Oh it’s not based on what you (already) know, it’s more of what you’re learning.’ You learn it from the basics, and you keep going from there.”

In what emerged as a frequent refrain, despite living in the vicinity of campus Diana said “I didn’t know anything” in terms of her familiarity with MTSU prior to dual enrollment, only that it was the closest college campus to her. She had never been on the campus for any reason. After participating in the program, Diana said she had developed a positive perception of the institution. She commented on the responsiveness of faculty and administrators in addressing questions, as well as what she perceived to be kindness and concern for students’ needs.

Diana describes her college decision process as fairly straightforward. She knew she would be enrolling in postsecondary education of some kind and had to make a decision between attending community college first and enrolling directly at MTSU as a freshman. For her, the decision was ultimately as simple as already having credits earned from the latter and having a familiarity with the institution. She affirmed that her dual enrollment experience did have an impact on her choice to attend MTSU.

Figure 4.7- Summary of Findings- Diana

Initial Codes	Common Pattern Codes	Primary Emerging Themes
Helpful professors	Experiencing college classes with assistance	Enhanced readiness due to exposure to campus processes, programs, and resources
“Fascinating”		
First generation		
“This is so easy”		
Initial fears		
Assistance from DE office		
Less work	Adapting to structure	
Alleviated fears		
Challenging concepts		
Similar to undergrad		
Felt prepared		
Adjustment of expectations		
“Knew it was the closest one”	Being unfamiliar with institution	Unfamiliarity despite Proximity
Never been to campus		
Staying close	Limiting decision based on location and cost	College decision not determined by DE, but reinforced
“Might as well just go”		
Considering community college		
Fewer applications		
Positive perception	Gaining confidence in institution	
Accessible faculty		
Loved experience		
Accessible staff		

Ben

Ben stated from the outset that he enjoyed his dual enrollment experience. He was particularly appreciative of the opportunity to enroll in DE courses in subjects that interested him personally. He also praised his instructors and reflected positively on the structure of the course

that allowed students to come to MTSU's campus to complete laboratory assignments. The singular word that Ben used to describe his experience in the program was positive.

As he started the process of applying as a dual enrollment student, he noted that it was significantly more complex than high school course registration. The student stated that as he was making an initial decision regarding which science course to take, he compared the dual enrollment option at CMS to the Advanced Placement (AP) courses offered in biology and chemistry. He didn't feel as those courses interested him, and he continued by disclosing that he had heard comments from other students regarding the difficulty of DE courses compared to those of AP. He admitted that the reported relative ease of dual enrollment, as well as the opportunity to receive college credit without having to sit for an AP exam was appealing to him. In particular, he noted the cost savings when electing not to select the AP option, due to the cost of the exams.

Ben did feel that the entirety of the application and registration process- creating an MTSU student account, applying for the dual enrollment grant, etc.- was more cumbersome than he had anticipated. However, he referenced the university's registration checklist as being helpful. He also drew a comparison to the undergraduate application and registration process, noting that the steps he had to complete for dual enrollment felt much more straightforward.

The participant made frequent reference to the rigor of his high school curriculum, acknowledging that Horizon Prep is one of the most challenging and highly regarded schools in the state. Overall, he described dual enrollment coursework that was fairly indistinguishable from the rest of his high school load in terms of difficulty. Ben didn't feel he could make an accurate assessment, as a true comparison would occur among the standard high school class, the AP version of the course, and the dual enrollment section, the first two of which he had not

experienced. He did praise both instructors for their efforts in making the course material accessible, ensuring that students could grasp the concepts that were covered, and conducting frequent reviews of the material. Through discussion with classmates that had taken alternate paths, he concluded that his dual enrollment courses were easier than their AP equivalents, and in line with his expectations from the outset.

When asked about the role of dual enrollment in his level of preparedness for college, Ben echoed previous sentiments he shared about the rigor of his overall high school experience. While he acknowledged that dual enrollment definitely helped him to some extent, he felt that it was “one class among many” that prepared him for success at the undergraduate level. The researcher continued on the topic, questioning if perhaps the act of going through the application and registration process as a college student might have conferred some sort of benefit. Ben suggested that the process for dual enrollment students was different enough from that for undergraduates that he did not perceive such a benefit.

In turning discussion to his familiarity with MTSU prior to dual enrollment, Ben disclosed that his mother is a professor at the university. Even then and attending a high school within walking distance of the campus, he expressed an unfamiliarity common among the interviewees, saying “I wasn’t too familiar with it (MTSU). My mom is a professor there, so there’s that connection. I know MTSU is right by Central, so I pass it all the time, it’s always there, but I’ve never really had an experience with it prior to dual enrollment.”

Ben expressed a unique perspective among the student participants, in that he did not feel his perception of the university changed as a result of his enrollment. He was careful to stress on numerous occasions that he did not have a negative experience but expressed a degree of ambivalence about his participation. He remarked that he did not, for better or worse, associate

the dual enrollment courses he took with the university. Rather, he thought of them as college classes that happened to be taught by instructors hired by MTSU.

Ben went into significant detail about his college search process. His intended major, computer science, was at the forefront of his decision-making. He started working outward from his hometown of Murfreesboro, seeking institutions that he felt had a strong track record in that particular area of emphasis. An early contender for his matriculation was Tennessee Tech University in nearby Cookeville, but his research continued with his attendance at college fairs and conversations with university representatives. Three universities ultimately made Ben's final list for consideration- University of Tennessee-Chattanooga (UTC), Mississippi State University (MSU), and University of Alabama-Huntsville (UAH).

UTC landed on his radar from the encouragement of his parents; his mother's employment at a Tennessee state institution made an in-state public school appealing from a financial standpoint. Ben toured MSU and UAH and enjoyed both visits, and received generous scholarship offers from each institution. Ultimately he felt more at home on UAH's campus while pointing out that there was "a bunch of opportunities" for him in his career field in the Huntsville area. Ben's college list reflected his desire to remain in the greater Midsouth region, while placing some distance between himself and his hometown. He was adamant that MTSU was never a serious contender for his enrollment, regardless of his experience as a dual enrollment student:

"There are other factors that made me not choose MTSU. Pretty much (it) just seemed too close to me. I wanted to feel like I was having the college experience and being able to just drive to my parents' house for the night, I wouldn't have felt that way...And then also, MTSU is a good school, but it doesn't really specialize in STEM."

Figure 4.8- Summary of Findings- Ben

Initial Codes	Common Pattern Codes	Primary Emerging Themes
Interesting classes	Experiencing college coursework	Enhanced readiness due to exposure to campus processes, programs, and resources
Helpful instructors		
Positive experience		
In-line with expectations		
Visiting campus for labs	Adapting to structure	
More challenging enrollment process		
Applying for grant		
Creating account		
Not familiar with campus	Being unfamiliar with institution	Unfamiliarity with institution despite proximity
Parent is instructor		
Driven by campus		
Campus too close to home	Seeking new opportunities	College decision not based on DE experience, student perception remains unchanged
Wanted distance from home		
Major not as strong		
Multiple colleges toured		
Wanted college experience		
“Being able to drive to parents for night”	Retaining existing attitude concerning institution	
Perception was already positive		
Don't associate classes with school		

Eleanor

Eleanor described her dual enrollment class as very straightforward pedagogically. Her instructor provided students with a packet to be completed throughout the course of each lecture class, with lab sessions meeting on campus on select Saturdays, as well as a final exam also conducted at MTSU. She remarked that the lab portion of the class was something that stood out in terms of her enjoyment. While offering the caveat that her experience might not be

representative of others, when asked to provide a single word to encapsulate her dual enrollment experience, Eleanor chose “self-studying.”

The student described both the registration process and the course itself as being straightforward, and “a little easier than I expected.” She was surprised to discover that much of the material in her course had already been covered in her high school chemistry class this previous year but mentioned that there were additional concepts that were new to her. Alis again mentioned “self-studying,” in the sense that the structure of her dual enrollment class was similar to her undergraduate classes and had prepared her for what to expect. She commented on the ability to utilize a syllabus to plan ahead, and the opportunity to adjust to the teaching styles of college instructors, both of which made her transition easier.

Eleanor was the only student that expressed a significant degree of familiarity with the campus prior to her participation in dual enrollment. Like Ben, her mother is a professor at the university. In her case, she described having spent time on the campus for as long as she can remember. With that in mind, Eleanor initially disagreed with the notion that her perception of MTSU had been altered by her experience with dual enrollment. From her perspective, she had always perceived MTSU as “an uplifting, and like, friendly everybody-works-together environment and (that) most of the professors are very approachable,” and indicated that feeling had been reinforced by her experience. Notably, she offered the preceding statement with the disclaimer that her perception was likely different from others’.

Her decision on attending college began with application to eight institutions between September and December of her senior year. Among the schools she applied to were MTSU, Vanderbilt University, Lipscomb University, and Tennessee Tech University within the state; University of Alabama Huntsville approximately two hours from home; and two much further

options in Hope College in Michigan, as well as Colorado School of Mines. Eleanor used the Common Application to make submissions, and shared that she did not necessarily narrow down her options until closer to April of her senior year, when she received admissions decisions and additional information about financial aid and scholarships.

It was a specific opportunity as an engineering major that led to Eleanor's decision to attend Lipscomb as a first-year student:

“Lipscomb has engineering mission trips that you get to go on, and not many other places do anything like that. So I was really excited to get to do that here, because I'm minoring in Spanish, and I would also get to speak Spanish in Honduras and Guatemala and these places that we're going. So I would get to use my full degree in my actual trade that I'm going into.”

While Eleanor initially stated that her perception of MTSU had not been changed by dual enrollment earlier in the interview, when asked specifically about whether or not her participation had affected how she considered the university as her destination, she expressed a different view. It was a recalled experience from her chemistry class that had indeed changed her perspective to some extent:

“My mom is a math professor, and so I was always in the math buildings, and those buildings are so run-down and old. So I always thought that MTSU was like, it's kind of dirty, it's kind of old. But then the dual enrollment chemistry class, we got to go in the labs, and that fancy science building, and I was like, ‘Oh wait!’ Exploring a new part of the campus, I realized how nice it was...so I think it opened my mind up to it more than I had been previously.”

Figure 4.9- Summary of Findings- Eleanor

Initial Codes	Common Pattern Codes	Primary Emerging Themes
Labs on campus	Adapting to structure	Enhanced readiness due to exposure to campus processes, programs, and resources
Syllabus and planning		
Teaching styles and structure		
Easier course than expected	Experiencing college coursework	
Similar to undergrad classes		
“Self-studying”		
Repeated material		
Parent is instructor	Being familiar with institution	Familiarity with institution due to proximity
On campus since birth		
Applied to diverse group of schools	Seeking new opportunities	College decision not based on DE experience, but student perception is improved
Common Application		
Travel abroad		
Interdisciplinarity		
Exposure to new facilities	Engendering appreciation of and/or respect for DE institution	
“Opened my mind up”		
Uplifting and approachable		

As mentioned at the beginning of this section, the preceding set of individual findings were categorized into common pattern codes, from which the researcher identified three primary emerging themes. These three themes are discussed below.

Primary Emerging Themes

Theme 1: Enhanced readiness due to exposure to college processes, structure, and resources

In consideration of Research Question 1, participants were asked questions concerning various aspects of their dual enrollment experience. They were encouraged to describe the

application and registration process necessary for participation in the program, as well as their experience of the courses themselves. In addition, students were asked directly if they felt as though their experience had made them more prepared to attend college as a first-year student. In analyzing the data, one common emerging theme was identified among the experiences of all seven participants. Specifically, participants described an enhanced feeling of readiness for undergraduate study as a result of their exposure to the processes of becoming a college student; the differentiated structure of college enrollment; and the adoption of resources and programs utilized by higher education institutions. This phenomenon will be described hereafter in this section as “doing college.”

Each interviewee described the rigor of taking the courses themselves as being either in line with their prior expectations, or in some cases easier than they had expected. Dean described one of his courses as being very straightforward, while another was difficult as he had anticipated, but still “on my level.” Diana and Sophie noted that the workload in their courses was actually lighter than they had expected, while Eleanor felt that the curriculum in her class was in many ways a repeat of concepts she had already learned.

Instead, the pattern that emerged from the data suggests that rather than exposure to college course content, it is the experience of “doing college” that resonates with students and leaves them feeling better prepared to transition as undergraduates. Liam felt that his experience resulted in a “new way of learning” that stood in contrast to his previous academic experiences. He remarked that his instructors would “do activities that I didn’t really expect.” He also emphasized the difference in structure of his courses; he appreciated the foundational nature of his syllabi, which he recognized as a departure from his high school experience. To Liam, his college courses felt more organized from the outset, which encouraged him to plan ahead. He

also mentioned being exposed to MTSU's course learning platform, D2L, as well as the process of obtaining a student ID card and accessing campus facilities as being helpful in easing his transition to postsecondary education.

Sasha described an observable difference between herself and her friends who had enrolled at MTSU as first-year students, driven in large part by her previous exposure to "doing college." She referenced her ability to navigate the University's mobile application, as well as her knowledge of campus bus routes in particular. When asked to summarize her dual enrollment experience in one word, Sasha chose the word "informative," a reference in large part to the knowledge she acquired outside of the classroom. Dean likewise mentioned an increased comfort level with the structure of college. While taking his courses, he became familiarized with the course learning platform, D2L; the office that handles student services, the MT One Stop; and other campus resources that were available to him. More broadly, he credits his dual enrollment experience with helping him understand the "scope of college" as being something more tangible and manageable to him, as opposed to his previous conception.

Sophie, like Liam, used the term "eye-opening" in reference not to the content of her courses, but rather to the realities of simply "doing college." She presented herself as a student who appreciated the additional structure and clearly defined schedule of her courses, as well as the lack of "random assignments" that she said pervaded her high school courses. She felt her college instructors were more demanding in their approaches to grading but became comfortable with established deadlines. As the lone (unexpected) online student among the interviewees, she specifically credited gaining familiarity with the pacing of online courses and the extensive use of the college's online learning platform. Eleanor echoed Sophie's appreciation of having to adjust to new instructional styles and course structure, and the ensuing planning necessary for

college success. She also highlighted the opportunity she and her classmates had to conduct laboratory experiments on campus as being something that impacted her.

As a first-generation college student, Diana felt apprehensive about the process of applying to and enrolling in a university. As she describes her initial mindset, “What am I doing? There’s so many things.” But she credits her experience, and especially the assistance of dual enrollment staff members, in making her more confident as she transitioned to being an undergraduate at MTSU. Diana ultimately felt that dual enrollment adjusted her expectations and made her more prepared to become the first college attendee in her family. Even Ben, who by his own description perceived himself to be fairly “college-ready,” stated that he was surprised by the challenges that could be presented by the application process, such as applying for financial aid. He mentioned creating his student account online as being helpful, and like Eleanor felt that participating in laboratory sessions on MTSU’s campus was a useful experience.

Theme 2: College decisions not based on dual enrollment experience

One surprising theme that emerged from the research related to Research Question 2 and the data that resulted from the interviews, which indicated that none of the seven participants felt that dual enrollment significantly influenced their decision of where to matriculate as an undergraduate student. However, six of the seven students did describe their perception of the institution as improving as a result of their experience, with one student expressed an essentially unchanged viewpoint of the institution. Manifestations of this theme developed emerged differently among the group of students that chose MTSU as their undergraduate institution and those that went elsewhere. Discussion of these two subthemes occurs in the next two sections.

Subtheme 1: Decision to attend institution is reinforced

Among the group of interviewed students that matriculated to the university as first-year students, none of the four expressed any indication that having participated in dual enrollment was the driving factor in making that decision. Instead, proximity and cost were frequently cited as determinants.

Sasha stated that she wanted to remain close to her home, and specifically that she did not want to attend an institution that required first-year students to live on campus. Dean also described wanting to have family nearby, and appreciated having friends that attended the institution. Sophie and Diana likewise intended to attend college in the immediate area, and both also cited cost as a factor; both were considering community college as an affordable option, and Sophie mentioned bearing the cost of her tuition and housing herself.

What did emerge as a common thread among all four students, however, was what could be described as a reinforcement of their previous decision to attend the university after graduation as a result of their dual enrollment experience. For Sasha, dual enrollment was a “really good first impression,” and her experiences “gave me a background of MTSU.” She was already fairly decided on MTSU having only applied to two institutions, but she felt her comfort level with the university was increased. In Dean’s case, MTSU was his “top pick” from the outset, as he cited previous visits to the campus, friends that were enrolled, and “looking for the closest classes to my house” that still met his expectations as an aspiring nursing major. He used the phrase “more entrenched” in reference to his decision to attend after experiencing dual enrollment saying, “It was my top choice before I even took dual enrollment but definitely it did make me feel more like this is the right choice.”

Like Sasha, Diana already knew she wanted to attend MTSU before becoming a dual enrollment student. After earning credits from the university as a high school student, she felt it made sense to go ahead and continue on with the same institution. It was Sophie, however, that made one of the most noteworthy observations in regard to the program's influence on her decision. She acknowledged that dual enrollment likely wouldn't have had any impact on her college choice had she been considering other institutions at the time. Since she was already decided on MTSU, however, she stated it made her feel more confident with her decision and led her to recommend dual enrollment participation to her peers still in high school.

Subtheme 2: Perception of institution can be improved among non-enrollees

The three students in the study that elected to attend other universities after graduation ended up at three distinct institutions- a private Christian institution 40 minutes from the student's home; an out-of-state public institution approximately two hours away; and a large, out-of-state private institution located just over 2,000 miles away. Notably, all three participants in this category had extensive college lists from consideration relative to the other four students. While technically still under consideration, it is perhaps unsurprising that MTSU did not emerge as these students' destination despite having had the dual enrollment experience.

The two students who matriculated out-of-state both prioritized putting distance between themselves and their homes and families as essential to the "college experience." Liam described that condition as an essential part of becoming an adult, while Ben was seeking middle ground of being far enough away to establish independence while still remaining within reasonable driving distance. The two gave similar examples of what their decision intended to avoid, with the former referencing "sleeping in my own bed" and the latter "driving to my parents' house for the night." By comparison, it was a unique opportunity presented by her institution of choice that

drove Eleanor to her decision; the ability to participate in discipline-oriented missions opportunities that allowed her to immerse herself in both her major and minor coursework experientially tipped the scales for her.

However, both Liam and Eleanor expressed improved perceptions of the institution as a result of their dual enrollment experiences. Liam emphasized the newfound respect he had gained from being enrolled in the program. He strongly implied that his relative lack of knowledge concerning the institution as well as his proximity to the campus had likely affected how he viewed MTSU, but that after completing coursework through the school he had a “more positive association.” The perceived quality of his instructors, particularly in how they helped him develop new learning skills, left him with a feeling of respect; in fact, he described one of his courses as “the most helpful class I’ve ever taken.” Eleanor conceded that while she ultimately matriculated elsewhere, her dual enrollment experience “opened my mind up to it (MTSU) more than I had been previously.” For her, the opportunity to engage with parts of the campus previously unexplored by her affected her perception. The newer, more advanced facilities she utilized as part of her dual enrollment class stood in contrast to the areas of campus she was already familiar with as the daughter of a university faculty member.

Among the interviewees, only Ben did not indicate there had been a notable improvement in his perception of the institution. Rather, his experience confirmed his previously held view of MTSU as a “good school.” He described a difficulty in connecting his classroom experience in his high school with the university itself. While he agreed the courses he took helped prepare him for college academically as part of an overall rigorous schedule, he remarked that “The dual enrollment classes, they weren’t bad. They didn’t negatively affect my perception. I just didn’t really associate them with MTSU at all.” Taken collectively, the three participants’ responses

suggest that even when dual enrollment students do not matriculate to the dual enrollment institution as first-year students, the potential exists for participants to graduate high school with a more positive perception of the institution.

Theme 3: Unfamiliarity in spite of proximity

One arguably surprising finding in the course of the research concerns the level of familiarity that students had with the institution prior to participating in dual enrollment. Results indicated that five of the seven students interviewed did not feel that they were familiar with MTSU, with four of the five describing complete unfamiliarity. Two of the students interviewed, Ben and Eleanor, have parents who are faculty at the college, but of those two only Eleanor felt knowledgeable about it. Notably, all seven participants live in the city/county where the college is located, all within an approximately 20-mile radius. Thus, the theme that emerged could be described as **unfamiliarity with the institution despite proximity to the institution**. Below are words and phrases used by five of the participants summarizing their responses to this topic:

Liam: Wasn't that familiar, heard about it, hadn't stepped onto campus

Sasha: Not familiar at all, don't know anything

Sophie: Nothing, didn't know anything, all new

Diana: Didn't know anything, knew it was a college, never been to campus

Ben: Wasn't too familiar, knew it was there, hadn't had experience with it

In contrast, Dean described himself as very familiar with the campus, having already done research on the institution. Eleanor also used the phrase "very familiar," recalling that she had been on campus throughout her entire life.

Additional Themes

A number of other recurring themes resulted from collection and analysis of the data. These themes have been described throughout the individual findings sections in Chapter 4, and several of them represent elements of the primary emerging themes discussed in the previous section. However, the researcher felt it was noteworthy to identify these themes and illustrate which participants' data reflected each one. A chart with that information is included below, in Figure 4.9.

Figure 4.10- Prevalence of other themes

Other themes	Liam	Sasha	Dean	Sophie	Diana	Ben	Eleanor
Eye-opening	X	X	X	X	X		X
Smooth enrollment process		X	X	X	X	X	X
Positive experiences with instructors	X			X	X	X	X
New ways of thinking/learning	X		X	X	X		
Self-paced classes	X			X			X
Gained familiarity with systems and processes	X	X	X	X	X	X	X
Previous unfamiliarity with institution	X	X		X	X	X	
Increased comfort with transition		X	X	X	X		

Summary

After conducting interviews with seven former dual enrollment students who have since matriculated to a higher education institution, open first cycle coding was performed to identify descriptive and In Vivo codes. A selection of initial codes from each student's interview is included in the first column of Figures 4.2-4.8. From that point pattern codes were generated to establish relationships among student experiences. Pattern codes common among participants are included in the second column of Figures 4.2-4.8. Consideration of the pattern codes led to the observation of three primary emerging themes, discussed at the end of the preceding chapter. In

Chapter 5, the researcher will conclude by providing visual conceptions of Themes 1-2 and connecting them to previous literature, adapting Iloh's framework to include dual enrollment, and discussing study limitations, implications, and recommendations for future research.

Chapter 5: Discussion and Conclusion

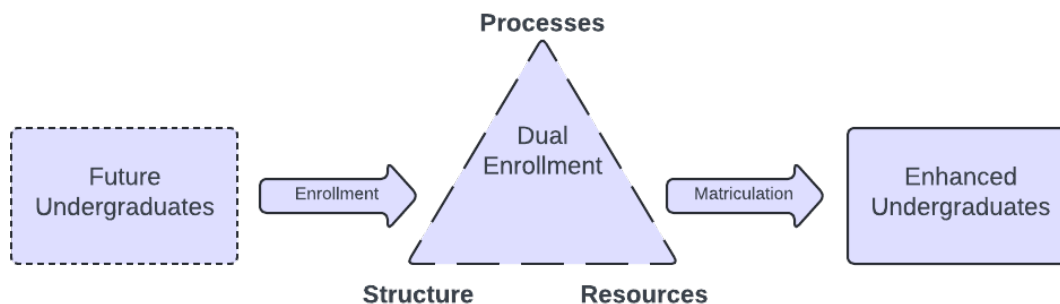
Theme 1: Enhanced readiness due to exposure to college processes, structure, and resources

The first primary emerging theme identified by the researcher reflects consideration of Research Question 1, restated below:

- RQ1: How does participation in Dual Enrollment affect students' perceptions of college readiness?

The researcher determined that among the sample of students that participated in the study, all students perceived that they felt better prepared for college as a result of participation in dual enrollment. However, while participants indicated that they had positive experiences within the academic context of the courses themselves, they also perceived the classes as generally being on par, or in some cases less challenging, than they had anticipated. What followed, then, were descriptions of other aspects of the dual enrollment experience that had impacted them. Specifically, it was the act of “doing college”- being exposed to college processes, structure, and resources- that the participants perceived as having affected their readiness level. The passage of students through the experience of dual enrollment is well situated within Iloh’s Model of College-Going Decisions and Trajectories. As students “do college” within the liminal space of DE, they are presented with information and opportunities they might not otherwise receive, at a critical time for making future decisions. Figure 5.1 offers a graphical representation of this phenomenon, as conceived by the researcher.

Figure 5.1- The Relationship between Dual Enrollment and Enhanced Readiness



Connection to Literature

The idea that dual enrollment, as a means of “doing college,” can positively impact readiness for undergraduate study is well supported in the literature. This type of exposure to processes, resources, and overall structure is comparable to Mechur Karp’s (2012) concept of “trying on college,” whereby advance practice of these activities leads to increased comfort upon matriculation to a postsecondary institution. Also, Lile, et al. (2018) suggests that dual enrollment is capable of enhancing “the clarity of the college-student role,” while Soto (2012) asserts that these programs are capable of fostering greater confidence in the face of transition to postsecondary education, an outcome explicitly described by several participants.

In the case of Liam, Diana, and Sasha, all three students referenced their status as first-generation college students and suggested that their dual enrollment experience was of particular benefit. Notably, these three students expressed appreciation for what they perceived as a significant degree of support from their parents in participation in the program. Their perceptions align with the study conducted by Judge (2020), which posited that early postsecondary

programs could have a positive impact on the academic self-efficacy of students who are the first in their families to pursue a college degree.

The key distinction made by the researcher based on the findings of this study, as described in the previous section, is that while there is ample support in existing literature for the notion that exposure to college-level coursework through dual enrollment can enhance students' academic self-efficacy (Schunk & DiBenedetto, 2016) and positively affect academic outcomes (An, 2013; Zinth, 2014; Ganzert, 2014; Hunter & Wilson, 2019), the experiences of the students interviewed suggests that their perceptions of college readiness were primarily impacted by their exposure to elements that could be considered incidental to the "primary function" of dual enrollment, which definitionally concerns the acquisition of college credits. Instead, it was the lived experience of executing the processes of enrollment, adjusting to the structure of syllabi and schedules, and utilizing the resources embedded within the operation of an institution- the "doing college"- that left all seven participants with the perception of enhanced preparedness as they progressed into undergraduate study.

In the development of the visual conception of this phenomenon as depicted in Figure 5.1, the researcher revisited one prior study in particular- that of Hofmann and Voloch (2012) which explored the concept of dual enrollment as a liminal space. As the authors describe, "Dual enrollment inhabits a space where larger questions about higher education- the cultural practices, norms, institutional relations and interactions, and the overall "business" of learning- are grappled with on a daily basis."

It is specifically this entry into the "liminal space" of dual enrollment during a critical period of transition that could be envisioned as a fortifying experience for students. While the challenges that face faculty, administrators and students alike as a result of the unique nature of

these programs can be responsible for generating a degree of tension, Hofmann and Voloch argue that practitioners should lean into these yet-undefined spaces and capitalize on the opportunity to help students “better understand the skills, knowledge, and experiences necessary to succeed in college.”

Theme 2: College decisions not based on dual enrollment experience

Subtheme 1: Decision to attend institution is reinforced

Subtheme 2: Perception of institution can be improved among non-enrollees

The second primary emerging theme and subthemes identified by the researcher reflects consideration of Research Question 2, restated below:

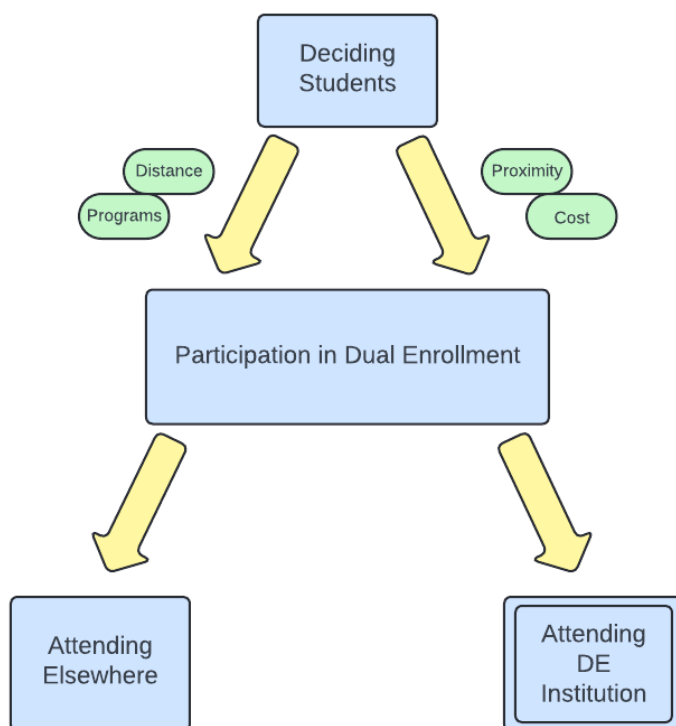
- RQ2: How does participation in Dual Enrollment affect students’ perception of the institution as part of the college decision process?

The researcher determined that among the sample of students that participated in the study, no students perceived participation in dual enrollment as being a determinant of their decision on where to attend college after graduation. It was notable that considerations of proximity and cost were common, particularly among first-generation students and members of underrepresented groups, leading credence to the supposition of Iloh’s model that conceptions of college decision-making must take a holistic approach to understanding students’ various levels of privilege and perceptions of choice. However, of the four students that matriculated to MTSU, all four expressed the sentiment that having participated in dual enrollment had affirmed their previous decision and made them feel more confident in their choice.

Of the three students that enrolled elsewhere after graduation, two of the three explicitly described having a more positive perception of the institution, while the other student did not describe a material change in his perception, but rather a reaffirmation of his existing positive

perception. Thus, while no participants experienced what could be described as an alteration in their postsecondary trajectory, the shared experience of dual enrolling did produce a describable effect among students' perceptions. Figure 5.2 offers a graphical representation of this phenomenon, as conceived by the researcher.

Figure 5.2- The Effect of Dual Enrollment on Student Perceptions of the Institution



Connection to Literature

The relationship between dual enrollment programs and postsecondary recruitment and enrollment management strategies, while still emerging in the literature, has been characterized generally by broad swathes of findings. It should come as no surprise that higher education institutions, having often invested considerable resources in these programs (Kinnick, 2012) are

seeking a return on investment in the form of increased enrollment (AACRAO, 2016). However, what data exists appears contradictory, with some sources indicating that DE programs may indeed bolster enrollment (Pretlow, et al., 2022; Moore, 2021) while others cast doubt on this assertion (Martinez, 2018; Cowan & Goldhaber, 2015).

That said, this study appears to highlight the dearth of emphasis that has been placed on what impact dual enrollment can potentially have on student matriculation decisions outside of the binary framework of whether or not the program led a student to choose that institution. The fact that all seven participants had either

- A. Already made their decision of where to attend college or
- B. At minimum, advanced far enough in the process that could not “make or break” the decision

indicates that previous conceptions of dual enrollment’s role in the college decision-making process, as found in existing literature, are limited in their utility.

The key distinction made by the researcher based on the findings of this study, as discussed in the previous section, is that while institutions understandably view dual enrollment as a means of attracting future undergraduates (Lichtenberger, et al., 2014), it is possible that the effects of these programs are more nuanced. While participants may not perceive dual enrollment as a determinant of their matriculation decision, the opportunity exists to more fully “entrench” students already planning to remain with the institution, while fostering a familiarity and appreciation for the institution among students already bound for other colleges. These could potentially be useful attributes in an era when enrollment management professionals are forced to address concerns of “melt” (Allen-Stuck & McDevitt, 2014; Briggs, 2021) and rising transfer

rates between four-year institutions (Li, 2010; National Student Clearinghouse, 2024), respectively.

Implications, Limitations, and Recommendations

As the previous sections reviewed and discussed the primary emerging themes derived from the findings of the study, as well as how they connect to (and potentially highlight gaps in) existing literature, the next sections will first highlight implications for both policy and practice. Next, limitations of the study will be addressed. Finally, the researcher will provide recommendations for future research based on the conclusions of the study.

Implications for Policy and Practice

Policy

As mentioned previously in Chapter 1, the most recent estimate concluded that 47 of 50 states in the U.S. had established statutes that address dual enrollment in some form or fashion, though these policies vary widely in scope and composition (Rivera et al., 2019) The U.S. Department of Education (2022) estimates that approximately 90% of high schools in the United States offer some sort of dual enrollment option to students. As is the case with most secondary and postsecondary programs, the responsibility for crafting appropriate policies concerning dual enrollment is placed in the hands of the individual states.

Tennessee is one of several states that have experienced remarkable growth in dual enrollment participation over the past decade. Driven by the dual intentions of meeting federal benchmarks for early postsecondary opportunities (EPSOs) and supplementing existing efforts as part of the state's Drive to 55 initiative, state policymakers have taken a number of steps to increase the rate of high school students that graduate with at least some college credit, or even an industry-based certification or an associate's degree. The primary effort made by state

leadership has centered on standardization of the fees associated with dual enrollment courses regardless of institution, and the continued expansion of the state's Dual Enrollment Grant program. As a result, students have the opportunity to earn credit for up to five college courses "tuition-free."

The vast majority of these courses offered to Tennessee students are conducted at the students' high school location, with another sizable percentage offered online. This approach makes sense from a logistical standpoint, particularly in driving access to dual enrollment opportunities in areas that are not in close proximity to higher educational institutions. Given the challenges colleges in the state already face in terms of facilities and hiring, high-school and online-based dual enrollment programs are a necessity to some extent. And the experiences that students can derive from this delivery method should not be discounted; these classes frequently utilize college course learning platforms, and students often are required to complete at least a portion of the administrative processes associated with enrolling.

That said, the findings of this study potentially reflect that more so than through the experience of the class curricula itself, dual enrollment students perceive more a benefit in terms of college readiness as a result of "doing college," as described in previous sections. With that in mind, it is recommended that policymakers aim to make the on-campus college experience (OCCE) more accessible to students. Broad suggestions include:

- Policies that reduce logistical barriers to OCCE (transportation, flexibility in HS scheduling)
- Policies that incentivize HEIs to cater more to OCCE
- Policies that continue to make OCCE more affordable (expansion of funds to cover lab fees, textbooks)

Practice

The themes that emerged from this study are worthy of consideration from higher education practitioners who are invested in student success as well as the success of their institutions. As Karp (2015) explained, institutional dual enrollment programs can be congruent with state goals concerning college readiness and degree attainment, but “realizing such a benefit would require all parties- high school districts, college administrators, state policymakers in particular- to reconsider long-standing principles and procedures of how they operate.” In other words, in order for dual enrollment programs to serve the purposes for which they have been conceived and supported to this point, institutions must be willing to make adjustments and commit the necessary resources to evolve their operations as more data emerges concerning what makes these programs effective.

First, program administrators should collaborate with faculty and staff on their campuses to place a greater emphasis on experiential learning opportunities. This is intended to be a broad concept. “Experiential learning opportunities” could refer to bringing high-school based dual enrollment classes to campus to take part in departmental events, laboratory experiences, or simply tours of discipline-specific facilities, but it need not be limited to academic-related activities. Other practices could include organizing student trips to campus events; scheduling class meetings with campus offices that provide various resources to students; or coordinating information sessions for dual enrollment students that address college success topics, such as those covered in first-year experience courses. Based on the findings of this study, giving dual enrollment students increased opportunities to “do college” could yield beneficial results.

In considering the second primary theme from the results, it is tempting to concede the opportunity to utilize dual enrollment as an undergraduate recruitment tool. If dual enrollees are

not becoming first-year students because of their participation in the program, why should enrollment management offices commit resources to those programs? However, it is worth considering the subthemes present in the research. First, an apparent opportunity exists to leverage dual enrollment as an “entrenching” agent as part of matriculation decisions. One way to do this is for institutions to streamline the admissions process further for dual enrollment students. Many institutions have dual enrollment admissions policies that are equivalent (or even more stringent) than those for undergraduate students; when feasible, allowing dual enrollment students to bypass redundancies in the admissions and enrollment processes and become admitted first-year students concurrently with acceptance as DE students could solidify participants’ decisions. Additionally, any opportunity to make this group of students feel as though they are already a part of the institutional community should be beneficial; any program or other effort that is specific in its inclusivity of dual enrollment students as part of its operation should be encouraged.

Conversely, students who participate in dual enrollment with a college but express intentions to enroll elsewhere after graduation represent a different type of opportunity. In the same way that institutions direct efforts at connecting with “stop-outs” and “dropouts” while committing increasing resources to recruiting transfer students, there is no reason not to leverage a students’ previous positive experience with an institution. While ideally a student will always make the best choice for themselves and their success when initially enrolling in college, and external circumstances will never intervene in a student’s postsecondary plan, ever-increasing transfer rates remind us that is not the case. Targeted- but casual- outreach efforts to former dual enrollment students who matriculate to other institutions should be considered; this communication should seek to primarily wish the student well and express appreciation for their

time as part of the institutional community, while also serving as a reminder of the student's positive experience.

Finally, it is worth revisiting the finding that dual enrollment participants were generally unfamiliar with the institution prior to taking part in the program. It is particularly noteworthy when considering that all of the interviewees resided in close proximity to the university. While this finding also raises questions concerning the nature of so-called "town and gown" relationships as they relate to school-age individuals, it suggests that there is always more work to be done concerning exposure of students to the institution. Undergraduate recruitment efforts have almost certainly begun to focus more on younger cohorts across-the-board. Nevertheless, the results of the study suggest that institutions should be aware of how present they are in the minds of prospective students and make efforts to pervade the community and local schools even further, particularly directing these efforts to high school first-year students and sophomores. All of the preceding implications for policy and practice are well-aligned with pragmatism as a theoretical framework.

Limitations

As is the case with any study, the preceding is not without limitations. The initial interview protocol utilized by the research failed to capture sufficient narrative background information from participants, focusing specifically on their experience in dual enrollment. As described previously, the researcher followed up with additional questions via email with participants, given difficulty in rescheduling follow-up interviews. This second round of inquiry was sufficient for capturing data, but it is likely that additional live interviews could have resulted in richer contextual information. Another potential limitation concerns the inclusion of one of the participants, Sophie, in the sample. The initial target population excluded students

who had only taken courses online through the institution. The decision to include her in the sample is explained in Chapter 4; however, it is still possible that her experience could be considered materially different from that of the other participants.

Recommendations for Future Research

There are several potential research opportunities to be drawn from this study. Perhaps one of the most obvious recommendations for future research would be an examination of students who were excluded from this sample. Specifically, a study exploring the experiences of students that participate in campus-based dual enrollment programs would provide a notable compliment to this study, particularly in light of the findings concerning the potential importance of on-campus college experiences in students' perceived readiness.

Another potential area of research concerns the surprising finding of unfamiliarity with the institution despite proximity to the institution. Such a study could attempt to make further determinations concerning levels of awareness and institutional knowledge among students and their "local" higher education institutions.

With multiple interviewees in this study categorized as first-generation college students, one student who was born and raised internationally, one who was not a native English speaker, and two who had faculty members as parents, there are plenty of avenues for future research concerning the dual enrollment experiences of these subgroups. There has been a fair amount of inquiry concerning the first group, but the supposition that early postsecondary experiences are potentially even more "eye-opening" to them makes further research desirable. International students and non-native speakers comprise an increasing number of high school students, and thus an exploration of these groups through a dual enrollment lens would be timely and valuable.

And while one might expect that the children of faculty would be overrepresented in a dual enrollment population, that group also presents an intriguing path of inquiry.

An additional area of potential research concerns the rigor of dual enrollment classes. While institutions are expected to adhere to regular curricular standards in dual enrollment courses, and there are a number of explanations for the responses of student participants, it would be worthwhile to encourage further comparison of the academic standards of dual enrollment courses.

Finally, during the course of this study it was observed that new state policy in Tennessee now allows 9th and 10th grade students some access to dual enrollment opportunities. This represents a substantial change to prevailing conceptions of what dual enrollment “should be,” and thus is worthy of additional scholarly consideration.

Conclusion

Dual enrollment, a program that allows high school students to enroll in college courses, continues to reshape the landscape of both secondary and higher education as the number of student participants continues to increase while colleges and universities seek to harness the perceived potential of early postsecondary programs for institutional advancement as well as enhanced student outcomes. From an institutional perspective, dual enrollment initiatives take on a variety of forms with two common goals- driving more graduating seniors to choose that institution, while also leaving incoming students more prepared to be successful upon matriculation.

This study was informed by existing literature concerning the history of dual enrollment; the structure and policy of DE programs; recruitment, enrollment management, and student success considered generally; and the effects of DE programs on those aspects of higher

education. The study was informed by Iloh's (2018) Model of College-Going Decisions and Trajectories and was constructed within a pragmatic theoretical framework. The researcher utilized a phenomenological case study approach and an interpretive framework of social constructivism to explore (1) student perceptions of college readiness, and (2) student perceptions of college-decision making as a result of participation in a dual enrollment program.

Semi-structured interviews with seven participants resulted in research findings that yielded three primary emerging themes. First, that students perceived an enhanced degree of readiness due to exposure to college processes, structure, and resources; Second, that students' decisions of where to attend college were not determined by their dual enrollment experience. Finally, that students were likely to feel unfamiliarity with the institution, despite residing in close proximity. Within the second theme, two subthemes were observed. Among students who matriculated to the dual enrollment institution, a perception of reinforcement or confidence in that decision was expressed. Among students who chose to attend other institutions, an improvement in institutional perception or a reinforcement of existing positive perception was noted.

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APPENDICES

Appendix A: SACSCOC Policy Statement on Dual Enrollment



*Southern Association of Colleges and Schools
Commission on Colleges
1866 Southern Lane
Decatur, Georgia 30033-4097*

DUAL ENROLLMENT

Policy Statement

For SACSCOC purposes, “dual enrollment” refers to courses taught to high school students for which the students receive both high school credit and college credit, regardless of location or mode of delivery. This would include such coursework offered at the high school, on the institution’s campus, or via distance education. This also includes programs and courses that may be offered under different names such as “early college,” “dual credit,” or “concurrent enrollment.” The academic rigor of such coursework matches the quality of other institutional coursework, regardless of location or mode of delivery.

Institutions must ensure that their dual enrollment courses and programs comply with the *Principles of Accreditation*. This applies to all such educational programs and services, wherever located or however delivered. In addition, institutions being reviewed should also be prepared to demonstrate clear institutional control over these dual enrollment courses and programs.

Applying the Principles of Accreditation to Dual Enrollment

With the underlying concept that the *Principles of Accreditation* apply to all programs of the institution, regardless of mode of delivery, institutions should consider the following statements in implementing and reporting on dual enrollment programs. Similarly, reviewers should consider these statements when approving or evaluating dual enrollment programs.

Substantive Change

An institution offering dual enrollment ensures appropriate notification and prior approval (if needed) of off-campus instructional sites where dual enrollment courses and programs are

offered. Another aspect of dual enrollment that may require notification or approval could be the use of a cooperative academic arrangement to deliver courses. (Please refer to the SACSCOC policy “Substantive Change for SACSCOC Accredited Institutions.”)

Faculty

SACSCOC defines an “instructor of record” as the faculty member qualified to teach the course. This person has overall responsibility for the development and implementation of the syllabus and for issuing grades. The faculty member will provide direct instruction for the course.

The institution ensures appropriate faculty qualifications for those who provide instruction for dual enrollment courses; these faculty members possess the same academic credentials and/or documented professional experience required by the institution of all of its faculty. Graduate teaching assistants, if they are the instructor of record and providing direct instruction, should meet the same academic and/or professional criteria. In all cases, the institution bears responsibility for documenting and justifying the qualifications of its dual enrollment instructors, and they are included on the Faculty Roster when appropriate for review by a SACSCOC committee. (Please refer to the *Resource Manual*, Standard 6.2.b, for a broader discussion of faculty qualifications.)

An institution offering dual enrollment courses or programs ensures that a sufficient number of full-time faculty members teach and/or provide appropriate oversight for the courses/programs. Materials submitted for review by SACSCOC explain the nature of faculty oversight that ensures the quality and integrity of the courses offered. The institution has clear criteria for the evaluation of faculty teaching dual enrollment courses and demonstrates the use of these criteria.

Curriculum and Instruction

For all dual enrollment courses offered, the institution employs sound and acceptable practices for determining the amount and level of credit awarded. Course content and rigor of dual enrollment courses are comparable to that of the same courses taught to the institution’s other students. (Please see the SACSCOC policy “The Quality and Integrity of Educational Credentials.”)

The faculty assumes primary responsibility for dual enrollment courses. Such oversight ensures both the rigor of programs/courses and the quality of instruction.

Institutional Effectiveness

Dual enrollment students are included within the processes used to ensure the effectiveness of campus programs. If dual enrollment students can earn a credential, then that credential and those students should be part of the institutional effectiveness process of the institution. The institution regularly assesses the effectiveness of its provision of library/learning resources and student support services for dual enrollment.

Library and Learning Resources

Students have access to appropriate library resources, and the institution demonstrates that students are able to use such resources effectively. If the high school is the provider of these materials, the institution establishes the appropriateness of the collections for the courses and programs offered. The institution ensures that its students have access to regular and timely instruction in the use of library and other learning resources.

Academic and Student Support Services

Academic support services are appropriate for the courses and programs offered. Institutions ensure that dual enrollment students are appropriately advised regarding the collegiate curriculum. Student support services are appropriate for dual enrollment students.

Institutions have an adequate and published procedure for resolving written student complaints, and the institution follows its policies and procedures. The institution ensures that its dual enrolled students are appropriately oriented regarding their rights and responsibilities. Documented procedures assure that security of personal information is protected.

Admissions and Transparency

The institution implements appropriate eligibility and placement procedures to ensure that potential dual enrollment students are prepared for college-level courses. Dual enrollment students are usually admitted under exceptions to an institution's published admissions policies, and the institution follows commonly accepted practices in making such exceptions. Advertising, recruiting, and admissions information adequately and accurately represents the programs, requirements, and services available to students.

Statements and other representations regarding the ability to transfer credit earned in dual enrollment programs and courses are accurate and complete. The institution ensures that

its registration and transcription practices for dual enrollment students are consistent with those in effect for all other students.

Facilities

Dual enrollment courses are offered in adequate physical facilities, whether under the control of the institution or under the control of the high school.

Document History

Approved: SACSCOC Board of Trustees, June 2018
Revised: SACSCOC Board of Trustees, December 2018

Appendix B: Interview Protocol

Interview Protocol

(Current Undergraduate Students that Participated in MTSU's Dual Enrollment Program)

Date: _____

Time: _____

Meeting Location: _____

Participant Name: _____

Undergraduate Institution: _____

Introduction Script:

Researcher: Hello, my name is Casey Brown, and I am the researcher for this study. Thank you for agreeing to participate in this interview. The purpose of this discussion is to explore your experiences as a dual enrollment student prior to your high school graduation, and what impact you feel that may have had on your feelings of readiness for college, as well as your college decision-making process; in other words, determining where you would attend after graduation.

Before we begin, you will need to sign the Informed Consent Document that I have shared with you. Do you have any questions about the document?

(After Consent form is collected)

Researcher: As a reminder, this discussion will be recorded, for the purpose of making sure the information you share is transcribed accurately. Your responses will remain confidential, and your name will not be included.

Before we begin the discussion, I'd like to share a few ground rules.

1. Participation is important: I am interested in your opinion and perspective, and all of your input is valuable.

2. I am not looking for you to say certain things about your experiences. There are no right or wrong answers, and you are encouraged to share your viewpoint.
3. There are a number of topics to cover in discussion. To be mindful of our time, I may end the discussion and change topics if necessary.

Do you have any questions? If you're ready, we will begin.

Questions for Guiding Discussion:

1. In general, what was your dual enrollment experience like?
2. If you had to describe your experience in one word, what word would you use?
3. How did you feel about the process of applying and getting registered for your courses?
4. What did you think about the classes themselves? Were they easier or more difficult than you expected?
5. Based on what you now know about college, do you feel like dual enrollment was a similar experience?
6. Overall, do you feel like participating in dual enrollment made you more prepared for college?
7. How familiar were you with MTSU before dual enrollment?
8. Did your perception of MTSU change after taking dual enrollment courses? How so?
9. Describe what your college selection process was like. When did you start identifying your choices, narrowing down options, and making final decisions?
10. Do you feel as though dual enrollment affected how you considered MTSU?