EXPLORING DUAL ENROLLMENT FACULTY MEMBERS' PERCEPTIONS OF EQUITY: A COLLECTIVE CASE STUDY

by

Michelle Donati Yates

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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APPROVED BY:

Kevin White, Ph.D., Committee Chair

James Eller, Ed.D., Committee Member

Abstract

The purpose of this collective case study was to discover how dual enrollment faculty members perceive and promote equity within dual enrollment courses taught at three high schools in collaboration with a partnering community college. The theory guiding this study was Argyris and Schön's theory of organizational learning. Argyris and Schön offer insight into how an organization or individual may claim to promote equity but fail to look internally at the policies and practices that hinder equity. The central question was: How do dual enrollment faculty members define and promote equity within the dual enrollment program? Purposeful, criterion-based sampling was used to select the participants. The criteria included the participant's role as a dual enrollment faculty member at a chosen high school working in collaboration with a community college. Data included interviews, observations, and documents and were analyzed using value and descriptive coding. Within-case and cross-case analysis was performed. The study revealed several themes: teachers defined equity as a means to promote fairness and attain justice, teachers used a variety of practices to achieve equitable outcomes, teachers believed the community college had no impact on their understanding of equity and equitable practices, and teachers believed the high school had an impact on their understanding of equity and equitable practices.

Keywords: dual enrollment, equity, deficit ideology, organizational learning

Dedication

To my grandfather, Charles, and his devoted caregiver, his daughter and my mother, Carolyn, I am who I am because of your unconditional love. Grandpa, as you approach your 100th year on Earth, we are reminded each day you are a gift to be celebrated. I thank you both for instilling in me a hunger for education and a belief in the American dream. You taught me the power of grit, for which I will be forever grateful. As life has taught me, we may not all be on a level playing field, but we have allies in the fight to even the odds. May we always find the strength to persist and with God's grace, become the best versions of ourselves. As we strive toward self-actualization, we must honor those who paved the road before us and provide strength to those who seek to forge new paths.

Acknowledgments

I have a few distinct memories that defined my doctoral journey. The first is when I decided to commit to this metaphorical marathon. It was over dinner with two very influential people in my life, my mother and father. The other was a rather low point and probably not my finest; I sat in a puddle of tears, convinced that I would never make it through statistics. Through it all, Mom and Dad were there to support me. Whether I finished the marathon or gave up after statistics, it made no difference to them; they wanted only to offer their support. Dad, with proper nourishment, the tiny seed grows into a mighty oak. Mom, you are the best life coach.

I would also like to acknowledge my best friend and husband. Without your support at home, I would not have made it through. Thank you, Grayson, for not giving me a hard time when I could not make it to your soccer games. You are my joy! Thank you, Carly; I did this for myself, but I did it for you too. I wanted to show you that with hard work and perseverance, there is no limit to what we can achieve. Your whole life lies before you; choose a life of integrity. It may not always be easy, but it is worth the work.

Finally, thank you, Dr. White, for your kind words of encouragement and support throughout the process. You were always there to answer, at times, the most insignificant questions and listen to my extensive complaints about that template change. Yes, you were right; I just had to power through. I would also like to thank Dr. Eller. You made me a better writer. I held my breath every time you edited my work, but at the end of the process, I am proud of what I have accomplished under your guidance.

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List of Abbreviations

Critical Legal Studies (CLS)

Critical Race Theory (CRT)

Virginia Community College System (VCCS)

Virginia Department of Education (VDOE)

CHAPTER ONE: INTRODUCTION

Overview

Socially just education calls for examining performance outcomes among all student subgroups and intervening when economic and social inequities limit the progress of marginalized students (Hall et al., 2019). John Dewey (1915) wrote, “What the best and wisest parent wants for his own child, that must the community want for all of its children” (p. 12). Dual enrollment allows high school students to receive college and high school credits. It shortens the time students spend in college, thereby reducing the overall cost of tuition (An & Taylor, 2015; Cowan & Goldhaber, 2015; Garcia et al., 2020; Witkowsky & Clayton, 2020). Although dual enrollment policies have changed to increase access, Black and Hispanic students remain underrepresented in Virginia dual enrollment programs (Pretlow & Wathington, 2014). Current research suggests that students on the margin are less likely to enroll, more likely to perform at lower levels, and drop out of higher education (McNair et al., 2020; Nelson & Waltz, 2019; Taylor, 2015). The issue of student success, or lack thereof, is most often associated with the student’s internal drive with no regard to social or institutional context (Bensimon et al., 2019). Rather than reducing educational inequities, dual enrollment exacerbates the disparities by providing white students with additional pathways to higher education. The chapter provides background information on equity in dual enrollment and examines the topic from a historical, social, and theoretical perspective. The problem of inequitable outcomes in dual enrollment is explored through research questions directed at dual enrollment faculty. Next, the purpose and significance of the research are stated. The researcher then identifies the questions guiding her study and defines pertinent terms. The chapter concludes with a summary, which restates the problem and purpose.

Background

Dual enrollment's initial purpose was to expand access to higher education and increase high school students' educational opportunities (Catron, 2001). Subsequent changes to dual enrollment policy called for expanding eligibility and increasing communication regarding dual enrollment offerings (Pretlow & Wathington, 2014). These changes increased access to and participation in dual enrollment while also contributing to an educational opportunity gap between student subgroups (Pretlow & Wathington, 2014). Although there have been efforts to create equitable outcomes, these efforts have had little impact on the disparities that exist between student subgroups.

Historical Context

During the 1980s, community colleges and public schools began working together to develop a vocational curriculum that would make it possible for students to complete their first two years of a vocational degree in high school and their last two years in community college (Catron, 2001). From this and similar programs, community colleges began circulating the idea of offering college courses that would give students an early start on a two or four-year degree (Catron, 2001). Virginia's plan for a dual enrollment program came to fruition in 1988 under the guidance of the Virginia Community College System (VCCS) and with the assistance of representatives from public instruction (Catron, 2001; Pretlow & Wathington, 2014).

The task force for dual enrollment, along with VCCS and the Virginia Department of Education (VDOE), created and signed the *Virginia Plan for Dual Enrollment*, which defined the nature of the relationship between public schools and community colleges and provided a loose framework for the program's operation (Catron, 2001). However, individual representatives from each of the 23 community colleges retained the right to implement the program how they saw fit

(Catron, 2001). This lack of consistency in program implementation could affect student enrollment and success.

Within the first decade of the dual enrollment program's implementation, most students took an academic rather than a vocational path (Catron, 2001). Initially, only juniors and seniors were eligible to take courses, and students were subject to the same admission requirements as any other applicant (Catron, 2001). Although the plan intended for schools and colleges to offer dual enrollment courses at no cost to the student, some college and school partnerships require tuition (Catron, 2001). Dual enrollment has flourished in rural areas; Catron (2001) attributed the growth to little or no tuition cost, increased desire for rural students to attend community colleges rather than four-year institutions, and the increased distance to higher education.

In 2005, subsequent revisions to the *Virginia Plan for Dual Enrollment* were aimed at expanding access and participation in dual enrollment courses with the goal of increasing enrollment and retention at two and four-year institutions of higher education (Pretlow & Wathington, 2014). The purpose of the policy shift was to increase opportunities for underserved subgroups, thus eliminating the opportunity gap; however, research results suggested marginalized individuals remain underrepresented in Virginia dual enrollment programs (Pretlow & Wathington, 2014).

Social Context

Policymakers laud dual enrollment as a way to increase college readiness and reduce educational inequities among underserved students by providing these individuals with increased access and educational benefits to include rigor in course work, which is thought to lead to college completion (Malin et al., 2017; Taylor, 2015). Dual enrollment students, regardless of race or socioeconomics, were more likely to seek enrollment in two or four-year institutions and

persist to completion compared to those who did not take dual enrollment courses (Nelson & Waltz, 2019; Taylor, 2015). Despite its perceived benefits, Garcia et al. (2020) found that among students classified as low-income, there was a significant decrease in their perception that they belonged in intense programs and an inability to pay for the programs that would advance their college careers. A study by Grubb et al. (2017) revealed that dual enrollment students were less likely to need academic support and more likely to need financial assistance and support. The need for programs to be more inclusive of students of color and low-income students was also significant (Grubb et al., 2017). Taylor and Pretlow (2015) indicated that dual enrollment is prevalent among community colleges; however, the restrictive nature of eligibility requirements found in many dual enrollment policies makes it difficult for marginalized students to attend. Although many dual enrollment policies address the importance of recruitment efforts, researchers have suggested that students most in need of dual enrollment are the least likely to be aware of it (Taylor & Pretlow, 2015).

Theoretical Context

Issues of equity and inequality in our nation's school systems are heavily rooted in discrimination based on race and class. Critical race theory (CRT) recognizes that racism is inherent in our society and is used to analyze how systemic oppression influences all aspects of American culture. CRT evolved from the critical legal studies (CLS) movement, which emphasized the class and racial inequalities in the legal system; however, "CRT was in part a response to the perception that CLS analyses were too class-based and underestimated 'race,' which for Critical Race Theorists is the major form of oppression in society" (Cole, 2017, p. 9). The origin of CRT is attributed to Derrick Bell, a Harvard law professor, who taught a course on racism and American law (Cole, 2017). Upon Bell's departure from Harvard, students rallied

together to create another course; its purpose was to discuss Bell's ideas (Cole, 2017). This course is thought to be the origin of what would become critical race theory and scholarship (Cole, 2017).

Applying CRT to equity in dual enrollment would require understanding how race and racism influence the inadequacies of programs and services Black and Brown students in dual enrollment receive in relation to their needs. For instance, a study by Garcia et al. (2020) found that marginalized subgroups often felt that dual enrollment courses were meant for high-achieving white students with the financial means to pay for the costs associated with dual enrollment. The number of marginalized students who enroll in dual enrollment courses reflects this misconception. According to the United States Department of Education (2019), Black and Hispanic students are less likely to enroll in dual enrollment. Hiraldo (2010) discussed the principles of CRT; one of its principles highlights the concept that many programs created to benefit students of color have often had the opposite effect. For example, in a study that examined policy changes meant to increase access to dual enrollment for underserved populations, researchers found that policy changes to dual enrollment in Virginia served to further "reinforce educational stratification where it need not exist" (Pretlow & Wathington, 2014, p. 52). This concept can be seen in the demographics of students who currently benefit from dual enrollment, the primary benefactors being white and Asian students (United States Department of Education, 2019). An and Taylor (2019) wrote that "researchers should consider using critical theories to assess how and if racial and social class inequities are perpetuated through dual enrollment" (p. 138).

Other studies attribute inequitable outcomes to a student's lack of social and cultural capital, principles associated with social capital theory. Felder (2017) discussed marginalized

subgroups and the merits of building social and cultural capital by "creating academic and social supports to improve college readiness and the transition to a postsecondary environment for dual enrollment students" (p. 15). The correlation of social capital, networking, and support with academic success has been the subject of considerable research (Carter-Francique et al., 2015; Lile et al., 2018). Lile et al. (2018) indicated that dual enrollment, marginalized subgroups tend to lack adequate financial resources and social and cultural capital compared to white students. Liu et al. (2020) wrote that "compared to white students, Black students may have more limited access to relatives and role models who have gone to college before" (p.7). An and Taylor (2019) discussed the importance of researchers using social and cultural capital theories to understand students better as they transition from high school to college through the process of taking dual enrollment courses.

In addition, John Rawls' theory of justice can be used to evaluate dual enrollment policies. For dual enrollment to be just, it must benefit people of color and low-income students equally. Applying John Rawls' theory of justice, educational programs should benefit marginalized individuals through equitable practices, which may require a redistribution of resources. Taylor (2015) stated, "Rawls' theory rejects a utilitarianism philosophy whereby policies maximize the benefit for all (i.e., the average) and argues that policies must at least be of equal benefit to those who are among the most marginalized and disadvantaged in society" (p. 359). However, studies indicate that although dual enrollment benefits marginalized students, these student subgroups do not benefit equally (An & Taylor, 2019; Taylor, 2015).

Literature on dual enrollment utilizes a vast array of theoretical and conceptual perspectives (An & Taylor, 2019). An and Taylor (2019) reviewed empirical studies on dual enrollment and found that popular theoretical and conceptual frameworks included "momentum

(e.g., Wang), college readiness (e.g., Conley), motivation theory, evaluation (e.g., Astin's I–E–O model), role and socialization theory, and engagement" (p. 138). However, these frameworks primarily focus on the students as the impetus for success or failure without regard to institutional factors influencing a student's educational outcomes. An and Taylor (2019) suggested using psychological theoretical frameworks such as "self-efficacy, growth or fixed mindset, identity, or sense of belonging" to further research students' psychological development as they move from high school dual enrollment to college (p. 138).

Problem Statement

The problem is that dual enrollment programs result in inequitable outcomes for students of color and low-income student subgroups (Liu et al., 2020; Miller et al., 2018; Nelson & Waltz, 2019; Pierson et al., 2017); marginalized students were less likely than their white, middle and upper-class peers to pass dual enrollment courses (Pierson et al., 2017), enroll in college (Liu et al., 2020), and persist to completion (Liu et al., 2020; Miller et al., 2018). In addition, these marginalized subgroups are less likely to be represented in dual enrollment programs (Fink, 2018; Grubb et al., 2017; Liu et al., 2020; Pierson et al., 2017; Pretlow & Wathington, 2014). Although there has been an overall increase in college enrollment and completion rates, students of color and low-income students are less likely than their peers to graduate from high school, enroll in college, and persist to completion (Ma et al., 2019). This suggests that the subgroups of low-income students and students of color do not benefit equally from taking dual enrollment classes.

Prior research related to equity in dual enrollment exposes that inequity exists between students of color and low-income students compared to their peers (Fink, 2018; Grubb et al., 2017; Liu et al., 2020; Miller et al., 2018; Pierson et al., 2017; Pretlow & Wathington, 2014).

Student outcomes, whether they enroll and persist to completion, are attributed to individual effort and other characteristics specific to the student rather than institutional factors and institutional actors (Liera & Dowd, 2019). Teachers can act as change agents within dual enrollment; however, studies of teachers' understanding of equity have been limited in the field of dual enrollment. Previous studies on teachers' perceptions of equity have focused on pre-service teachers (Acquah & Commins, 2015; Ladson-Billings, 1999; Whitford & Emerson, 2019), computer science (Vakil, 2018; Zhou et al., 2020), and mathematics (Morales-Doyle, 2017). Furthermore, research has suggested that teachers' perceptions of equity are somewhat limited (Zhou et al., 2020), and they lack strategies to effectively address inequitable outcomes (Gorski, 2016a; Hakkola et al., 2021; Zhou et al., 2020). While studying student attrition in postsecondary education among marginalized individuals, Bensimon et al. (2019) identified the need to examine the role of faculty members who have the capacity to act as allies and contribute to student success. Their research highlighted the propensity for higher education institutions to create programs that "remediate or compensate for inferior educational experiences" and ignore the value of faculty in creating equitable learning opportunities (Bensimon et al., 2019, p. 1691). Therefore, it would be beneficial to understand the perspectives of dual enrollment faculty as it relates to inequitable outcomes and the underrepresentation of marginalized subgroups.

Purpose Statement

The purpose of this collective case study was to discover how dual enrollment faculty members understood and promoted equity within the dual enrollment program at their respective high schools in collaboration with the partnering community college. Equity was defined as the redistribution of resources and the identification of practices and policies likely to benefit

students who are most often underrepresented in dual enrollment (Jurado de Los Santos et al., 2020).

Significance of the Study

Faculty perspectives provide valuable information regarding equity in dual enrollment. Information related to how faculty members understand and promote equity was collected. From this information, empirical, theoretical, and practical significance was established.

Empirical Significance

Existing research identifies the problem, inequitable outcomes (Liu et al., 2020; Miller et al., 2018; Nelson & Waltz, 2019; Pierson et al., 2017; Taylor, 2015) and a lack of representation for marginalized students in dual enrollment programs (Fink, 2018; Grubb et al., 2017; Liu et al., 2020; Pierson et al., 2017; Pretlow & Wathington, 2014). However, little research seeks to understand why inequitable outcomes exist and how they can be remedied. Bensimon et al. (2019) indicated that faculty who act as institutional agents could "use their knowledge to support minoritized student success. They do so by attempting to transform institutional contexts such that they function as well for minoritized students as they do for white students" (p. 1692). However, scant research attempts to explain how teachers contribute to equitable outcomes through their understanding and implementation of strategies that promote equity (Bensimon et al., 2019). McNair's (2016) research emphasizes the importance of colleges changing their cognitive frames to recognize their role in being underprepared for marginalized students. Referring to the challenges institutional actors face regarding equity, McNair (2016) wrote, "The problem is not really a lack of will; rather some colleges are simply not structured for that level of engagement; for others, there is no expectation or requirement to be student-centric; and there are still others who struggle with competing pressures and demands" (p. 14). This study explored

the faculty perceptions within the dual enrollment programs to understand how these participants and the organizations with which they are affiliated contributed to or prohibited equity.

Theoretical Significance

Argyris and Schön's (1974) theory of organizational learning involves learning and teaching within organizations. These organizations have included both schools and businesses. Dual enrollment is unique in that the teacher is the head of the classroom and responsible for promoting equity. However, the teacher is considered both an employee of the high school and the college. These two entities may promote equity in very different ways. For instance, in a study that examined the role of the dual enrollment teacher as both an employee of the high school and college, Russo (2020) found that although dual enrollment instructors had significant contact with students, they felt as though their voices were not "valued in administrative conversations around just who is welcomed into dual enrollment classes" (p. 106). For example, Russo (2020) found that school administrators made dual enrollment instructors feel that dual enrollment courses were for their highest achieving students, even though dual enrollment instructors felt that low-SES students were more likely to benefit from these courses. In this collective case study, participants may have different experiences based on the learning that takes place within each individual high school and the community college. This study revealed how each entity informs a teacher's knowledge and practices related to equity.

Practical Significance

Policy changes to Virginia's dual enrollment plan expanded access to marginalized populations; however, access does not ensure equity. Research on student success highlighted the importance of positive student and faculty interactions (Bensimon et al., 2019). Organizations and individuals can create equitable outcomes if they recognize their roles as change agents.

Information gathered through interviews with faculty members, observations, and document study exposed how the institutions and teachers understood and promoted equity and whether that understanding was derived from best practices. This information can influence professional development and policies related to equity.

Research Questions

Jurado de Los Santos et al. (2020) suggested that it is necessary to share equity ideologies to agree on how these inequities will be addressed. Zhou et al. (2020) indicated that those with higher levels of critical consciousness, which includes critical reflection and cognitive empathy, are more likely to act in a way that creates equity. Zhou et al. (2020) stated, "Such findings suggest the importance of studying teachers' critical reflections, which may provide models for students' critical reflections" (p. 4). Liera and Dowd's (2019) study found that organizational learning was successful in teaching faculty what it meant to be change agents in the quest for equity; however, it was less successful in teaching faculty how to implement such changes. Therefore, it was essential to identify how faculty members understood and promoted equitable outcomes within dual enrollment and how the organizational learning environments influenced that understanding.

Central Research Question

How do dual enrollment faculty members define and promote equity within the dual enrollment program?

Sub Question One

How has the partnering community college influenced the way dual enrollment faculty members define and promote equity within the dual enrollment program?

Sub Question Two

How has the individual high school influenced the way dual enrollment faculty members define and promote equity within the dual enrollment program?

Definitions

The following terms are pertinent to this study on equity and dual enrollment.

1. *Deficit ideology* – The idea that the oppressed are responsible for the disparities that exist in education and in life, as well as the belief that marginalized subgroups are somehow intellectually and culturally deficient (Hall et al., 2019).
2. *Dual enrollment* - Dual enrollment is also referred to as dual credit, early college, and concurrent enrollment; it allows students to receive college credit or dual credit while in high school (An & Taylor, 2019).
3. *Equity in education* - A quality education built on the premise that it may require an unequal distribution of resources and a reflection of underlying values, procedures, and policies to meet students' needs (Jurado de Los Santos et al., 2020).
4. *Inclusion* – All groups, regardless of disability or social and cultural differences, are included (Hall et al., 2019).
5. *Opportunity gap* - The unintended consequence of increasing access to education and the lack of opportunity based on race and socioeconomic status (Pretlow & Wathington, 2014).
6. *Organizational learning* – Learning that occurs within an organization, such as professional development. However, organizational learning can lead to ineffective and effective learning, which one may incorporate into their work. When implemented effectively, organizational learning can be responsible for achieving an organization's intended goals (Argyris, 1997; Argyris & Schön, 1974, 1978, 1996).

Summary

The problem is that dual enrollment programs result in inequitable outcomes for students of color and low-income student subgroups (Liu et al., 2020; Miller et al., 2018; Nelson & Waltz, 2019; Pierson et al., 2017; Taylor, 2015). In addition, these marginalized subgroups are less likely to be represented in dual enrollment programs (Fink, 2018; Grubb et al., 2017; Liu et al., 2020; Pierson et al., 2017; Pretlow & Wathington, 2014). Most often, marginalized subgroups are viewed through the lens of a deficit ideology. Program initiatives are geared toward fixing the students rather than the institution that has perpetuated and exacerbated the problem. The purpose of this collective case study was to discover how dual enrollment faculty members understood and promoted equity within the dual enrollment program at their respective high schools in collaboration with the community college. Dual enrollment fails to produce equitable outcomes for its students. The failure originates in the inability of the organization or individual to recognize underlying values that prevent equitable outcomes.

CHAPTER TWO: LITERATURE REVIEW

Overview

The literature review begins with the origin and description of the theoretical framework guiding this study. Argyris and Schön's (1974) theory of organizational learning provides a foundation for understanding how inequitable outcomes can be a learning problem of an institution that fails to recognize how its underlying values, policies, procedures, campus climate, and culture create additional barriers for underrepresented and marginalized student subgroups (McNair et al., 2020). Within an organization, a mismatch exists between the theories institutional actors claim they believe and the theories that govern their actions (Argyris, 1997; Argyris & Schön, 1974, 1978, 1996). Organizations may give the appearance of supporting a specific initiative but fail to make institutional gains in the specific area because of weak, ill-informed policies that attempt to fix the issue at a surface level without regard to underlying values that serve to perpetuate the problem (Argyris, 1997; Argyris & Schön, 1974, 1978, 1996). The related literature discusses the increasing prevalence of dual enrollment courses in our nation's school systems. Next, the various types of dual enrollment programs are introduced, and the purpose, benefits, and drawbacks of dual enrollment are explored. In addition, the related literature discusses equity and inequity as it relates to dual enrollment, the role colleges and high schools play in addressing these issues, and how teachers and leaders view and can act as agents for change in the fight for equitable outcomes for all student subgroups. The chapter concludes with a summary that explores what is currently known about equity in relation to education and indicates how this study will fill the gap in the literature.

Theoretical Framework

Organizational learning is a complex process that requires accurately identifying an error and its systematic correction (Argyris & Crossan, 2003). Organizational knowledge is the culmination of the learning environment, the capacity of individuals within the organization to learn, the interactions between the organization and the individuals regarding learning, and the context and culture of the organization as a learning environment (Wang & Ahmed, 2003).

Argyris and Schön's Theory

The origin of Argyris and Schön's research on organizational learning is rooted in cognitive and behavioral psychology and began with the concept of individual learning, which ultimately evolved to include organizational learning (Argyris & Crossan, 2003). Initially, their research was applied to business organizations, but subsequent work has had significant implications for educational organizations (Argyris, 1997). The tenets discussed in Argyris and Schön's (1974) theory of organizational learning provide a foundation for understanding how individual and organizational learning contributes to or inhibits equitable outcomes in education (Bensimon, 2005; Bensimon & Malcolm, 2012; Malcolm-Piqueux & Bensimon, 2017; McNair et al., 2020).

Argyris and Schön (1996) maintained that there are three distinct ways organizations create productive organizational learning: they use inquiry to understand organizational deficits and create organizational tasks aimed at increasing performance, they examine internal structures and underlying values that inhibit performance, and they use inquiry to increase productiveness of single-loop and double-loop learning. Learning occurs when one's intended purpose matches actuality; the learner should always strive to make his or her intentions match actuality (Argyris, 1997). Argyris and Schön's concept of single-loop learning has been used to explain how

inequities are attributed to student deficits (Bensimon, 2005; Bensimon & Malcolm, 2012). Double-loop learning differs in that this type of learning seeks to understand the underlying values within the institution that may have contributed to the mismatch and then change the underlying values to correct the mismatch (Argyris, 1997; Argyris & Schön, 1978, 1996). An additional principle Argyris and Schön proposed is that individuals and organizations have both espoused theories, which are theories they claim they believe, and theories-in-use, which are the theories reflected in their actions (Argyris, 1997; Argyris & Schön, 1978, 1996). Certain social and cultural features of the institution might discourage self-reflection because it challenges the institution's perceived image and the institutional actors (Argyris & Schön, 1996).

Bogdan and Bilkin (1982) defined theoretical orientation as "a loose collection of logically held-together assumptions, concepts, or propositions that orient thinking in research" (p. 30). Teachers' beliefs about equity are socially constructed and informed by their organizational learning environments. Argyris and Schön's (1974) theory surmised discrepancies between espoused theories and theories-in-use and implementation of single or double-loop learning influence an organization's desired outcomes; therefore, research questions were designed to understand how teachers make sense of equity in light of their learning environment. According to Merriam (1988), the theoretical framework influences every aspect of one's research design: the purpose, focus, and research questions; the reason for one's design; the participants, concepts, and setting; data collection methods and data analysis; and lastly, the researcher's interpretation of those findings. Sutton and Staw (1995) described theory as a basis for understanding why things like "acts, events, structure and thoughts occur" (p. 378). In other words, the theoretical framework will influence all aspects of the design, from the purpose to the questions, data collection methods, participants, setting, and analysis.

Related Literature

Dual enrollment, also referred to as dual credit, early college, and concurrent enrollment, allows high school students to receive college credit or dual credit while attending high school (An & Taylor, 2015; Witkowsky & Clayton, 2020; Zinth & Taylor, 2019). Students enrolled in dual enrollment courses may have the opportunity to earn an associate degree, career studies certificate, or transferable college credits. Dual enrollment courses are offered to qualified juniors and seniors; freshmen and sophomores are admitted on a case-by-case basis. To qualify for dual enrollment in the Commonwealth of Virginia, students are held to the same standards as traditional applicants (Catron, 2001). Dual enrollment courses, which are offered at little or no cost to students, must maintain the same rigor as community college courses and be taught by qualified instructors (Catron, 2001). Qualified instructors hold a master's degree in their discipline or a master's degree plus 18 hours in the area in which they teach and are evaluated by the participating high school and community college.

Prevalence in Schools

The number of dual enrollment students has increased over time, and state policies, high schools, and community colleges have made efforts to increase the capacity to offer dual enrollment classes (An & Taylor, 2015). In the Commonwealth of Virginia, Governor Mark Warner wanted to expand the program to increase college enrollment and completion; Warner viewed this initiative as a "more efficient use of the high school student's senior year" (as cited in Pretlow & Wathington, 2014, p. 43). The decrease in adult student enrollment was replaced by an increase in high school students enrolled in community college through dual enrollment courses (Field, 2021). Most high schools in the United States offer dual enrollment; as of 2012, 47 states supported dual enrollment through written agreements (An & Taylor, 2015). With the

growing cost of higher education, states have had to create additional opportunities to alleviate some of the costs associated with higher education.

Dual enrollment is growing participation, and states are becoming increasingly involved in policies that promote dual enrollment courses and programs (An & Taylor, 2015, p. 1). In Colorado, the state passed the Concurrent Enrollment Programs Act, which required schools to develop more equitable opportunities to access dual enrollment programs, especially for historically underrepresented student populations (Witkowsky & Clayton, 2020). Moreno et al. (2021) noted the increased drive for dual enrollment and early college high schools to be more inclusive of students who were often underrepresented in these programs. The imperative behind these initiatives is to create students who are college-ready and, therefore, persist to completion (Moreno et al., 2021).

Types of Dual Enrollment Programs

A lack of consistency exists among states and institutions regarding how dual enrollment programs should function (Burns et al., 2019; Miller et al., 2018; Tobolowsky & Allen, 2016). Specifically, Miller et al. (2018) found a variation in both instructional and advising practices among community colleges in the state of Texas. Dual enrollment differs from advanced placement and international baccalaureate programs because it is meant to be accessible to a broader range of students (Jones, 2017; Tobolowsky & Allen, 2016). Regarding the differences in dual enrollment program design, Tobolowsky and Allen (2016) remarked, “They may be individual courses or a complete high school curriculum. They can be taken at the high schools, community colleges, 4-year institutions, and online and differ by rigor, content, instruction, and design within and between states” (p. 9).

Variations in instructor, delivery mode, course offerings, student qualifications, and cost create inconsistencies, leading to disparities in program quality and student outcomes (Zinth & Taylor, 2019). Dual enrollment can be as simple as singleton programs, which operate as one or two single college-level courses offered by the participant's high school to enrich the high school experience and provide college credit or as complex as comprehensive programs (Bailey & Karp, 2003; Tobolowsky & Allen, 2016). For instance, Early College High Schools, an example of a comprehensive program, offer dual credit with additional support systems, which aid students as they transition from high school to college (Hutchins et al., 2019; Schaefer & Rivera, 2020). The extent and complexity of the dual enrollment program is often based on the availability of qualified dual enrollment teachers.

When comparing delivery methods, Hu and Chan (2021) found no significant differences regarding improving college readiness between courses delivered on college campuses and those delivered by dual enrollment teachers at the high school; however, each method, when compared to students who did not participate in courses, increased college readiness. Students who attended Early College High Schools were more likely than those who did not to earn associate and bachelor's degrees and at a faster rate (Edmunds et al., 2020). In a study comparing the same course taught as a dual enrollment course and as a college credit-only course, dual enrollment classes were shown to be equally as rigorous, and teachers were equally effective at teaching the course objectives (Miller et al., 2018). Regardless of course modality, dual enrollment has had positive impacts on college readiness (Hu & Chan, 2021), increased degree attainment (Edmunds et al., 2020), and has been shown to be rigorous (Miller et al., 2018).

Benefits of Dual Enrollment for Students

Dual enrollment allows students to receive college credit, reducing the overall costs associated with a college degree (An & Taylor, 2015; Cowan & Goldhaber, 2015; Garcia et al., 2020; Witkowsky & Clayton, 2020). Policymakers indicated that dual enrollment reduces educational inequities among minorities and underserved students by providing easier access and benefits, such as increased rigor, that lead to college completion (Malin et al., 2017; Taylor, 2015). Dual enrollment can act as means to recruit students who are often underrepresented in colleges or have had fewer options based on their proximity to higher education (Jones, 2017).

Students are thought to receive numerous benefits from dual enrollment courses. Grubb et al. (2017) found that dual enrollment students were more likely to graduate in two to three years and less likely to receive remediation than their non-dual enrollment peers. Morgan et al. (2018) discovered a link between degree attainment and the increased rigor dual enrollment coursework provided. In a study that analyzed high school students' participation in dual enrollment from 1998-2015, D'Anna et al. (2019) found an increase in two and four-year graduation rates and an earlier overall graduation time for students who participated in dual enrollment as compared to those who did not participate in dual enrollment. Haxton et al. (2016) found similar results, with a greater number of early college participants earning their bachelor's degrees compared to those who did not participate in the early college program. Similarly, low-income and students of color were more likely to obtain advanced degrees (Haxton et al., 2016). Barnett et al. (2015) indicated, "Participating students are more likely to graduate high school, enroll and persist in college, accrue college credits, and complete college than students who do not participate in dual enrollment" (p. 39). In a study from the state of Georgia, Partridge et al. (2020) found a significant savings to the overall cost of a college education when students could participate in dual enrollment classes. However, Allen et al. (2019) found that rather than savings

to the overall cost of a college degree, dual enrollment offered benefits such as taking fewer semester hours, thus reducing the course load each semester, or the opportunity to add an additional major or minor.

A study conducted by An and Taylor (2015) examined college readiness after the first completed year of college and found that dual enrollment students were more likely to display characteristics that made them more academically successful in college. An and Taylor's (2015) study differed in that prior studies sought to understand college readiness in dual enrollment students upon high school graduation and entrance into college. In her research, Kanny (2015) found that students felt they benefited from the exposure to the academic content, learned a lot about the expectations placed on them as college students, and enjoyed the freedom and independence they experienced as college students. Similarly, a study by Allen et al. (2019) found that "participation in dual credit bolstered students' navigational capital, helping them make sense of the college environment as an institutional structure, and understand the rules of engagement with faculty and their peers" (p. 48).

Students also benefitted from the exposure to diverse ideas from students who represented all walks of life, particularly when students attended classes on campus (Lile et al., 2018). At-risk students who participated in dual enrollment were more likely to think about their lives outside of high school and began to focus on long-term goals (Lile et al., 2018). Students who participated in dual enrollment courses received a preview of the habits students must acquire to be successful in college. For instance, Kanny (2015) discussed how students learned the importance of keeping an open line of communication with their professors. While not explicitly stated, these habits ultimately increase the likelihood that students will have an easier adjustment period in those first few years of college. Taking dual enrollment courses made

students begin to develop identities as college students (Allen et al., 2019; Lile et al., 2018; Witkowsky & Clayton, 2020). A study by Nicholas et al. (2020) discussed the importance of the community college nurturing dual enrollment students' identities as transfer students, building students' confidence in their ability to achieve in higher education. Witkowsky and Clayton (2020) wrote about the benefits of dual enrollment, including "the development of an understanding of the college credit system, course structures, faculty expectations, academic support resources, confidence needed to see themselves as college students, and autonomy and self-advocacy in the learning process" (p. 433).

Given the benefits of dual enrollment courses and the positive outcomes associated with students' attendance, it would behoove faculty members, college administrators, and policymakers to understand the underlying reasons for the lack of representation among marginalized student subgroups. Although existing literature illustrates the positive impact of dual enrollment courses on college readiness and completion, less is known about how these perceived benefits affect Black and Brown students (Liu et al., 2020).

Educators who are committed to equity and equitable outcomes seek out opportunities to explore institutional structures, policies, and practices that contribute to inequities in student outcomes; they work to change the institutional environment to support marginalized students achieve at the same rate as their white peers (McNair et al., 2020). As McNair et al. (2020) indicated, "Lasting change happens when educators understand both the meaning of equity and that meaning is represented through personal values, beliefs and actions" (p. 1). These perceived benefits should be equally accessible to students from all subgroups.

Drawbacks of Dual Enrollment for Students

Along with the benefits, there are numerous drawbacks. For instance, many schools do not have counselors designated for dual enrollment students; therefore, dual enrollment takes up a significant portion of school counselors' time (Lile et al., 2018; Witkowsky & Clayton, 2020). Support systems, which have been proven effective with dual enrollment students, are reduced when restraints are placed on support personnel (Lile et al., 2018). In addition to these concerns, Kanny's (2015) study revealed that students were discouraged by the poor grades they may have received, the lack of credit transferability, negative interactions with other college students and professors, and the lack of support systems. The opportunity to earn college credit while in high school often reduces students' time at two and four-year colleges. During these formative years, less time in institutions of higher education means that students do not have as much time to grow socially, emotionally, and intellectually, leaving them underprepared upon graduation (Witkowsky & Clayton, 2020). In a study by Jett and Rinn (2020), a common complaint among students was the feeling of social isolation, primarily caused by alienation from their former friend groups. This suggests that high school students may not be equipped emotionally to handle dual enrollment courses.

Since dual enrollment is handled differently by each state and within each state, there is a lack of communication between states, between high schools and community colleges within states, and between community colleges and four-year institutions, public as well as private schools. The failure to create a unified policy with universal applicability leaves students weary of the transferability of these courses (Kanny, 2015). Inconsistency in policies related to student participation has also been identified as a weakness in some dual enrollment programs (Witkowsky & Clayton, 2020). Duncheon and Relles (2020) attributed dual enrollment's ineffectiveness in attaining desired outcomes to the college and high school's inability to

communicate effectively, which ultimately threatened implementation and course rigor. Faculty members, who felt accountable to both entities, struggled with issues of pedagogy, students' developmental needs, and knowledge gaps (Duncheon & Relles, 2020). Since there were limited interactions with the partnering college, teachers tended to rely more heavily on advice and instruction from the high school (Duncheon & Relles, 2020). For example, a study by Mollet et al. (2020) revealed that dual credit teachers struggled to meet the requirements of each entity. Furthermore, the study indicated a lack of communication among the district, high school, and partnering college; this made it difficult for teachers to enact "proactive initiatives" related to equity (Mollet et al., 2020, p. 235). Inconsistencies between these two entities can have troubling impacts on teachers and students. For instance, even if faculty members had an internal desire to combat racial inequities, they may feel ill-prepared as a result of insufficient training, or they may feel they lack the authority and support to address racial inequities (Gorski & Parekh, 2020; Liera & Dowd, 2019).

Equity in Education

Equity involves redistributing resources to serve students most in need (Jurado de Los Santos et al., 2020). However, this oversimplified definition, which some associate with equity, does little to explain the many nuances involved in this complex phenomenon. Jurado de Los Santos et al. (2020) stated, "It is therefore necessary to identify the elements that favor and harm equity, and then to offer appropriate policies" (p. 14). Malcolm-Piqueux et al. (2020) defined "equity in higher education" by both a critical analysis and as a measure of accountability (p. 391). Critically, Malcolm-Piqueux et al. (2020) defined equity as "the recognition that institutional racism (and sexism) is an entrenched characteristic of colleges and universities," which can only be addressed through a conscientious effort to identify and fix the underlying

values that contributed to the inequalities that exist based on race, sex, and class (p. 391). As a measure of accountability, Malcolm-Piqueux et al. (2020) identified equity as "the attainment of proportional representation of historically marginalized groups in terms of access, retention, degree completion, and participation in enriching programs, experiences, and activities that build students' academic and cultural capital" (p. 391). In addition to racial proportionality, Bensimon (2018) argued that achieving equity in higher education requires one to think critically and address how white privilege and supremacy have filtered into institutions and institutional practices. Liera and Dowd (2019) indicated that for equitable outcomes to be achieved, a concerted effort on the part of the organization must be made to identify the specific policies and procedures that act as barriers to marginalized students.

For equity to be realized, higher education must recognize the value of its faculty to broker relationships (Jett & Rinn, 2020; Liera & Dowd, 2019). However, this requires a faculty member's thorough understanding of how an institution's environment of discrimination and bias profoundly affects the experiences of underrepresented subgroups. Equity is a manifestation of what happens in the classroom and depends upon interactions with faculty members who attempt to neutralize unequal power relationships within the institution's policies and practices (Bensimon et al., 2019). Ellerbrock et al. (2016) indicated the importance of teachers being self-reflective and critically aware when examining their understanding of diversity and seeking out enrichment opportunities when they need to expand their knowledge. In a study that focused on early college high schools and professors' cultural perspectives, Mollet et al. (2020) found that many professors held hidden biases that ultimately influenced how they perceived students. Their findings showed how "biased expectations can produce systems of oppression" (Mollet et al., 2020, p. 238).

In recent years, equitable outcomes have not been obtained, particularly for low-income students. For instance, low-income students are far less likely than their upper-income peers to obtain a college degree (Page & Scott-Clayton, 2016). Garcia et al. (2020) found that low-SES students were underrepresented in dual enrollment and lacked adequate financial support to make taking dual enrollment classes a reality. Kanny's (2015) research revealed that low-income students lacked support systems and were left on their own to navigate the dual enrollment process. Inadequate college information, including the application process, financial aid, and the associated benefits of enrollment, served as barriers for low-income students and their parents (Page & Scott-Clayton, 2016). It could be argued that these barriers could be remedied by a dual enrollment program concerned about educating the whole student and providing structures that will benefit students as they enroll and persist to completion. In this sense, it is important to study dual enrollment and identify its strengths and weaknesses to address the needs of underrepresented students.

Inequity as it Applies to Dual Enrollment

Xu and Solanki's (2020) study reported a nationwide racial equity gap in dual enrollment; higher poverty levels were connected to wider racial equity gaps. Xu and Solanki (2020) found that "differences in pre–high school achievement gaps between white and minority students are the strongest predictors of racial gaps in AP and DE participation in a district" (p. 18). Dual enrollment students were more likely to enroll in and complete college compared to their peers who did not take dual enrollment courses; however, the subgroups within the dual enrollment group, students of color and low-income students, did not enroll in and complete college at the same rate (Blankenberger et al., 2017; Nelson & Waltz, 2019; Taylor, 2015). The achievement gap is perpetuated by the perception that underrepresented students do not belong in

the dual enrollment program (Garcia et al., 2020).

In addition to disparities in representation, Garcia et al. (2020) found that low-SES students could not pay course fees associated with dual enrollment. Lin et al. (2020) found that students considered low-SES were less likely to persist in higher education, while students with access to financial assistance, through loans and parental support, were more likely to persist to completion. This suggests that low-SES students may not be aware of the financial aid opportunities available to them. Taylor (2015) stated, "The credit-only model of dual credit is unlikely to yield results that make any significant impact on disparities in educational outcomes" (p. 375). Taylor's (2015) study refers to Rawls' theory of social justice; he posits that policies should not attempt to benefit the majority. Rather, they should benefit those most in need. Based on this theory, dual enrollment policies should support students most in need of the benefits of early access to college education (Taylor, 2015). Xu and Solanki (2020) found that the most effective districts, in terms of dual enrollment implementation, "have lower racial baseline gaps, greater access to college acceleration opportunities, and stronger financial support" (p. 13).

Addressing Inequities in Dual Enrollment

To address the needs of dual enrollment students, Garcia et al. (2020) stated, "Policy considerations for the expansion of funding for underrepresented and low-socioeconomic students' participation in DC programs need to be realized" (p.592). In addition, Grubb et al. (2017) recognized the need for additional funds to support low-income students as they participate in dual enrollment courses, including limited access to computers and the Internet. Dual enrollment instructors and administrators need to find ways to address the concerns of minority and low-income students who feel as though dual enrollment courses are out of their reach (Garcia et al., 2020; Grubb et al., 2017). Community colleges and high schools should put

structures in place that will help students, particularly in underserved populations, to transition from high school to postsecondary education (Duncheon & DeMatthews, 2018; Garcia et al., 2020; Kanny, 2015; Martinez et al., 2018; Taylor, 2015).

In considering the needs of Black and Brown students, one must consider several components: "curriculum, instruction, assessment, school funding, and desegregation" (Ladson-Billings, 1998, p. 18). The curriculum does not value the voices of people of color and therefore does not include their stories as they truly are; the lack of representation in the curriculum does not adequately serve students of color (Ladson-Billings, 1998). For instance, school systems in the United States use the Western canon in Pre-K-12 and higher education (Chapman et al., 2020; Hall et al., 2019). The United States, from its beginnings, has been a culmination of the contributions of many cultures; however, this truth has not been adequately represented in the curricula of these institutions. Chapman et al. (2020) wrote, "The pervasive marginalization of the historic and current roles and experiences of different racial and ethnic groups results in students believing that people of color have minimally contributed to the growth and success of the United States" (p. 572). Creating a curriculum, classroom practices, and strategies that respect all students may encourage underrepresented students to enroll in these courses. A study by Devlin and McKay (2018) found marginalized students performed better academically when course material was relatable to the student body, student expectations were clearly and explicitly defined, assessments were meaningful, teachers used inclusive approaches during instruction, teachers used collaborative learning opportunities and implemented flexibility in the learning activities, and teachers were empathetic and supportive of the needs of their students.

In addition to these suggestions, Mehl et al. (2020) indicated that successful dual enrollment programs made a concerted effort to create equitable outcomes through research-

informed initiatives. Their study found that successful programs focused on making a firm commitment to equity, creating equitable access opportunities, creating supports based on data, and focusing on relationships that can help increase the confidence of underrepresented, marginalized students (Mehl et al., 2020). Ladson-Billings (1998) echoed these suggestions, indicating that a poorly designed curriculum along with failing instructional strategies matter when it comes time to assessment; assessment generally hurts students of color because it shows what they do not know rather than what they do. Organizations must commit to double-loop learning for real change to occur, and they must communicate this learning through professional development provided to faculty and staff.

A Justice-Centered Approach to Equity

Teachers and institutions concerned about equity should use a justice-centered approach to evaluate equitable practices. Justice-centered pedagogy draws upon critical and culturally relevant pedagogy, critical consciousness, and cognitive empathy (Morales-Doyle, 2017; Zhou et al., 2020). Primarily, it has been used to understand how teachers conceptualize equity in the fields of science and computer science education (Zhou et al., 2020). Justice-centered pedagogy exists on a continuum with concepts of equity ranging from a redistribution of resources, which is considered a weaker inclusion practice, to equity as practices that value the cultural experiences of students, which is considered a stronger inclusion practice (Dawson, 2017; Zhou et al., 2020). For instance, increasing access to dual enrollment by expanding eligibility and increasing communication about dual enrollment programs would be considered on the weaker end of inclusion, whereas changing the curriculum to value and reflect the voices of students of color would be considered on the stronger end of inclusion. Using stronger inclusion practices requires educators “to be critically conscious about the roles of individuals and social systems in

equity" (Zhou et al., 2020, p. 4). Vakil (2018) has argued for a justice-centered framework for computer science, which emphasizes equity as "rooted in discourses of inclusion and diversity and justice-centered approaches anchored in critical theoretical perspectives in learning, schools, and technology" (p. 36). This calls for an ideological shift in how we imagine institutions of learning. Learning would entail students recognizing, thinking critically about, and responding to systems that perpetuate inequalities. Justice-centered pedagogy focuses on specific aspects of education: "the content of the curriculum, the design of the learning environments, and the politics and purposes of CS reform" (Vakil, 2018, p. 26).

Based on the work of Ladson-Billings' culturally relevant pedagogy and Freire's critical pedagogy, justice-centered pedagogy has shown progress in producing equitable outcomes. Ladson-Billings (1995) described culturally relevant pedagogy as a method of teaching that seeks to empower the collective through the following means, "(a) students must experience academic success, (b) students must develop and/or maintain cultural competence, and (c) student must develop critical consciousness in which they challenge the status quo of the current social order" (p. 160). Freire's work on critical pedagogy in northeast Brazil is similar to that of Ladson-Billings in that it addresses critical consciousness (Morales-Doyle, 2017). In Freire's work, critical consciousness is defined as a means by which "people come to view themselves as capable of transforming reality by eliminating oppression" (Morales-Doyle, 2017, p. 1036). Similarly, Ladson-Billings (1995) viewed critical consciousness as the ability of students and teachers to evaluate the institutional and societal norms that perpetuate inequities within a system. Freire believed "the school has the task of guiding young generations to actively practice democracy by empowering them in the search for new paths of humanization in which all

ethnocentric and racist attitudes as well as skeptical and resigned thinking are excluded" (Maviglia, 2019. p. 391).

Research in the field of science and computer science has acknowledged the need for studies that explore "cultural and societal factors that contribute to equitable participation" (Zhou et al., 2020, p. 2). A justice-centered framework provides a spectrum to evaluate equitable practices; practices on the strong end of inclusion can empower students and create equitable outcomes among marginalized subgroups (Dawson, 2017; Zhou et al., 2020). Therefore, it is imperative to understand how teachers perceive and promote equity to determine their place on the spectrum. Research on critical consciousness, a key component of the justice-centered framework, should be an integral part of professional training for teachers (Zhou et al., 2020). Teachers with a strong justice-centered understanding of equity are more effective at promoting equitable outcomes (Morales-Doyle, 2017; Zhou et al., 2020). However, Zhou et al. (2020) study found that even with training, teachers tended to think about equity in terms of redistributive justice, which leans toward the lower end of inclusive practices. Zhou et al. (2020) stated, "These results suggest the need to help teachers develop a more in-depth understanding of equity issues beyond the scope of equal participation and form critical reflection, so they recognize the structural causes of inequity" (p. 24).

Socio-cultural stereotypes influence prospective students' feelings regarding their potential success in a given area. For instance, students of color are less likely to believe they belong in dual enrollment courses (Garcia et al., 2020). These same stereotypes are prevalent among students in the field of computer science and affect how underrepresented students view their self-efficacy in this field (Zhou et al., 2020). Teachers who engage in critical reflection are

less likely to adopt a deficit ideology and more likely to empower students to recognize and transcend cultural and socioeconomic biases.

Teachers' Understanding of Equity

Teachers' understanding of equity can generally be defined as "promoting the participation of underrepresented groups and providing equal access to resources" (Zhou et al., 2020, p. 20). This suggests a limited understanding of the social and cultural dynamics that have created disparities in outcomes among marginalized subgroups (Zhou et al., 2020). Studies indicate that teachers who had students who were underperforming held deficit views, specifically when these students were of color (Battey & Franke, 2015; Goode et al., 2020) or were considered low-SES (Ellis et al., 2016). Teachers attributed underperformance to shortcomings in their students and their students' parents; they believed students and parents did not value education (Battey & Franke, 2015; Ellis et al., 2016; Goode et al., 2020). Ellis et al. (2016) found that pre-service teachers' views were challenging to change. Teachers often indicated they adopted a color-blind approach to teaching, which allowed them to avoid discussing race issues and to diminish the role of race and racism in creating the problem (Goode et al., 2020; Gorski & Parekh, 2020). Teachers were described as "gatekeepers" standing in the way of students entering and being successful in their classes because of preconceived, stereotypical views of who belonged in their classes (Goode et al., 2020; Gorski, 2016b; Zhou et al., 2020). Often, teachers would attribute underperformance or underrepresentation to a lack of resources within the home, which allowed them to avoid analyzing their own beliefs and biases in promoting inequities (Goode et al., 2020). Teachers were more likely than students to view their school as an equitable place; this difference in perception was more likely to make students feel less connected to the school (Debnam et al., 2021). In fact, a study by Kye (2020) indicated

that teachers often minimized issues of race, culture, and socioeconomics, indicating these issues had little effect on students in the classroom. Research shows that teachers lack a complex understanding of equity. Marginalized students are often viewed through a deficit cognitive frame; therefore, services are more likely to be redistributive. Redistributive practices are less socially just and ultimately less transformative in relationship to equity-oriented goals.

Gorski (2016b) argued that teachers "were trained to be culturally sensitive rather than racially or linguistically just" (p. 222). Teachers reported difficulty in discussing issues of race when related to equity (Goode et al., 2020). However, several studies suggested the importance of the teacher addressing and understanding social and cultural barriers and injustices within the context of learning and acting as an ally for students of color (Goode et al., 2020; Zhou et al., 2020). Shah (2018) indicated the importance of teachers addressing the root causes of inequities rather than focusing their attention on the effects of inequities. Palliative efforts do little to tackle deeply ingrained institutional inequities; therefore, it becomes necessary to reflect on its etiology. Hakkola et al. (2021) found that faculty members who engaged in self-reflective practices centered on equity were more likely to initiate conversations about "equity-minded change" (p. 9).

Teachers recognized the importance of implementing strategies that would bring about equitable access but were unsure which strategies would be most effective (Zhou et al., 2020). For instance, a study that examined a community of practice, which focused on teaching and equity, uncovered that participants could recognize their roles in systems of oppression but struggled to take action to make significant changes (Hakkola et al., 2021). Strategies teachers did employ tended to be concerned about an even distribution of resources (Zhou et al., 2020). A study by Allee-Herndon et al. (2020) found that teachers used inclusive practices regarding the

instructional material they used in the classroom; however, critical reflection and transformational practices were less likely to be used. Critical reflection requires the teacher to teach students to notice inequitable treatment among marginalized subgroups, which they were able to do in a historical context but failed to do in relation to current events and circumstances (Allee-Herndon et al., 2020).

Interestingly, teacher educators felt confident about their knowledge base concerning equity; however, they felt underprepared pedagogically (Gorski, 2016a). This would lead one to believe that pre-service teachers and practicing teachers may understand the concept of equity and their role in a system that creates inequitable outcomes but feel ill-prepared to address these issues within the context of their classes because they have not been properly prepared in their teacher preparation programs. Similarly, Kye (2020) found that teachers wanted their teaching to be socially just, but they enacted "practices that overlooked students' perspectives and practices that discounted race and culture" (p. 189). This supports the concept of one's espoused theories not aligning with their theories-in-use. For instance, teachers claim they value social justice in education but fail to act in a socially just way. In their work with college faculty, Prystowsky and Heutsche (2017) found that teachers benefitted from "ongoing implicit bias awareness training and the development of Faculty Institutes, which focus on student engagement" (p. 25). This type of professional development was instrumental in closing equity gaps (Prystowsky & Heutsche, 2017).

Teachers who wish to make equity-oriented change can face resistance in the classroom, school, and community. For example, Castillo-Montoya (2020) indicated that white students are not always open to discussions of race and, at times, can display open resistance. In other scenarios, white students may be open to discussions of race but detach themselves, refusing to

see their role in perpetuating the problem (Castillo-Montoya, 2020). A study by Irby et al. (2019) also documented resistance to equity-oriented goals. In their research, the participant who wished to enact equity-oriented change received extensive backlash from faculty and community members for her efforts (Irby et al., 2019). Navigating these varying degrees of understanding within the student body can be difficult, especially when there is very little institutional and community support.

A study by Ellerbrock et al. (2016) found that teachers often avoided discussing diversity because they had little to no experience with it. Teachers who could critically reflect on their own biases and institutional inequities served as role models, encouraging students to do the same (Zhou et al., 2020). Similarly, Ellerbrock et al. (2016) found that the most capable teachers understood their personal biases, reflected on their craft and encouraged students to be self-reflective. Teachers should foster in students a respect for their own culture and an ability to critically analyze the sociopolitical landscape that produces inequities within the system (Ellerbrock et al., 2016). Critical reflection requires that individuals reflect on and respond to the root causes of oppression; this act of reflection calls for individuals to empathize with the oppressed (Zhou et al., 2020). A study by Acquah and Commins (2015) discovered that critical reflection increased cultural awareness in pre-service teachers.

Teachers as Agents of Change for Equity

Organizational change happens when organizations harness the existing knowledge of their institutional actors, including faculty and administrators, ensuring that the knowledge these actors bring is managed in a manner that is transferred within the organization to disseminate and ultimately create new knowledge that enriches the organizational learning and leads to intentional organizational change (Bauman, 2005). Hanson et al. (2015) found that teachers were

instrumental in promoting successful outcomes in dual enrollment. Educators who understand equity and incorporate these practices into their classroom are those who have made a concerted effort to study the underlying values, policies, and cultural aspects of the institution to change existing education into one that truly values diversity and the numerous benefits students of all races and classes receive from these dynamics (Bensimon, 2018; Bensimon & Gray, 2020; McNair et al., 2020). Patterson Williams et al. (2020) discussed the importance of "noticing for equity" which requires the teachers to listen to students as they notice issues related to equity and "engaging with and responding to moments to advance talk and practice of moving toward more equitable teaching and learning for all" (p. 508). Researchers also suggested that teachers notice for inequitable outcomes among marginalized students, study the data disaggregated by race and socioeconomic status, and identify policies and procedures that unfairly target marginalized populations (Bensimon, 2018; Bensimon & Gray, 2020).

When addressing equity issues, teacher educators believed they were well-versed in equity research but lacked strategies to teach equity-minded practices (Gorski, 2016a). In addition, they felt they would benefit from a community to discuss issues of equity (Gorski, 2016a). Researchers argued the need for teachers to develop a "critical lens" through which to examine equity (Bensimon, 2018; Gorski & Parekh, 2020). Through a critical lens, teachers can examine policies and practices that negatively impact marginalized students within their classroom and the school (Gorski & Parekh, 2020). To be equity-minded, teachers must recognize patterns in educational outcomes among marginalized students; this requires examining and intervening with research-based interventions and support (Bensimon, 2018; Bensimon & Gray, 2020). Ultimately, professors must take the initiative to educate themselves and recognize how the culture of white supremacy has filtered into many of the systems,

policies, and procedures to the detriment of students of color (Bensimon, 2018; Bensimon & Gray, 2020; Goode et al., 2020).

However, as Ríos (2018) indicated, educators can become frustrated when a strong desire exists to act as agents of change, but their exchanges addressing equity result in ideas rather than action. Lasting changes occur when educators truly understand equity, and that understanding is reflected in the way these values influence their actions; however, this can only occur if there is a firm commitment from the institution that works to implement equity-oriented goals (Bensimon, 2018; Bensimon & Gray, 2020; McNair et al., 2020). Often, within an organization, there is no consistency surrounding what it means to be equitable; this lack of consistency produces a conflicting view of what equity means and how to produce equitable outcomes (McNair et al., 2020). Ríos (2018) wrote, "The debate that exists today about equity, or lack thereof, is simply that of static false words; they are devoid of action and therefore we are left only with illusion" (p. 4). Such is the nature of ineffective organizational learning; it is infused with buzzwords that spark excitement and the thrill of real institutional change, but it sets teachers and organizations up for failure unless the learning seeks to understand and change the institutional structure and beliefs that have been instrumental in creating the barriers that exist for marginalized students.

Teachers are often taught the importance of embracing diversity. Gorski (2016a) warned that by making culture the center of the conversation, individuals often mask the underlying issues, which are racism, classism, and other forms of prejudice at their core. Fundamental to these issues of discrimination lies the root cause, a struggle for power. Gorski (2016a) wrote that "race, socioeconomic status, gender, and other identity markers around which people are marginalized are not cultural identities" (p. 244). Therefore, issues of inequitable outcomes

cannot be solved through initiatives focused on culture. For instance, a culturally responsive teacher does not change the power dynamics that lead to inequities. In a study by Stepp and Brown (2021), they concluded that teachers often had an incomplete understanding of culturally responsive practices. Further, these teachers did not associate culturally responsive practices with increased learning (Stepp & Brown, 2021). Cultural responsiveness and diversity training become a diversion that, upon the initial appearance, seem like a valiant effort toward equity but fail to produce real change (Gorski, 2016a).

Morales-Doyle (2017) indicated the necessity of developing critical consciousness in students, but teachers must possess this attribute to do this. However, critical consciousness is not groomed in pre-service teachers; teachers often see cultural diversity as a problem that needs to be fixed (Ladson-Billings, 1999). Ellerbrock et al. (2016) stated, "True to our own lived experiences, many teacher educators, purposefully or unconsciously, find difficulties with teaching to diversity and may end up avoiding such issues altogether" (p. 229). Zhou et al. (2020) indicated "the importance of studying a teacher's critical reflection [a component of critical consciousness], which may provide models for students' critical reflection" (p. 4). Allee-Herndon et al. (2020) stressed the importance of teachers engaging in transformational practices, which would entail teachers teaching students how to recognize social injustices and take actions to rectify the injustice.

Zhou et al. (2020) stressed the importance of cognitive empathy, which is thought to be a catalyst for a teacher's use of equitable practices and desire to create an equitable environment. For instance, a study by Decety and Yoder (2016) found that individuals who displayed cognitive empathy were more likely to exhibit concern and act when confronted with social injustices. Kitchen (2020) found that teacher candidates were open to expanding their

understanding of equitable practices and had a high degree of cognitive empathy. However, teacher candidates feared their "lack of knowledge or improper use of language" surrounding topics concerning equity and diversity would be perceived negatively (Kitchen, 2020, p. 19). In a related study, Whitford and Emerson (2019) found that empathy intervention among white pre-service teachers reduced implicit bias toward people of color.

Research in the field of science and computer science has acknowledged the need for studies that explore "cultural and societal factors that contribute to equitable participation" (Zhou et al., 2020, p. 2). Teachers with a strong justice-centered understanding of equity are more effective at promoting equitable outcomes (Morales-Doyle, 2017; Zhou et al., 2020). However, Zhou et al. (2020) study found that even with training, teachers tended to think about equity in terms of redistributive justice, which leans toward the lower end of inclusive practices. Zhou et al. (2020) stated, "These results suggest the need to help teachers develop a more in-depth understanding of equity issues beyond the scope of equal participation and form critical reflection, so they recognize the structural causes of inequity" (p. 24). Zhou et al. (2020) indicated that teachers who engage in critical reflection are more likely to see social inequities as a systemic rather than an individual problem. Gorski and Parekh (2020) noted the necessity of understanding and cultivating the "critical orientation" of teachers who are directly responsible for educating students (p. 281).

A study by Devlin and McKay (2018) found that an inclusive approach to teaching and one that valued diversity was most effective in producing equitable outcomes. Teachers wishing to accommodate the growing diversity of their classroom benefit from the following practices: "using inclusive pedagogical approaches, engagement through active and interactive learning, and flexibility" (Devlin & McKay, 2018, p. 85). Teaching is a profession that requires significant

training outside of the professional development required by affiliated institutions. As such, teachers' views of equity and how equity should be promoted through classroom practices are also influenced by their desire and view of lifelong learning. A teacher's understanding of equity can also be influenced by the teacher's ability to critically reflect on the reasons for inequitable outcomes (Acquah & Commins, 2015; Ellerbrock et al., 2016; Ladson-Billings, 1995; Morales-Doyle, 2017; Zhou et al., 2020) and the teacher's use of cognitive empathy when addressing issues of bias (Decety & Yoder, 2016; Kitchen, 2020; Whitford & Emerson, 2019; Zhou et al., 2020).

Leadership and Equity-Minded Change

For dual enrollment to be successful, the school leader must be a visionary and understand the importance of providing opportunities that are "socially and economically transformational to the lives of students and families within their communities" (p. 527). Effective leaders stress the importance of clear communication (Allen et al., 2019; Martinez et al., 2018). For instance, Allen et al. (2019) found that high school counselors and college advisors were instrumental in promoting dual enrollment. Allen et al. (2019) suggested engaging with businesses and the community to form partnerships and communicating information about dual enrollment using email, text, and mail. Amaro-Jimenez et al. (2020) offered similar suggestions, highlighting the importance of creating partnerships between parents and counselors from both high school and college. Allen et al. (2019) indicated that communication should start in middle school to create a college-going mentality among underrepresented students in higher education. Additionally, leaders saw the need to increase rigor (Amiot et al., 2020; Duncheon & DeMatthews, 2018; Morgan et al., 2018) to make up for the advantages that some students may have as second-generation or multigenerational college goers (Morgan et al., 2018). Amiot et al.

(2020) found that increasing rigor positively impacted achievement and improved students' perceptions of themselves and their academic abilities, especially among marginalized subgroups.

Effective leaders recognized institutional barriers and sought culturally relevant support (Martinez et al., 2018). For example, in a study of dual enrollment program opportunities for underrepresented students, Martinez et al. (2018) indicated that school leaders hired bilingual dual enrollment instructors to work with dual language students. In addition, school leaders must consider financial constraints (Xu & Solanki, 2020). For instance, Xu and Solanki (2020) suggested removing "financial barriers that hinder students' participation in such programs, especially students from less affluent backgrounds" (p. 18). Courses offered at no or minimal cost were beneficial to dual enrollment participants (Allen et al., 2019, p. 47). Additionally, Amaro-Jimenez et al. (2020) found that parents benefitted from information about financial aid, including how to apply and continue receiving financial aid.

To make dual enrollment programs equitable, Duncheon and DeMatthews (2018) indicated that school leaders "prioritized: (a) instructional rigor, (b) targeted interventions, (c) embedded supports, and (d) student enrichment" (p. 276). Supports included "study skills courses, college readiness programs, and technology-based skill-building programs" (Duncheon & DeMatthews, 2018, p. 280). For change to happen, school leaders must analyze the systemic elements of oppression that hinder the progress of underrepresented students within education (Castillo-Montoya, 2020; Shah, 2018; Wellington-Baker & Hammer, 2020). This transformation must start at the top and filter into the faculty who teach a diverse population (Wellington-Baker & Hammer, 2020). Castillo-Montoya (2020) indicated the importance of giving faculty opportunities to discuss equity-oriented goals, "making race (and racism) an explicit and central

focus" (p. 7). For instance, a study by Amiot et al. (2020) sought to understand how deficit thinking, especially among teachers, contributed to the normalization of failure. They found that teachers were resistant to equity-related work because they feared they would be blamed for underperformance; instead, teachers blamed students, citing "poverty, lack of parental interest, or immigrant or refugee status" as reasons for their failure (Amiot et al., 2020, p. 209). For leadership to be transformational, leaders should extend their understanding of equity to move beyond wanting to simply improve the conditions for marginalized students (Shah, 2018). Rather, leaders must recognize their role in perpetuating and benefitting from the current system and identify when discussions become dominated by deficit thinking (Shah, 2018). Leaders should ensure that teachers' expectations of their students match or exceed the expectations of their students' parents (Amiot et al., 2020).

Summary

Teachers can have a powerful impact on reducing educational inequities (Jett & Rinn, 2020; Liera & Dowd, 2019). However, researchers found that teachers had a limited understanding of equity (Zhou et al., 2020) and often equated inequitable outcomes to a deficit within the student or the student's parents (Battey & Franke, 2015; Ellis et al., 2016; Goode et al., 2020). Kohli et al. (2017) indicated that research on equity when divorced from the discussion of the systemic oppression experienced by marginalized individuals serves to maintain the status quo. Often students' success is related to their personal attributes; little is known about the social and institutional context that contributes to inequitable outcomes (Bensimon et al., 2019). Teachers are an integral part of a student's educational experiences. Zhou et al. (2020) indicated that even with training, teachers often had a limited understanding of equity; therefore, it is important to analyze how teachers make sense of equity and identify which

strategies they employ to create equitable outcomes. Gorski and Parekh (2020) noted the limited research on the critical orientations of teachers as they make sense of equity. Zhou et al. (2020) indicated the importance of teachers developing an understanding of equity issues beyond the limited definition of redistribution and access to a more critical analysis of systemic inequalities.

This study explored the perceptions of dual enrollment faculty related to equity and the strategies used to promote equitable outcomes within dual enrollment. In addition, it explored how individual and organizational learning at each institution contributed to the teachers' sense of efficacy and agency when attempting to address inequitable outcomes. Previous research that attempted to discover teachers' understanding of equity has been limited to pre-service teachers (Acquah & Commins, 2015; Ladson-Billings, 1999; Whitford & Emerson, 2019), computer science (Vakil, 2018; Zhou et al., 2020) and mathematics (Morales-Doyle, 2017). Less is known about practicing teachers' perceptions of equity, specifically in the field of dual enrollment, and how that understanding is influenced by the organizational learning of the institution or institutions. The purpose of dual enrollment is to increase access to higher education for all subgroups; however, dual enrollment has failed in its mission. Therefore, it is important to discover the root causes of these inequities to rectify the problem. This study, which seeks to understand teachers' perceptions of equity viewed through the lens of organizational learning, may shed some light as to why teachers' views rarely progress past a redistributive understanding to a more critical understanding of equity, which Zhou et al. (2020) maintained is necessary for transformation to occur. The study has the potential to provide a deeper understanding of Argyris and Schön's theory of organizational learning as it relates to educational institutions and potentially shows how an organization's concept of learning, or conceptualization of equity, can contribute to its dysfunction. This study will uncover how

institutions train their teachers to understand and promote equity. This understanding may enlighten each institution, the high school and the cooperating community college, as they develop professional opportunities for dual enrollment teachers.

CHAPTER THREE: METHODS

Overview

The purpose of this collective case study is to discover how dual enrollment faculty understand and promote equity within the dual enrollment program at their respective high schools. The study uses multiple cases to understand the phenomenon. The sites include three high schools in conjunction with the community college. Participants include dual enrollment faculty members at multiple sites. In addition to these items, the procedure and the researcher's role are defined. Data collection includes interviews, documents, and observations. Data analysis is explained. Finally, the trustworthiness of the data and ethical considerations are explored.

Research Design

This qualitative study relies on a collective case study research design. Qualitative studies are appropriate when the researcher seeks to understand a social problem by examining the unique perspectives of individuals who have direct experience with it (Creswell & Creswell, 2018). The social problem in this study is the inequitable outcomes produced by the dual enrollment programs at a local community college. Dual enrollment faculty members work closely with these students and provide valuable insight. In addition, a qualitative approach to research should be used when the researcher wishes to gain a deeper understanding and explanation of quantitative research (Creswell & Poth, 2018). For instance, quantitative studies have indicated that students of color and low-income students are underrepresented in dual enrollment (Pretlow & Wathington, 2014; Taylor, 2015). Furthermore, existing quantitative research has established that dual enrollment does not result in equitable outcomes among these subgroups (Taylor, 2015). Quantitative research reveals the problem but fails to enlighten the reader by providing factors that may contribute to the problem. Creswell (2013) indicated that to

understand a social problem, “qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is both inductive and deductive and establishes patterns or themes” (p. 44). Qualitative research allows the researcher to explore and gain insight into an issue that directly impacts a marginalized group of individuals. As Creswell and Poth (2018) indicated, qualitative research should be done when “a desire to empower individuals exists” (p. 46). When deep disparities exist among subgroups in terms of outcomes, policymakers, administrators, and faculty members must explore the institutional factors that have contributed to these dynamics.

A case study research design is appropriate when the researcher wishes to understand a particular problem through the exploration of a case or cases; these cases provide an illustration of the phenomenon under investigation (Creswell & Poth, 2018; Yin, 2018). Case studies are relevant when the researcher has “a ‘how’ or ‘why’ question about a contemporary set of events over which a researcher has little control” (Yin, 2018, p. 13). The research questions for this study are “how” questions, which seek to understand how dual enrollment instructors understand and promote equity within the dual enrollment program. How dual enrollment instructors understand equity is related to individual and organizational learning, over which the researcher has little to no control.

A case study is also relevant when “the boundaries between phenomenon and context may not be clearly evident” (Yin, 2018, p. 15). One’s understanding of equity is directly related to how the faculty member’s institution addresses the issue through, for instance, professional development. In this research study, context is integral to understanding the phenomenon. Case studies focus on a bounded system (Merriam, 1988; Yin, 2018). Three Rivers Community College’s dual enrollment program provided the parameters to explore dual enrollment faculty

and their understanding of equity. Since there was a limited number of dual enrollment faculty members at each high school, three high schools served as the cases in this study. For this reason, the specific research design is a collective case study with the high schools acting as bounded systems. Yin (2018) suggested using at least two cases because similar conclusions from two cases that are independent of each other are more compelling and therefore more credible than using only one case. Interviews, documents, and observations provided the data for this research. Within-case analysis was used to develop a description of the case, and cross-case synthesis was used to establish recurrent themes between cases.

Some precursors to case studies were "Malinowski's study of the Trobriand Islands, French sociologist LePlay's study of families, and the case studies of the University of Chicago Department of Sociology from the 1920s and 1930s through the 1950s" (as cited in Creswell & Poth, 2018, p. 97). Case studies related to education were initiated by psychologists studying learning (Merriam, 1988). For instance, Piaget studied his children's cognitive development, which had a tremendous effect on education and instruction (Merriam, 1988). Important thinkers in this field of study include Yin, Stake, Merriam, and Tisdale; each advocates for different approaches to case studies (Creswell & Poth, 2018).

Research Questions

Creswell and Poth (2018) suggested that the study be reduced "to a single, overarching central research question and several sub questions" (p. 137). The central research question addressed the research problem and elicited dual enrollment faculty members' understanding and promotion of equity within the dual enrollment program. The sub questions were designed to elicit an understanding of how learning organizations have influenced dual enrollment faculty members' perceptions of equity and its promotion.

Central Research Question

How do dual enrollment faculty members define and promote equity within the dual enrollment program?

Sub Question One

How has the partnering community college influenced the way dual enrollment faculty members define and promote equity within the dual enrollment program?

Sub Question Two

How has the individual high school influenced the way dual enrollment faculty members define and promote equity within the dual enrollment program?

Sites and Participants

There were three sites in this collective case study: West High School, North High School, and East High School. Each high school receives dual enrollment credit from Three Rivers Community College. There were 20 dual enrollment faculty members in the sample pool. The sample size consisted of 10 to 15 dual enrollment faculty members.

Sites

Three Rivers Community College has two campuses in Virginia; it serves 12 surrounding counties and their high schools. West High School, South High School, and East High School offer dual enrollment courses through Three Rivers Community College. Three Rivers Community College has approximately 4,041 students ([redacted], 2020). Approximately 42% of its students are dual enrollment ([redacted], 2020). Approximately 68% of the students are white, 18% are Black, 5% are Hispanic, 1% are Native American, and 2% are Asian ([redacted], 2020). West High School has approximately 800 students (Virginia Department of Education, n.d.-a). Approximately 72% of students are white, 18 % are Black, 4% are Hispanic, 3% are of multiple

races, 2% are American Indian, and 1% are Asian (Virginia Department of Education, n.d.-a). Approximately 30% of students are economically disadvantaged, and 2% are English learners (Virginia Department of Education, n.d.-a). South High School has approximately 1,000 students (Virginia Department of Education, n.d.-b). Approximately 75% of students are white, 12% are Black, 5% are of multiple races, 4% are Hispanic, 1% are Native American, and 1% are Asian (Virginia Department of Education, n.d.-b). Approximately 23% of students are economically disadvantaged, and 1% are English learners (Virginia Department of Education, n.d.-b). East High School has approximately 260 students; approximately 70% are white, 11% are of multiple races, 11% are Black, 5% are Hispanic, 2% are Asian, and 1% are American Indian (Virginia Department of Education, n.d.-c). Approximately 35% of students are economically disadvantaged, and 2% are English learners (Virginia Department of Education, n.d.-c). Although West High School and East High School are in the same county, they each have their own superintendent and school board.

In addition to convenience, the sites were chosen because they offer dual enrollment courses through Three Rivers Community College, are close geographically, are similar in demographics, and share resources. For instance, West High School and East High School use South High School's vocational program, which offers some dual enrollment courses. Based on each school's quality report, Black, Hispanic, and economically disadvantaged students are less likely to graduate with an advanced diploma (Virginia Department of Education, n.d.-a, n.d.-b, n.d.-c), which may serve as an indicator of college readiness and thus, persistence. In addition, marginalized subgroups were less likely to graduate and enter institutions of higher education (Virginia Department of Education, n.d.-a, n.d.-b, n.d.-c). West High School, South High School, and East High School are representative of the research problem. In a collective case study, Yin

(2018) suggested using no more than four or five cases in a study. This case study will use three cases.

Each school is organized in much the same way. For instance, Three Rivers Community College is the partnering higher education institution for the three high schools. The dean of dual enrollment is responsible for the dual enrollment program. The dual enrollment program has a dual enrollment recruiter and adviser who works with all schools to recruit and advise dual enrollment students. School counselors coordinate the dual enrollment programs at each school, and qualified high school faculty members teach courses delivered at the individual high schools.

Participants

Participants in this study are dual enrollment faculty members from three locations: West High School, East High School, and North High School and work in collaboration with Three Rivers Community College. They are both male and female teachers with more than three years of teaching experience. Instructors teach various subjects: mathematics, English, science, music, education, and college success skills. They range in age from 28 to 67 years.

Researcher Positionality

The philosophical assumptions I bring to this study and the findings that eventually unfold are indelibly linked; they are uniquely my own, infused with my subjective reality. Creswell and Poth (2018) stated that methodology is "characterized as inductive, emerging, and shaped by the researcher's experience in collecting and analyzing the data" (p. 21). As I research, I understand the changing nature of qualitative research. Case studies take shape and change as new information develops. I remained fluid as the study developed based on the information encountered.

Interpretive Framework

I used a social constructivist interpretive framework. A social constructivist interpretive framework "interprets participants' constructions of meaning in his or her account" (Creswell & Poth, 2018, p. 34). Teachers' understanding of equity is socially constructed. Meaning and thus understanding is created through social interactions within and outside the teacher's learning organization. Organizational, socio-historical, and cultural norms influence teachers' perceptions of equity and impact how they promote equity within the dual enrollment classroom. Thus, it was imperative to consider the complexities that inform understanding. In a qualitative study that uses a social constructivist interpretive framework, Creswell and Poth (2018) recommended creating open-ended, broad questions to allow participants to construct their answers. They also acknowledged the part the researcher plays in bringing their own bias and understanding when interpreting and analyzing participant responses (Creswell & Poth, 2018).

Philosophical Assumptions

My beliefs and philosophical assumptions profoundly influenced the choice and trajectory of my research (Creswell & Poth, 2018). Therefore, it was necessary to articulate how these assumptions and beliefs were reflected in my study. Articulating one's philosophical assumptions enables the researcher to recognize how the many ways of thinking filter into one's research. Creswell and Poth (2018) suggested that the researcher "convey the assumptions, define the assumptions, and discuss how they are illustrated in the study" (p. 22).

Ontological Assumption

Ontological assumptions question the nature of reality (Creswell & Poth, 2018). In the process of understanding, human beings construct their realities. A learner's reality is the sum of his prior knowledge and experiences. In this qualitative study, I used the different perspectives of

multiple individuals to build a comprehensive understanding of how dual enrollment faculty members understand equity and how that understanding or reality is socially constructed.

Epistemological Assumption

Hall et al. (2019) stated, "Epistemology examines questions about how and what we know, and how knowing takes place" (p. 198). To collect evidence from the participants, Creswell and Poth (2018) stressed the importance of gaining an inside perspective by "conducting studies in the field where the participants live and work" (p. 21). I met dual enrollment instructors in their natural environments using face-to-face interviews and observations. As a dual enrollment instructor, I have an inside perspective. Knowledge was gleaned from interactions with the participants. Observations provided additional information related to social and environmental factors that may contribute to the phenomenon being studied.

Axiological Assumption

Axiological assumptions recognize the value-laden nature of research; the researcher recognizes her biases in relation to the research (Creswell & Poth, 2018). Through research and teaching, I have learned about the concept of a deficit ideology. I believe that schools fail students because they base their reforms on the ill-conceived beliefs that students of color and low-income students are the problem. As members of a learning organization, teachers adopt practices that reflect the culture and norms of the learning environment. As such, teachers' practices may be ill-informed. As I approached my research, I recognized my tendency to make this assumption.

Researcher's Role

In qualitative research, the researcher serves as the "key instrument" for collecting multiple forms of data (Creswell & Poth, 2018, p. 43); the multiple forms included documents,

interviews, and observations. The interview questions were influenced by my research and role as a dual enrollment instructor. My position as a dual enrollment instructor and adjunct faculty member at Three Rivers Community College gave me an inside perspective of the dual enrollment program. I have a relationship with the instructors involved. I live in South High School's district and know South High School's dual enrollment faculty as they have taught my daughter in dual enrollment. I have built a rapport with the faculty at South High School. As a member of West High School's faculty, I have built relationships with dual enrollment faculty members; I consider them respected peers. Creswell and Poth (2018) discussed the importance of building rapport to obtain the most valuable data. Since a relationship had already been established, I believed the participants would be honest and forthcoming in their communications. Creswell and Poth (2018) recommended that "multiple forms of validation be used to ensure that the account is accurate and insightful," especially when the researcher is studying her workplace (p. 153-154). Multiple forms of validation, including triangulation of data sources, communicating my bias, member-checking, extended observation in the field, external audits, and providing a detailed description of the research participants and setting, were used when collecting data and conducting an analysis.

I believe equity is viewed through a deficit cognitive frame. In other words, schools and institutions of higher education view inequitable outcomes as a learning problem of the student rather than as a learning problem of the institution. As such, they create programs and initiatives geared toward fixing the student. Teachers, who receive professional development from these entities, adopt these same cognitive frames. The cases chosen were representative of the research problem. I believe teachers have an incomplete or limited understanding of equity. Since I believe understanding is socially constructed, I think their understanding reflects their learning

environment, which fails to address issues concerning equitable outcomes adequately. Yin (2018) indicated that researchers, because of their advanced understanding of the problem, may only use data that supports their position; therefore, it is necessary to be "open to contrary evidence" (p.86). Yin (2018) suggested sharing initial findings with "critical colleagues;" these "documentable rebuttals" reduce bias (p. 87). To reduce bias, I was open to contrary evidence and shared my findings with someone who critically analyzed my work.

Procedures

Procedures included obtaining permission from the sites and the IRB. Permission from each of the collaborating schools, as well as permission to access aggregate data from Three Rivers Community College was obtained. Criterion-based sampling was used. The sample size consisted of 20 dual enrollment faculty members from the three schools, serving as the cases. From the sample pool, 11 participants were included. Participants were recruited through their email accounts.

Permissions

Before any data was collected, site and IRB approval were obtained. The IRB application was submitted to the chair, who checked for accuracy and gave approval for the IRB application (Liberty University, n.d.). The IRB approved the application after suggesting revisions (Appendix A) (Liberty University, n.d.). Accessing Three Rivers Community College's aggregate data required approval from the Institutional Research contact. In addition, site approval was obtained from the three schools acting as cases (Appendix B). Three Rivers College provided an updated list of dual enrollment faculty members and their respective schools. I identified dual enrollment faculty members who teach at the three potential sites. Once

the application was approved and access was granted to the sites (Appendix B), I emailed each dual enrollment faculty member with a recruitment letter to recruit participants (Appendix C).

Recruitment Plan

The sample pool consisted of 20 dual enrollment faculty members from three high schools: West High School, North High School, and East High School; these high schools offer dual enrollment courses through Three Rivers Community College. Saturation is thought to occur when there are no new themes or patterns in the data, and further collection or analysis would yield no additional insight (Guest et al., 2020; Saunders et al., 2018). In their study, Guest et al. (2020) concluded that 11 to 12 interviews were needed in qualitative research to reach saturation. Their study was consistent with Guest et al. (2006), who found that 12 interviews were sufficient to reach saturation; however, most of the themes were present in the first six interviews. Therefore, a sufficient sample size is 11-12 participants (Guest et al., 2006; Guest et al., 2020).

The study used purposeful or purposive sampling. Purposive sampling enables the researcher to use a sample of people that will "best inform the researcher about the research problem under investigation" (Creswell & Poth, 2018, p. 148). Purposive sampling is nonprobability sampling, which is appropriate for qualitative research (Merriam, 1988). Specifically, criterion-based sampling was used to select the participants. Merriam (1988) stated, "Criterion-based sampling requires that one establish the criteria, bases, or standards necessary for units to be included in the investigation; one then finds a sample that meets these criteria" (p. 48). The criteria for this case were the teacher's identity as a dual enrollment instructor and the teacher's placement at one of the three high schools, which is considered representative or

typical of the identified problem; this is considered typical case selection because the cases meet the specified criteria (Merriam, 1988).

Once IRB (Appendix A) and site approval (Appendix B) were granted, participants were recruited through their Three Rivers Community College email address. After receiving confirmation to participate in the study from each participant, a consent form was sent to the participants and retrieved upon a scheduled interview (Appendix D). Consent forms provided background information, procedures for their participation, risks and benefits, compensation information, and information about how their identity would be protected. Participants were informed about the voluntary nature of the study and had the opportunity to withdraw at any time. Instructions to withdraw were included. Faculty signed the consent form to indicate their participation in the study.

Data Collection Plan

Data collection in this study included interviews, documents, and observations. These different types of data collection provided an understanding of the phenomenon under investigation. Yin (2018) wrote, "The multiple sources of evidence essentially provide multiple measures of the same phenomenon" (p. 128). Meyer (2001) indicated that data collection is guided by the researcher's ability to access information, time constraints, and financial resources. Due to these constraints, the researcher focused on data collection pertinent to the study; however, the type of data collection is determined by the ease with which these types of data can be collected.

Interviews

Interviews provide information essential to the case study; there are three types: "prolonged interviews, shorter interviews, and survey interviews" (Yin, 2018, p. 119). Prolonged

interviews take place over a longer period and can produce additional leads; however, the researcher must be careful in that she cannot allow the interviewee to overly influence her research (Yin, 2018). Shorter interviews take approximately an hour, can be done in one sitting, and are often open-ended, while survey interviews follow a structured set of questions (Yin, 2018). Merriam (1988) indicated the importance of adopting an attitude of neutrality toward the participant. Yin (2018) suggested that interviews be conversational in tone. Paton (1980) suggested taking a presuppositional stance when interviewing, meaning the interviewer should presuppose the participant has information worthy of discussing. However, Yin (2018) warned that interviews have the potential to provide information that is biased and inaccurate.

Interviews are considered the primary components of qualitative research. Interviews were face-to-face and semi-structured. Creswell and Creswell (2018) described interviews as "unstructured and generally open-ended questions that are few in number and intended to elicit views and opinions from the participants" (p. 249). The interview process follows a complex procedure, which includes creating the interviews questions; identifying those who would best be able to communicate their experiences with the phenomenon; deciding on the best interview tactics; establishing guidelines for data collection and an interviewing protocol; adapting one's questions to best meet the needs of the study; establishing rapport and a comfortable space for interviewing; obtaining consent; and transcribing the interview (Creswell & Poth, 2018).

Prior to the interview, I identified potential interviewees, recruited the participants (Appendix C), and received consent (Appendix D). Interviewees consisted of dual enrollment faculty members from the three high schools. Interview times were at the teacher's discretion and took place in person at the participant's school. The interviews were recorded using a Sony

Voice Recorder. The following questions were used in interviews. The questions are labeled, indicating which research question the interview questions answered.

Individual Interview Questions

1. Tell me a little bit about yourself, including how you became involved in dual enrollment? CRQ
2. How do you define equity in terms of dual enrollment? CRQ
3. What value do you place on promoting equitable practices within the program and classroom? Explain. CRQ
4. What do you believe you do in your classroom or within the program to promote equitable outcomes? CRQ
5. What does it mean to you to have a commitment to equity? CRQ
6. How do you believe you demonstrate that commitment? CRQ
7. Describe any professional development you have had related to this topic. SQ1and 2
8. What role do you believe the community college partner has in creating equitable outcomes within the dual enrollment program? SQ1
9. To your knowledge, what current supports do you believe exist to help students achieve in dual enrollment and higher education? SQ1 and 2
10. Why do you believe inequitable outcomes exist among marginalized students? CRQ
11. How do you believe the community college influenced your understanding of equity and equitable practices? SQ1
12. How do you believe the high school influenced your understanding of equity and equitable practices? SQ2

13. Is there anything you would like to add concerning dual enrollment and equity? CRQ, SQ1, and 2

Question one is meant to put the participant at ease (Creswell & Creswell, 2018). Questions two through six are designed to understand a teacher's perception of equity, its significance in promoting achievement within all subgroups of students, and how faculty promote equity within the classroom. Equity can only be achieved through the commitment of those faculty members involved (Bensimon & Malcolm, 2012; Liera & Dowd, 2019). As Jurado de Los Santos et al. (2020) stated, "Only with a joint action of the different persons responsible for the education system can educational equity be achieved, favoring the integral development of students and their incorporation into society in their lifelong learning process" (p. 14). To achieve joint action, faculty must clearly understand equity, be committed to its promotion, and be willing to attend professional development. In addition, the nature of a teacher's understanding is significant in that it may establish whether they possess a deficit or equity-minded cognitive frame (Bensimon, 2005, 2007). Deficit-minded cognitive frames focus on the student as the problem rather than the organization. Whether a teacher develops this type of cognitive frame may be influenced by an organization's ability to learn effectively. Double-loop learning requires the organization to investigate the underlying values that impede progress toward equity and to make changes to those values (Argyris, 1997; Argyris & Schön, 1974, 1978, 1996). In addition, it may establish where teachers fall within a justice-centered framework, "which spans over a spectrum of socially just practices" (Zhou et al., 2020, p. 3).

Question seven is meant to establish what type of training teachers have received and from whom. One institution may value equity and provide the bulk of training, or teachers may receive conflicting information from the high school and college on how they should promote

equity within their classrooms. An organization participating in single-loop learning contributes to inequitable outcomes by perpetuating organizational learning problems, which may filter into the views and actions of its employees (Bauman, 2005; Bensimon, 2007; McNair et al., 2020). Each discipline at the college level may provide more extensive training than other departments, resulting in different practices within dual enrollment courses. A lack of consistency, due to a lack of communication between the high school and college and among the different departments within the community college setting, could create discrepancies in how the program is administered. Questions eight, nine, ten, eleven, and twelve are designed to understand how information is communicated and to determine how faculty members' understanding of equity and equitable practices has been influenced by the organizational learning of the different institutions. Argyris and Schön's (1974) theory of organizational learning provides a foundation for understanding how individual and organizational learning contributes to or inhibits equitable outcomes in education. The final question concludes the interview and probes the participant for additional information.

Individual Interview Data Analysis Plan

Interviews were analyzed according to Saldana's (2016) suggestions: interviews were coded during the initial transcription; a reflective journal highlighting the process of analysis was maintained, which further served to generate codes; and interview analysis was shared with the participant to ensure accurate meaning was attributed the interviewee's words. Saldana (2016) suggested that value coding is an effective type of coding used in case study interview analysis. "Value coding is the application of codes to qualitative data that reflects an applicant's values, attitudes, and beliefs" (Saldana, 2016, p. 131). In this case study, a value represented the importance attributed to an idea, for example, the value an individual places on equity and

equitable outcomes (Saldana, 2016). Attitudes are generally learned and reflect our "thoughts and feelings" about a particular concept, while beliefs are a combination of "values and attitudes" and are influenced by a range of interactions that participants interpret and make meaning from (Saldana, 2016, p. 131). Units were coded according to this system. Questions were articulated in such a way to make coding for values, beliefs, and attitudes easier to identify. Saldana (2016) indicated that once transcripts have been coded according to values, beliefs, and attitudes, "the next step in the process is to categorize them and reflect on their collective meaning, interaction, and interplay, working on the premise that all three constructs are part of an interconnected system" (p. 133).

Documents

Documents included information from EdEquity and were gathered from the Virginia Department of Education website. EdEquity was considered Virginia's framework for creating equitable opportunities and outcomes within Virginia's schools (Virginia Department of Education, 2020). EdEquity resources document Virginia's attempts to close opportunity and achievement gaps by providing information and professional development related to culturally relevant and inclusive practices (Virginia Department of Education, 2020), which are considered more effective practices for obtaining equitable outcomes among all subgroups (Dawson, 2017; Zhou et al., 2020). Specifically, the department addresses the need to expand access to higher education through initiatives such as improving school climate, creating additional pathways to higher education, improving absenteeism and suspension rates, and having an extended-year graduation rate (Virginia Department of Education, 2020). Interviews can corroborate whether these practices are being incorporated into the school system and to what extent. Documents provided additional credibility to the information provided by participants. Ideally, school

systems within the Commonwealth of Virginia should use EdEquity as a framework to guide their practices. According to Hitchcock and Hughes (1995), documents contain "values and ideologies, either intended or not" (p. 231). Documents from EdEquity shed light on whether these values and ideologies related to equity were reflected in each organization's practices. Since documents from the Virginia Department of Education serve as a form of legitimacy, these resources should guide school-related practices. Documents contain an array of information and are used to validate and legitimize information from other sources (Yin, 2018). In addition, documents may lead the researcher to different paths of inquiry; however, Yin (2018) warned that documents could be both biased and overwhelmingly numerous, which may cause the researcher to waste valuable time during the exploration phase.

Document Data Analysis Plan

Document analysis should provide a deeper understanding of data collected from other sources (Altheide & Schneider, 2013). Saldana (2016) recommended using descriptive coding for documents. Descriptive coding is used to describe what a document conveys and "leads primarily to a categorized inventory, tabular account, summary, or index of the data's content" (pp.103-104). Descriptive coding ascribes a short phrase to a larger passage and indicates the main idea of the material (Saldana, 2016). These short phrases are "organized and categorized" to create an overall picture of the different document sources (Saldana, 2016, p. 103). Altheide and Schneider (2013) suggested that document analysis consists of "reading, sorting, and searching through your materials; comparing within categories, coding, and adding keywords and concepts; and then writing mini-summaries of categories" (p. 29).

Observations

Observations were direct and provided additional information related to social and environmental factors that may contribute to the phenomenon being studied (Appendix F) (Yin, 2018). Descriptive and reflective notes on the setting, participants, activities, conversations, behaviors, social factors, and environmental factors were taken. The setting had the potential to reveal the proportionality of subgroups and provide evidence of the research problem. It revealed classification and segregation within the class. In addition, Hall et al. (2019) found that schools and teachers who were able to achieve equitable outcomes among marginalized students have high expectations, positive relationships, positive classroom and school climates, and culturally relevant and inclusive practices. Data collection included those factors: teacher expectations, student/teacher relationships, classroom/school climate, and culturally relevant/inclusive practices. Data collection added deeper context to teachers' understanding of equity and equitable practices. Observations revealed whether these practices were enacted and to what extent.

Observation Data Analysis Plan

Field notes were taken (Appendix F). Saldana (2016) indicated that descriptive analysis is appropriate for observations; therefore, this type of analysis was performed on the data mined from the observation. This is specifically relevant for providing a rich description of the setting, including social and environmental factors that may contribute to the phenomenon (Marvasti, 2014). It further validated information gleaned from interviews. Marvasti (2014) wrote, "the simplest way to represent observations is to only describe them—write them down as you see them" (p. 359). Observations in this study served the dual purpose of providing descriptions of the context of the setting and revealing how teachers manifested their understanding of equity and equitable practices within the classroom setting.

Data Synthesis

Before beginning the analytic phase of one's research, it is important to have a strategy for data analysis (Yin, 2018). For instance, Yin (2018) suggested returning to the theoretical assumptions, using an inductive strategy, creating a descriptive framework of one's case, and exploring the validity of competing theories. Data collection was organized into files. I created a systematic filing system, which included a searchable spreadsheet or database organized by data type, participant, and date of collection (Creswell & Poth, 2018). This allowed for quick retrieval of important information (Creswell & Poth, 2018). Case study data analysis requires "analyzing data through description of the cases and themes of the case as well as cross-case themes" (Creswell & Poth, 2018, p. 105). Next, I read and memoed emergent ideas (Creswell & Poth, 2018; Merriam, 1988). This aided in "tracking the evolution of codes and theme development (Creswell & Poth, 2018, p. 188). Creswell and Poth (2018) suggested to "read through text, make margin notes, and form initial codes" (p. 198). Next, codes or categories were developed into themes. Creswell and Poth (2018) suggested the "use of categorical aggregation to establish themes or patterns" (p. 198). The researcher looks for patterns in the data in hopes that themes will emerge (Creswell & Poth, 2018). Patterns in the data were used to create categories in which additional information was organized (Merriam, 1988). Yin (2018) suggested using pattern matching to analyze data. Finally, the researcher develops "naturalistic generalizations," which may be applied to similar situations and cases (Creswell & Poth, 2018, p. 206). Further, since there were multiple cases, cross-case analysis was used; patterns were established within a case, and then those cases were compared to find commonalities (Yin, 2018).

Trustworthiness

To be trustworthy, the study must be credible, dependable, and transferable. I followed the necessary steps to obtain the most valid information. This requires a thorough explanation and examination of the methods involved in the research process. Numerous strategies to ensure the validity of the study were performed.

Credibility

Meyer (2001) indicated that credibility could be established through extensive information gained through the interview process. Credibility can be checked through "member checking or seeking membership feedback" (Creswell & Poth, 2018, p. 261). Ideas within the interview process were explored and fact-checked through additional meetings with the interviewee. Member checks involve presenting the interpretations of data to the source of the information for the participant to ensure the accuracy of the interpretation (Creswell & Poth, 2018). Creswell and Poth (2018) suggested, "corroborating evidence through triangulation of multiple data sources" (p. 260). In addition, I built trusting relationships with the participants through extensive time spent in the field (Creswell & Poth, 2018).

Transferability

Meyer (2001) indicated that the use of multiple cases makes the study's results more transferable. Therefore, I used multiple cases to illustrate the issue under study. In addition, I provided clear procedures and data analysis so that the research could be replicated (Meyer, 2001). Yin (2018) suggested using at least two cases because similar conclusions from two cases that are independent of each other are more compelling than using only one case. Rich, comprehensive descriptions of the site and participants improved the transferability of my study;

it will allow it to be conducted in a similar setting, which, if recreated, may provide similar conclusions.

Dependability

Creswell and Poth (2018) indicated that the auditing process can determine dependability. The auditor determines if the interpretation and conclusions are supported by the data (Creswell & Poth, 2018). Creswell and Poth (2018) suggested that the auditor, usually a peer, has no connection to the case. Using the researcher's tracking document, the auditor would review the entire study and its findings (Creswell & Poth, 2018). As Merriam (1988) suggested, I explained in detail how I collected data and arrived at my conclusions related to the themes identified so that the auditor could follow the same trail and understand how I came to my conclusions. The auditor, a peer, had knowledge of qualitative data analysis and had recently completed her doctoral degree in education.

Confirmability

Confirmability was achieved through audit trails and triangulation. I provided a detailed description of how I came to my conclusions so that the process could be audited. Lincoln and Guba (1985) indicated that the auditing process establishes confirmability by showing that the findings are informed by the data and by providing a thorough understanding of the analysis so that the auditor can deem whether the researcher's practices are sound. Triangulation uses multiple sources of data "to provide corroborating evidence" (Creswell & Poth, 2018, p.240). I used interviews, observations, and documents to understand how teachers perceive and promote equity. The three sources provided recurrent or similar themes, which added to the validity of my findings.

Ethical Considerations

A specific concern of this study was the comfort of the individuals involved because I have a direct relationship with some participants. Therefore, I protected the identity of participants by creating pseudonyms (Creswell & Poth, 2018). I was transparent about my intentions, and participants knew the nature of the research being conducted (Creswell & Poth, 2018). Participants were informed about the nature of the research, procedures, risks, benefits, compensation, confidentiality, voluntary nature of the study, and terms of withdrawal, on the consent form (Appendix D). Potential participants had the opportunity to sign the consent form if they felt comfortable doing so.

Observations may be disruptive to the site and individuals. I respected the study site and minimized disruptions by building trust within the site and with the participants (Creswell & Poth, 2018). Prior to data collection, I received approval from the Institutional Review Board, which ensured that the research was ethical (Appendix A). Data is being kept in a secure, password-protected location. Recordings are accessible to the researcher on a password-protected hard drive and will be destroyed after a designated period (Appendix D) (McCrae & Murray, 2008).

Summary

This qualitative, collective case study has the potential to shed light on organizational learning practices that perpetuate the disparities within the dual enrollment program. Three high schools working in collaboration with Three Rivers Community College served as the cases in this study because they are representative or typical of the problem. Criterion-based sampling was used to select the participants. Twenty dual enrollment faculty members, including five white males and 15 white females, served as the sample pool for this study. From the sample pool, 11 participants served as the sample size. Interviews from dual enrollment faculty,

observations, and an exploration of documents provided a wealth of data. The data explained the central question, which seeks to understand how dual enrollment faculty understand and promote equity within the dual enrollment program. Data were organized into files and tracked using a spreadsheet. A detailed description of each case was constructed. Each instance of the case was analyzed for themes; within-case and cross-case analysis was conducted. Finally, generalizations were drawn from the data in its entirety. Numerous strategies were employed to establish the trustworthiness of the study; this included ensuring that the process was credible, dependable, and transferable. This was accomplished by member checks to ensure credibility, a detailed auditing process to ensure dependability, and the use of multiple cases to ensure transferability. In addition, steps were taken to ensure the study was ethical. Those steps included receiving permission from the Institutional Review Board prior to data collection, protecting the identity of the participants, establishing trust with the participants, securing the data, and properly disposing of the data after an appropriate length of time.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this collective case study is to discover how dual enrollment faculty members understand and promote equity within the dual enrollment program at their respective high schools in collaboration with the partnering community college. The chapter includes participant descriptions and the data mined from interviews, observations, and documents in the form of narrative themes. Outlier data, data that did not answer the research questions but was deemed significant, and research question responses are discussed.

Participants

After obtaining consent from the IRB, individual sites, and community college partner, a recruitment letter was sent to each dual enrollment instructor in the sample pool. Of the 20 dual enrollment instructors, 11 agreed to participate in the study: four dual enrollment instructors from West High School, three dual enrollment instructors from East High School, and four dual enrollment instructors from South High School. Prior to the interviews and observations, participants signed consent forms. Interviews took place in person at the participants' schools, and observations were completed either prior to or immediately after the scheduled interview. The document study offered additional insight into participants' understanding of equity and equitable practices. Dual enrollment instructors were interviewed to collect information on how dual enrollment instructors define and promote equity within the dual enrollment program. In addition, information was collected about how their high schools and community college partner contributed to their understanding of equity and equitable practices. A brief description of the participants is listed in Table 1.

Table 1

Dual Enrollment Teacher Participants

Teacher Participant	Years Taught	Highest Degree Earned	Content Area	Years of Adjunct Experience
Jennifer	24	Masters	Humanities	7
Samantha	22	Masters	STEM	21
Melissa	25	Masters	Humanities	14
Emma	11	Masters	Humanities	7
Linda	42	Masters	Humanities	5
Lauren	7	Masters	Humanities	5
Jessica	12	Master +18 hours	STEM	3
Kimberly	19	Masters	STEM	7
Lisa	28	Masters	Humanities	10
Karen	36	Masters	Humanities	13
Christopher	10	Masters	Humanities	10

Dual enrollment participants' responses were similar within and across cases. A descriptive account of the participants, based on the answers to their interviews and observations, ensues. Participants' content area was described as either Humanities, which included the arts, literature, or languages, or STEM, which included science or math. This content area classification was chosen to protect the identity of the participants.

Jennifer

Jennifer has taught for 24 years and has served as an adjunct faculty member for seven years. Although she felt committed to achieving equitable outcomes through equitable practices, she acknowledged that dual enrollment, although open to everyone, was primarily taken by white, middle and upper-class students. She felt this could be remedied by increased recruitment efforts and educational workshops aimed at underserved populations.

Jennifer thought of equity in terms of giving each student what he or she needs to succeed. Equity was associated with empathy and a deep desire to reach her students. She believed this could be cultivated by building strong relationships and respecting the diversity within her classroom. Jennifer indicated that she had high expectations but acknowledged that each student progressed differently. Success was defined as a steady progression toward the mastery of the intended learning outcomes.

In terms of professional development, Jennifer felt the community college relied on the high school to provide educational opportunities for its employees. She described communication between the high school and partnering institution as inadequate, specifically regarding professional development. She felt she was the primary support system for her students but acknowledged she had received training from her high school on the value of respecting diversity.

Samantha

Samantha has taught for 22 years and has served as an adjunct faculty member for 21 years. Samantha believed equity was giving each student what he or she needed to succeed. She insisted equity and equitable outcomes were more likely to be obtained in dual enrollment because of the structure and built-in supports; however, when questioned further, she acknowledged she was their primary support. Samantha stressed the significance of building strong relationships, emphasizing the importance of discussing students' futures and what steps they could take to accomplish their career goals. She believed she had high expectations and felt many students were unprepared for the rigorous course load. Samantha was concerned with the cost of the material needed for her class and admitted that she would often purchase or find ways to provide the necessary material at no cost to her students, particularly those who may not be

able to afford the items. She also mentioned upper and middle-class students primarily took dual enrollment because of the costs associated with it, and that ultimately, it served to increase the opportunity gap.

In terms of professional development, Samantha recalled receiving training through the high school related to the disadvantages of using one's cultural lens to understand student behavior. She explained the significant impact this training had on her interactions with students. Samantha indicated there was little to no communication with the community college, and training had not been provided.

Melissa

Melissa has taught for 25 years and has served as an adjunct faculty member for 14 years. She defined equity as meeting students where they are and helping them master the learning objectives. Melissa believed mastery is attainable because she focuses on relationships, and through those relationships, she developed a better understanding of what each student needed. In addition, she believed it is important to provide a diverse curriculum to meet her students' varying interests and experiences. She credited the high school and community college for giving her the autonomy to choose what she included in the curriculum. Melissa believed it is important to teach students how to advocate for themselves; she saw this as an essential skill for college bound students. Melissa also promoted the idea of providing remedial classes to further prepare students for the rigors of dual enrollment.

Melissa admitted she had not received sufficient professional development on equity from the high school or the community college. However, she mentioned she felt tremendous empathy for her students and sought out opportunities for personal growth in this area through individual initiatives. She thought that the community college partner should concentrate their

efforts on recruiting a diverse population of students and making students aware of all the opportunities available to them. Melissa felt the counselors did a good job in this area.

Emma

Emma has taught for 11 years and has served as an adjunct faculty member for seven years. Emma believed equity was about meeting students where they are and providing for their individual needs. She stressed the importance of building relationships and being empathetic to the needs of her students, offering extensions on assignments for extenuating circumstances. However, she believed in holding students accountable and to rigorous standards. Emma stressed the importance of using a variety of texts offering various viewpoints. In addition, she noted the importance of her students exploring the power structures within society and understanding how those power structures influence how stories are told. She also felt that it was important that her students explore and understand their personal and implicit bias and how it influences their decisions. For instance, during the observation of her class, a Black female student discussed her research project, where she examined how discipline procedures disproportionately affected black students.

Within Emma's department, there was a strong push for an equity committee; however, she felt those efforts were purposely thwarted by a school system that catered to a culture of white supremacy. Emma described communication with the community college as limited and indicated meeting times were never convenient for the work schedules of high school dual enrollment teachers.

Linda

Linda has taught for 42 years and has served as an adjunct faculty member for the past five years. She believed dual enrollment had the capacity to create equitable outcomes because it

fostered a culture where all students were exposed to the rigors of college coursework in a structured, supportive environment, one they may not receive in a four-year college. She felt that dual enrollment courses introduced students to habits they would need to succeed in college. For instance, dual enrollment taught responsibility, self-advocacy, and confidence. Linda expressed immense empathy for her students because she felt she could relate to some of the hardships underrepresented students might face. For this reason, she expressed that it was important to her to create a supportive environment in her classroom. She believed in holding her students to high standards but at the same time, giving them "second chances" to be successful.

Because of the nature of her department, she and her department initiated the professional development she did receive. Linda felt like the community college had been supportive in the respect that they made students aware of the opportunities available to them. Although, she believed students would benefit from learning time management and study skills.

Lauren

Lauren has taught for seven years and has served as an adjunct faculty member for five years. She understood equity as giving each student what he or she needed to be successful. Lauren believed choice and diversity in the curriculum and building strong relationships with the students were vital to creating equitable outcomes within the classroom. She also thought it was important to discuss personal bias and acknowledge how it may filter into academia and interpersonal relationships. She emphasized the importance of creating a classroom culture that appreciated and celebrated diversity, especially by introducing various texts that were representative of different cultures.

Lauren indicated she felt a personal commitment to equity and often participated in outside opportunities for professional development. She felt like her school system stood in

opposition to discussions pertaining to equity and vehemently denied troubling issues affecting minority students. Lauren described the culture of the school community as hostile, particularly on issues of race. However, Lauren praised the community college for the freedom they gave the teachers to build their curriculum and the support they provided through their community college liaison.

Jessica

Jessica has taught for 12 years and has served as an adjunct faculty member for three years. She admitted that she did not necessarily think about being equitable; however, she felt she worked with all her students to ensure they were achieving their full potential. She often presented the material in different ways to meet the needs of each of her students. Jessica is a minority in her field, so she felt she served as a role model with her positive attitude toward her subject. She communicated her empathy for her students, which stemmed from an incident where she was told she would not succeed in her chosen field. Therefore, she prioritized communicating to students that they would be successful in her class.

Jessica communicated that professional development from the high school was limited. Other than the image of spectators of different heights looking over the fence at a ball game, which has become synonymous with equity in education, she could not recall professional development related to equity. She believed that the high school and community college effectively promoted dual enrollment to ensure equity of access. However, she was less sure about professional development offered by the community college, indicating that perhaps they provided it, and she may not be aware of it. Jessica suggested there may be a lack of effective communication on the part of the community college.

Kimberly

Kimberly has taught for 19 years and has served as an adjunct faculty member for seven years. As a minority in her field and a first-generation college student, she felt it was her responsibility to promote and recruit underrepresented students into her field. She believed it was important to teach to the individual, build strong relationships, eliminate the negative perception students may have about the subject, and be empathetic to students' needs.

Although Kimberly could not recall professional development offered by the community college, she suggested the need to study the classes' demographics to ensure marginalized students were represented. She acknowledged the benefit of the reduced cost of dual enrollment but questioned whether the costs still served as a barrier to dual enrollment. Kimberly recalled high school professional development related to equity but indicated it was divisive because it focused on race and made teachers feel their personal biases prevented equitable outcomes.

Lisa

Lisa has taught for 28 years and has served as an adjunct faculty member for ten years. Lisa thought the term "equity" had become a "buzzword" in education and felt it was important that students be held to the same expectations. Although she was willing to provide struggling students with additional help, she believed that students should be held to high standards and questioned whether the push for equitable outcomes resulted in lowered expectations. She saw herself as the primary support for her students and expressed the lack of support she received from the high school. Lisa discussed the importance of holding students accountable, having high expectations, and providing targeted support.

Lisa recalled the high school providing professional development related to equity but indicated it was personally offensive because it made her feel as though her bias prevented marginalized students from being successful. She could not recall specific professional

development from the community college but believed that the community college should take an active role in disaggregating the data and providing structured support for marginalized students. Lisa expressed concern that financial barriers may prevent some students from taking her class and acknowledged that the school had previously covered costs associated with dual enrollment.

Karen

Karen has taught for 36 years and has served as an adjunct faculty member for 28 years. Equity was giving students what they needed in order to be successful. Karen expressed the importance of creating a diverse curriculum so marginalized students would feel represented. She felt passionate about her subject and hoped it was reflected in her teaching. Karen indicated that there was limited professional development provided by the high school and community college. Karen thought the high school should do more to build students' social and cultural capital; however, she felt the high school had successfully created an inclusive environment. She indicated that at previous colleges, she had professional development related to identifying students at risk and providing those students with appropriate resources. Although she could not recall professional development offered by the community college, she admitted this might have been a result of inadequate communication.

Christopher

Christopher has taught for ten years and has served ten years as an adjunct faculty member. Christopher associated equity with fairness and thought he created fairness by meeting with students individually and addressing their specific needs. Although he could not identify any professional development provided by the partnering community college, he expressed that he had received professional development from another community college where he worked.

The professional development was associated with diversity and equitable practices. He suggested the high school counselors had been helpful. Christopher also mentioned the benefits of the high school providing tutoring through the honor society and the community college's writing center.

Results

Data collected from interviews, observations, and documents produced valuable insight regarding how dual enrollment instructors understood and promoted equity within the dual enrollment program. Upon transcription and analysis, several themes emerged: equity was associated with fairness and justice, teachers used a variety of practices to ensure equitable outcomes, teachers felt as though the high school had some influence on their understanding of equity and equitable practices, and teachers felt like the community college did not influence their understanding of equity and equitable practices. These themes were organized into subthemes, which specifically described their experiences.

Equity as Fairness

Teachers associated the term equity with being fair to their students. Fairness had multiple meanings and was unique to the teacher. For instance, when defining equity, Christopher stated, "I think it means to be kind of fair across the board with everything and to make sure everyone is getting a fair chance and getting an equal chance to succeed." The concept of fairness was generally defined as meeting the needs of the individual or treating students the same regardless of their barriers.

Giving Students What They Need to be Successful

To be fair to their students, several teachers stressed the importance of treating students as individuals with specific needs that must be met before achieving equitable outcomes. Emma

expressed this sentiment: “I see equity as meeting kids where they are. You’re not going to be able to just dole out the same exact thing for everyone and expect them to be able to do that.” Some teachers viewed those needs as deficits, while others attached no judgment to students’ individual needs. Fairness was achieved when all the needs of their students were considered.

Treating Students the Same Regardless of Barriers

Other teachers thought being fair and thus equitable meant treating students the same. For instance, Lisa described equity as, “I have the same expectations. Everybody has the same benefits, the same opportunities, the same lessons, the same information; nobody’s treated differently.” The concept of being “treated differently” was directed at students from marginalized subgroups. “Differently,” in this context, was associated with unfairness.

Equity as Justice

Equity was related to a sense of justice. Teachers felt empathy for their students or believed that systemic racism and bias prevented students from achieving their full potential. They sought to combat these disparities by promoting equity and equitable practices. Kimberly discussed her experiences as a first-generation college student and woman in the STEM field and expressed her desire to see her students achieve regardless of their backgrounds. She stated, “Every potential student is a potential future engineer or scientist, regardless of what their parents’ educational backgrounds is, what their socioeconomic background is, their ethnicity, their gender; these are potential future engineers, future scientists.”

Relating to Student Categorization as Underrepresented

Teachers valued equity and equitable practices because they related to the students’ designation as underrepresented in higher education. Linda expressed empathy because of a learning disability. She stated, “I do remember what it was like in high school, just somebody

saying you study harder, you need to work harder, and that was the answer." From her experiences, she adopted an attitude toward her students of empathy and desire to see all students achieve. Linda stated, "I'm not going to let them quit. I'm just not going to let them quit."

Combatting Systemic Racism and Confronting Personal Bias

Teachers expressed a critical awareness of the role racism played in creating inequitable outcomes and a desire, through equitable practices, to rectify disparities among subgroups. If they could not relate to students personally, they recognized inequitable outcomes as the product of systemic racism and personal bias. Melissa expressed, "Systemic racism is real, and it's present, and it's something that I didn't have a great understanding of because when you don't see it or experience it, you don't actually know it exists." She hoped to provide a sense of justice through equitable practices. Melissa said, "I think we need to have a better understanding of the different perspectives and the differences with our student population."

Teachers Use a Variety of Practices to Achieve Equitable Outcomes

To be equitable and to achieve equitable outcomes, teachers employed numerous practices. Teachers communicated the importance of relationships, classroom culture, targeted support, recognizing and responding to bias, flexibility, and accountability. Samantha discussed using several of these practices in her quest for equity: "I feel like all students achieve when you hold a high bar, give them the support they need, and offer extra help."

Building Relationships

Teachers felt that building relationships was central to creating equity in the classroom. Jennifer communicated the importance of relationships: "I am a relationship teacher. I like to talk to you one-on-one, and I like to see what you need and what you know, so I can make adjustments for that, to help everybody reach the same level." Creating strong relationships

enabled teachers to assess their students' needs better. Part of the relationship process included conversations. Conversations served the purpose of assessing students' needs, but they also provided an opportunity for dual enrollment teachers to impart knowledge about being successful in college and in the workforce.

Teaching a Diverse Curriculum Representative of the Student Population

Teachers reported the importance of providing opportunities for students to see themselves represented in the curriculum. This created interest, but it also served as a way to communicate different perspectives. Emma stated, "I try to offer a variety of texts and making sure that my authors are varied as well as the reading levels; interest is important." Teachers in the humanities were more likely to include diversity in their curriculum because there was more room to modify the material used to teach the subject.

Creating an Inclusive Culture

Teachers strived to create a classroom culture where students felt respected, valued, and included. For instance, Lauren referred to the "wellness checks" she did during individual conferencing. She used these as an opportunity to connect with her students. After reflecting on a podcast about equity that she was particularly moved by, Lauren used the "wellness check" as a chance to discuss feelings of isolation and exclusion, especially among her students of color. Referring to a conversation she had with students, Lauren stated, "I want you to know I am here for you. I want you to know I'm a safe space. They tell me, that in this room, they never feel like that [isolated or excluded]."

Providing Targeted Supports

Teachers attempted to modify their instruction or connect students with services that were specific to their needs. In this way, teachers provided targeted and appropriate support for the individual. For example, Christopher completed writing conferences with each student. He

stated, “I really try to work with students one-on-one to make sure they understand what to do. If somebody needs extra help, I encourage them to contact me, send me a draft to their paper, and I give them feedback.”

Teaching Students to Recognize Bias and How It Influences Narratives

Teachers sought opportunities to explore how bias impacted what is taught in our nation’s schools. Emma said, “We talk about hegemony and power structures and who gets to tell a story and why that matters. We do a lesson on the canon. So like, what is the American canon? Okay. Who decides what’s in the canon?” Teachers explored their personal biases and asked that students critically analyze how bias influences how stories are told. In this way, teachers and students became critically aware of power structures and how those structures influence every aspect of our society.

Being Flexible but Holding Students Accountable

Teachers discussed the relevance of remaining flexible with assignments and due dates. They stressed the importance of being sympathetic to what is going on in a student’s life when considering due dates, accepting late work, and considering assignment requirements. For instance, Jessica discussed how she changed the requirements for an assignment because a student had been absent from her class for several days. Jessica said, “And so one of the things I did is I let them have the formulas because I don’t think they should get it wrong because I don’t remember the formula.” Most teachers remained flexible while still requiring students to master the objectives. This was seen as the benefit of dual enrollment. Students were introduced to college-level work, but they were still treated like high school students.

The Community College Has Not Impacted Teachers’ Understanding and Practices

Teachers had difficulty recalling any particular instances of professional development offered by the community college; however, several teachers questioned whether this was

because they did not offer professional development or did not communicate those offerings. Karen conveyed this idea when she said, “No judgment, it’s just that I haven’t gotten anything from them, I think, about equity, and if I did, it didn’t, it wasn’t enough that I remember it.”

A Lack of Communication

Several teachers indicated they were unsure if the community college offered professional development and suggested there was a lack of communication on the part of the community college. Jessica conveyed this sentiment, “I don’t know if them not doing it is because of, they are not actually doing it, or there are resources that I’m just not aware of.”

The High School Has Impacted Teachers’ Understanding and Practices

Many teachers recalled receiving professional development related to equity and equitable practices. Some teachers reflected on the experience as positive, while others felt the professional development was a personal attack on their integrity. Teachers noted their peers’ important role in forming their understanding of equity and equitable practices.

Being Fair and Understanding Personal Bias

Teachers discussed professional development related to being fair and understanding personal bias. As a result of the professional development, it influenced the way they interacted with students. Samantha recalled a book study about using one’s cultural lens to interpret student behavior. She stated, “You had to touch on different language dialects, just understanding the posturing, and like basically, just becoming more aware of what the bar, behavioral-wise, that you hold is. You’re being, you’re not being equitable.” This book study had a positive impact on the way she interpreted student behavior. While this was a positive experience for her, others reflected on similar professional development as a negative experience, recalling feeling defensive. For instance, Lisa stated, “I mean honestly, I, and I know I’m not the only one, a lot of people are saying it, you know, now, I feel like a racist.” Although the topic of the professional

development at all sites was similar, the way the professional development was delivered impacted how teachers received the professional development. Teachers were more responsive to in-house professional development delivered by their peers and less open to an outside speaker.

Learning from Peers

Within the context of the high school learning environment, teachers discussed the impact other teachers had on forming their understanding of equity and equitable practices. Within a department, particularly when there was more than one dual enrollment teacher, teachers reported the positive influence sharing resources had on the practices they used to promote equity. For instance, Lauren discussed her colleagues' impact on her: "My coworkers, who have been teaching way longer than me, they've shown me how to be better and be better for them."

Outlier Themes and Data

There were several themes related to equity that did not answer the research questions. Teachers expressed concern over issues within the program that hindered equity. For instance, teachers mentioned the cost of dual enrollment acting as a deterrent to some students. Teachers believed the culture of the school and the surrounding community prevented specific demographics from excelling. In addition to concerns, teachers discussed positive aspects of the program. They were pleased with the high school navigators and school counselors, who often promoted programs and provided students with resources and information about dual enrollment. They also indicated that the community college gave them the freedom to make decisions about their curriculum and resources for their students.

Outlier Finding #1

Teachers expressed concern over the cost of dual enrollment programs, indicating that some students may be unable to pay for dual enrollment credits. Cost concerns could result in

inequitable access to dual enrollment courses. Kimberly communicated this concern, “I know it’s harder for some students because I have students that their parents will cut a check for that, and I have students that will pay out of their paycheck for themselves because they don’t have the means.” Several teachers expressed concern that the majority of students who are taking these courses are middle and upper-class white students, and they questioned whether this was the intended demographic.

Outlier Finding #2

Teachers expressed concern about how the school’s culture and surrounding community affected equity goals. Specifically, they mentioned schools thwarting their efforts at forming an equity committee and ignoring incidents of racism. Teachers also raised concerns over the community and the open hostility some parents felt toward race-related issues. Teachers felt as though these concerns prevented them from advancing equity-related goals. For instance, Lauren discussed several teachers’ desire to create an equity committee and the school’s denial that there was a need for one. Lauren stated, “And then we tried to bring it [the need for an equity committee] back up that year, and they told us, no, it’s not necessary. So, it just died, and we all tried to make something happen.”

Outlier Finding #3

Teachers discussed the positive impact school counselors and high school navigators had on students. They often provided students with resources and information about dual enrollment, higher education, and the workforce. Teachers saw this as a way to advance equity goals. Jessica discussed the positive impact of high school navigators and school counselors. She stated, “They did a big thing with English 12, conducting interviews, and they got people from the community to interview the students and grade it; it was really cool. She does a lot of stuff. We’re lucky.”

Outlier Finding #4

Teachers were pleased they had the freedom to design their curriculum the way they saw fit. They felt this allowed them to include diversity in the curriculum. Lauren described this sentiment, “They give us a lot of freedom, which I think helps us build equity; the fact that they are not in my classroom, and the fact that they do just trust me to do my job, helps me.”

Research Question Responses

Interviews, observations, and the study of documents provided a wealth of information. The recurrent themes are used to provide narrative answers to each of the research questions.

Central Research Question

How do dual enrollment faculty members define and promote equity within the dual enrollment program? Faculty members defined equity as a means to promote fairness and opportunity to attain justice for their students. Fairness was thought of in two different ways: giving students what they need to be successful or treating students the same regardless of their barriers. For instance, Karen communicated the concept of giving students what they need, “To me, it means students who have the ability and need a little help should get that help.” Other teachers described fairness as treating students the same. For example, Kimberly stated, “It’s just teaching each child the same, treating everybody as a person, looking beyond ethnic and socioeconomic barriers and gender barriers, especially in science.” In addition, equity was seen as a way to provide justice for their students. The desire to provide justice stemmed from feelings of empathy or an acknowledgment of systemic racism. Kimberly wanted to see all her students achieve, especially those underrepresented in college, because of her designation as a first-generation and minority in her field. She stated, “Neither of my parents went to college. My father didn’t finish high school. I’m a girl who liked math and science, which was weird, and it was natural for me.” Teachers also acknowledged systemic racism as a root cause of inequitable

outcomes and expressed a desire to combat its effects. Emma expressed her concern about systemic racism: “I think there’s a lot of really big systemic issues with that. I mean I guess just white supremacy can be an issue there.”

Teachers used multiple practices to ensure equitable outcomes. Those practices were building relationships, incorporating diversity into the curriculum, creating an inclusive environment, providing targeted support, teaching students to understand bias, and being flexible while still holding students accountable. Melissa described the importance of building relationships: “I think it’s really about trying to get to know the students on a personal level, so I can understand what their personal challenges might be.” Emma illustrated the importance of incorporating diversity into the curriculum by providing a variety of texts by diverse authors in her classroom library. She expressed, “So students can pick their own books, which I think is helpful because then, they can pick things that are interesting to them.” Karen communicated the importance of an inclusive environment: “I try to include everybody because I think it’s the right thing to do, and I feel strongly about it.” Lisa suggested providing targeted support: “So if I see somebody who is struggling more than somebody else, I always offer an extra lesson, or if you need extra clarification, I tell them to come see me tomorrow during AAP.” Lauren communicated the importance of teaching students to recognize personal bias: “It’s about teaching students that their perceptions of the world are not always accurate.” Linda communicated the importance of flexibility regarding due dates and assignment requirements: “I believe in do-overs. They do a project, and it flops; they have to write reflections on everything they do. Instead of tell me what they did really well, tell me what they didn’t do well and what they would change.”

Sub Question One

How has the partnering community college influenced how dual enrollment faculty members define and promote equity within the dual enrollment program? Teachers did not think the community college partner had impacted their understanding of equity and equitable practices; however, they often attributed this to a lack of communication on the part of the community college. Lisa described professional development offered by the community college: "I don't think the college has done anything like that for any of their off-site, adjunct instructors, or maybe that's more of a localized, on-site kind of thing. I really don't know because we don't receive much communication from them."

Sub Question Two

How has the individual high school influenced how dual enrollment faculty members define and promote equity within the dual enrollment program? Teachers felt the high school had influenced their understanding of equity and equitable practices regarding their understanding of how bias influenced their interactions with students. Depending on the delivery method, teachers viewed professional development as either a positive or negative experience. Professional development that took place in-house was perceived favorably, while an outside speaker was perceived negatively. Dual enrollment instructors credited their peers with positively influencing their understanding of equity and equitable practices. Lisa negatively reacted to an outside speaker: "He [the speaker] kind of does make you feel like what I'm doing is wrong, like I'm the problem."

Summary

Teachers viewed equity and equitable practices as being fair and providing a sense of justice. Although teachers voiced concerns about how institutional racism negatively impacted outcomes among marginalized students, they relied heavily on remediation to achieve equity.

Using remediation would suggest that some teachers held deficit views of their students. Deficit views focus on the student as the impetus for disparities in outcomes. A deficit cognitive lens allows one to overlook institutional practices that negatively impact marginalized students. Teachers used a variety of practices to obtain equitable outcomes; however, practices were more likely to be culturally sensitive rather than racially just. The lack of communication on the part of the community college prevented teachers and students from receiving valuable training, services, and resources. Teachers felt the high school had influenced their understanding of equity and equitable practices; however, teachers viewed professional development differently based on its delivery. The most meaningful professional development took place in-house and was delivered by their peers.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this collective case study is to discover how dual enrollment faculty members understand and promote equity within the dual enrollment program at their respective high schools in collaboration with the partnering community college. After interpreting interviews, observations, and documents, several themes arose. From those themes, interpretations are discussed. These interpretations lead to implications for policy and practice. Theoretical and empirical implications drawn from the research are discussed. Lastly, limitations, delimitations, and suggestions for future research, based on the findings, are explored.

Discussion

The collective case study used interviews, observations, and documents to reveal dual enrollment teachers' understanding of equity and equitable practices. In addition, the study revealed how teachers' understanding was influenced by organizational learning. From this collective case study, several themes emerged: equity was associated with fairness and justice, teachers used a variety of practices to ensure equitable outcomes, teachers thought the high school had some influence on their understanding of equity and equitable practices, and teachers thought the community college did not influence their understanding of equity and equitable practices. Upon consideration of these themes, interpretations were extracted.

Interpretation of Findings

After a summary of thematic findings, significant interpretations from those findings ensue. Interpretations include, teachers' understanding of equity and equitable practices was informed by a justice-centered approach to equity, teachers' espoused theories did not always

align with their theories-in-use, double-loop learning was more likely to occur when teachers were given opportunities to learn from their peers within the context of their schools, and a lack of communication between the high school and partnering community college made it difficult for teachers to enact proactive initiatives related to equity. The community college, high schools, and dual enrollment instructors can benefit from these findings and interpretations.

Summary of Thematic Findings

Analysis of the data revealed several themes. Teachers thought of equity as means to promote fairness and attain justice for their students. Fairness had two distinct meanings: (1) to meet a student's individual needs with the goal of mastering course objectives and (2) to treat students the same regardless of their barriers. Two motives drove a desire to attain justice: (1) teachers were empathetic to their students' needs because they identified with the categorization of underrepresented, and (2) teachers recognized that inequitable outcomes was a product of systemic racism. Teachers used various practices to obtain equitable outcomes: building relationships, teaching a diverse curriculum representative of the student population, creating an inclusive environment, providing targeted support, teaching students about bias and understanding how it influences how stories are told, and being flexible while holding students accountable. Teachers felt their high schools had influenced their understanding of equity and equitable outcomes and credited their peers with being instrumental in their development as teachers. However, teachers were less likely to believe the community college had impacted their understanding, which was attributed to a lack of communication from the community college. From these thematic findings, several significant interpretations arose: teachers' understanding of equity and equitable practices was informed by a justice-centered approach to equity, teachers' espoused theories did not always align with their theories-in-use, double-loop learning

was more likely to occur when teachers were given opportunities to learn from their peers within the context of their schools, and a lack of communication between the high school and partnering community college made it difficult for teachers to enact proactive initiatives related to equity.

A justice-centered approach to equity informed teachers' understanding of equity and equitable practices. The core components of a justice-centered approach to equity involve cognitive empathy, critical consciousness, and the use of critical and culturally relevant pedagogy (Morales-Doyle, 2017; Zhou et al., 2020). Elements of these components informed how teachers in this study understood equity and influenced the practices they used to ensure equitable outcomes. Zhou et al. (2020) acknowledged the importance of cognitive empathy and its influence in producing an equitable environment. Teachers who displayed empathy were more likely to act with concern for their students and act when confronted with injustices (Decety & Yoder, 2016). Furthermore, Whitford and Emerson (2019) found that empathy intervention reduced implicit bias. Many teachers in this study expressed empathy because they related to students' designation as marginalized or underrepresented in higher education. For this reason, they sought to create an inclusive environment where students felt valued, respected, and represented.

Culturally relevant pedagogy is a method of teaching that empowers marginalized students by placing value on students' academic successes and developing their cultural competence and critical consciousness (Ladson-Billings, 1995). Critical consciousness, a term associated with Paulo Freire's critical pedagogy, is the act of being critically aware of how power structures affect societal norms. Ladson-Billings (1995) argued the relevance of teaching students to evaluate institutional and societal barriers that produce inequitable outcomes, thus developing students' critical consciousness. Teachers in this study practiced critically and

culturally relevant pedagogy. They sought out opportunities to introduce students to diversity through the curriculum, thus building students' cultural competence. They also encouraged students to recognize and question the power structures within society and reflect on how those structures affected which stories were told and how they were told. This type of analysis developed students' critical consciousness.

Teachers' espoused theories did not always align with their theories-in-use. Argyris (1997) argued that an organization's measure of effectiveness could be ascertained by whether the organization or its employees' espoused theories, theories they claim they believe, match their theories-in-use. For instance, teachers in this study indicated they believed institutional racism prevented students from achieving equitable outcomes. This belief becomes a part of their espoused theories on equity. The teachers' espoused theory on equity acknowledged that institutional barriers were the primary catalysts for inequitable outcomes. However, when communicating their understanding of equity, some teachers indicated that equity involved meeting students where they are and giving students what they need. Several teachers expressing this viewpoint associated students' needs with deficits.

The concept of marginalized students operating at a deficit is known as a deficit ideology and is often associated with low-SES students and students of color (Hall et al., 2019). Several studies have indicated that deficit views held by teachers lead to students underperforming (Battey & Franke, 2015; Ellis et al., 2016; Goode et al., 2020). This is considered a self-fulfilling prophecy; students rise to a teacher's level of expectations (Hall et al., 2019). Teachers with deficit views were more likely to act as gatekeepers, placing restrictions on students they believed would not be successful in their classes (Goode et al., 2020; Gorski, 2016b; Zhou et al., 2020). While not a common practice among dual enrollment teachers, there were instances

where teachers voiced their concerns about students not having the wherewithal to participate in the program. In this way, they acted as gatekeepers to the dual enrollment program.

Furthermore, teachers who attribute underperformance to a deficit within the student are less likely to look internally at their own bias and to acknowledge the systemic issues that contribute to inequitable outcomes (Goode et al., 2020). Although some teachers claimed they believe that systemic racism is the root cause of inequitable outcomes within the dual enrollment program, their theories-in-use suggest that their decisions are informed by deficit views. Deficit cognitive frames can lead to equity practices that are redistributive and less socially just.

Double-loop learning was more likely to occur when teachers had opportunities to learn from their peers within the context of their schools. Double-loop learning involves identifying the underlying values within the institution that may have led to a mismatch between an organization's goals and their actuality (Argyris, 1997; Argyris & Schön, 1978, 1996). Teachers who participated in professional development where they collaborated and learned from their peers were more likely to examine and understand the institutional context that led to the problem. They worked with teachers to strengthen equity goals for their departments. For instance, two dual enrollment teachers within the same department collaborated to create an extensive, culturally diverse classroom library collection. They created lessons where students examined implicit and explicit bias and were empowered to create solutions to their school's problems. In addition, they attempted to form an equity committee to change their school's culture, which they viewed as hostile to equity goals.

Argyris and Schön (1996) argued that social and cultural features of an institution might discourage self-reflection because it challenges the institution's perceived image. This would result in the institution providing professional development that was single-loop learning in

nature. Single-loop learning attempts to fix a problem without understanding the root cause. An organization participating in single-loop learning exacerbates inequitable outcomes by perpetuating organizational learning problems, which may influence the views and actions of its employees (McNair et al., 2020).

A lack of communication between the high schools and community college made it difficult for teachers to enact proactive initiatives related to equity. A study by Mollet et al. (2020) found that dual enrollment teachers felt ill-prepared to implement equity-related initiatives due to a lack of communication among the district, high school, and community college. Duncheon and Relles (2020) reiterated this finding, claiming that a breakdown in communication between the high school and community college prevented the dual enrollment program from meeting its intended outcomes. Dual enrollment teachers in this study were unaware of resources available to their students or opportunities for professional development, although they believed resources and opportunities probably existed. They attributed this to a failure in communication. Mollet et al. (2020) indicated that dual enrollment teachers struggled with their role as both an employer of the community college and high school. Limited communication between these two entities made teachers rely primarily on their high schools for information and resources (Duncheon & Relles, 2020). Dual enrollment teachers in this study relied primarily on their high schools for support. Teachers' lack of knowledge about the community college and its resources limited teachers and prevented them from providing potentially helpful services to their students.

Implications for Policy or Practice

After reflecting on the findings of this collective case study, there are implications for policy and practice. Efforts to increase communication between the high school and community

college and to improve the quality and type of professional development provided to dual enrollment teachers are integral to creating equitable outcomes in dual enrollment.

Implications for Policy

Community colleges must make it a policy to communicate student support services to dual enrollment teachers and students. As community college students, dual enrollment students are entitled to all of the advantages traditional college students receive. Dual enrollment teachers indicated they received limited communication from the community college and were unsure if opportunities and services were available to them and their students. For instance, students are typically directed to student support services in the student development course, College Success Skills; however, there is no requirement for dual enrollment students to receive this class prior to enrolling in dual enrollment courses. Furthermore, there is no consistency among sites regarding this class. For example, one site incorporated college success skills into the dual enrollment English course. At other sites, dual enrollment students were encouraged to take College Success Skills directly from the community college and pay full tuition. Teachers indicated the importance of their students taking the College Success Skills course, discussing the necessity of the skills they acquired while in this course, such as study skills, computer literacy, knowledge of student services, and time management. These skills were attributed to providing a more equitable start to dual enrollment students.

In addition to this finding, information from this collective case study indicates the need for the high schools and community college to work together to implement strategies consistent with EdEquity's (2020) resources, which are based on best practices and empirical evidence, for training instructors. EdEquity (2020) recommends several strategies for ensuring equity in advanced programs: studying data to identify barriers that prevent students of color and low-

income students from enrolling, creating clear, measurable goals for increasing access to and success in advanced programs, increasing opportunities for advanced coursework, and supporting students of color and low-income students' success in advanced coursework. Requiring the high schools and community college to implement these strategies would increase the likelihood of achieving equitable outcomes in dual enrollment. To effectively implement these strategies would require high schools and the community college to provide teachers with appropriate training and time to execute these goals.

Implications for Practice

Findings from this collective case study highlight the need for teacher-driven professional development on understanding implicit bias to combat deficit views, building cultural competency, and incorporating EdEquity's (2020) strategies to ensure equity in advanced programs. Professional development was most effective and positively received when teachers led those efforts; therefore, learning at these schools should be teacher-driven. Teachers at these sites should evaluate the school's underlying values, policies, and cultural aspects that may impede equity. Findings from such a study would benefit teachers by raising their critical awareness while also identifying potential issues within the institution that contribute to inequitable outcomes.

Furthermore, findings from this collective case study indicate the need for time and opportunity to collaborate with department members on equity-related issues. All dual enrollment teachers within the community college's region should be encouraged to collaborate with teachers who share their discipline. Findings from this study indicated that sites with more than one dual enrollment teacher in an academic discipline were more likely to engage in practices consistent with EdEquity. These teachers were more introspective with issues such as

personal bias, more likely to create assignments that developed students' critical consciousness, and more likely to use teaching methods consistent with critical and culturally relevant pedagogy.

Theoretical and Empirical Implications

Argyris and Schön's research on organizational learning found that single-loop learning and a mismatch between an employee or employer's espoused theories and theories-in-use contributed to an ineffectual learning environment (Argyris, 1997; Argyris & Schön, 1978, 1996). This collective case study supported Argyris and Schön's research; it showed that some teachers' espoused beliefs did not match their theories-in-use. For instance, teachers claimed to believe in systemic racism; however, some teachers harbored deficit views of their students. The espoused belief that systemic racism leads to inequitable outcomes suggests that the problem exists and is exacerbated by the institution. In other words, the institution produces an environment that is hostile to equity; however, deficit views blame students for their disparities (Hall et al., 2019). When an organization does not seek to identify and understand the institutional barriers that influence a problem, single-loop learning is more likely to occur. Argyris and Schön's concept of single-loop learning has been used to explain how inequities are attributed to deficits within students (Bensimon, 2005; Bensimon & Malcolm, 2012). This study confirmed the theory that single-loop learning and a mismatch between employees' espoused theories and theories-in-use created an ineffectual learning environment. This is consistent with Liera and Dowd's (2019) research that found that organizational learning was successful in teaching faculty what it meant to be change agents in the quest for equity but less successful in teaching faculty to implement actual changes. This study extends research on organizational learning. It showed that teachers were more likely to engage in double-loop learning when given

time and opportunities to collaborate with their peers. Teachers were more likely to investigate institutional barriers that contributed to inequitable outcomes, implement just practices centered on developing critical consciousness, and practice critical and culturally relevant pedagogy. With the influence of their peers, they were also more likely to examine their understanding and practices related to equity. This is consistent with Hakkola et al. (2021), who found that faculty members who engaged in self-reflective practices centered on equity were more likely to initiate conversations about "equity-minded change" (p. 9).

Findings from this collective case study were consistent with previous research that found teachers held deficit views of students of color and low-income students (Battey & Franke, 2015; Ellis et al., 2016; Goode et al., 2020; Mollet et al., 2020). However, this finding conflicts with many teachers' beliefs and the practices they implemented. Gorski (2016b) suggested this conflict could be explained: "teachers were trained to be culturally sensitive rather than racially or linguistically just" (p. 222). All of the teachers in this study were culturally sensitive, and some of the teachers were racially just. Racially just teachers were more likely to be teachers who had opportunities to collaborate and consult with their peers on issues related to equity and equitable practices. This study was consistent with Allee-Herndon et al. (2020) who found that teachers used inclusive practices regarding the instructional material they used in the classroom but were less likely to use critical reflection and transformational practices. However, this study showed that teachers who had the opportunity to collaborate with their peers were more likely to do both, use inclusive practices regarding instructional material and use critical reflection and transformational practices. Teachers who were able to collaborate on issues of equity built lesson plans that asked students to recognize implicit bias, analyze how bias influenced how stories were told, and take actions to rectify real-world problems. This study was consistent with

Kitchen (2020), who found that all teachers were open to expanding their understanding of equitable practices and had a high degree of cognitive empathy. Although some teachers held deficit views, all teachers wanted to know how they could best meet the needs of their students.

Limitations and Delimitations

Although not intentional, participants were white teachers, primarily female, dual enrollment instructors. Most teachers had extensive experience and had taught for many years. Although they were white teachers who could identify with students based on their designation as low-income, first-generation, or learning disabled, all underrepresented categories in higher education, they could not necessarily relate to issues of racial discrimination. The absence of teachers of color limited this study. In addition, most teachers were veterans who received their initial training before these issues came to the forefront. The absence of first-year teachers acted as a limitation to this study. Other limitations included the rural location. Teachers at each location discussed the school's culture and surrounding community, acting as a deterrent to implementing equity-related goals. Excluding inner-city and schools with a more diverse population was a limitation of this study.

A decision was made only to examine the dual enrollment program and dual enrollment teachers. This population was chosen based on research indicating inequitable outcomes in dual enrollment in the area of enrollment and completion in higher education. Due to my experience as a dual enrollment teacher, I decided to examine this specific program. However, the argument could be made that all teachers within the public school could have been included because inequitable outcomes exist regardless of whether students take dual enrollment classes.

Recommendations for Future Research

Considering the findings, future recommendations include changing the focus to how communities of practice influence how teachers understand equity and the practices they choose to promote equity. This collective case study found that teachers were more likely to engage in double-loop learning or effective organizational learning when they had opportunities and time to collaborate. Extending research to explore communities of practice would shed light on how peers influence teachers' understanding and the practices they use to promote equity. In addition, it would be beneficial to explore other community colleges and high schools that offer dual enrollment to investigate their learning environment. Data gained may provide insight into whether these institutions provide professional development conducive to advancing equity goals.

Considering the limitations and delimitations, including a more diverse population of teachers, to include teachers of color, would provide valuable insight and show how race might impact a teacher's understanding of equity and the practices teachers of color use. For instance, Gershenson et al. (2020) found that Black students with at least one Black teacher were more likely to aspire to college. In addition, exploring pre-service teachers and new teachers' understanding of equity would provide valuable insight into how teacher education programs influence pre-service and new teachers' understanding of equity. Expanding the study to include all teachers in PreK-12 would provide a complete understanding of how the PreK-12 educational systems influence their teachers' understanding of equity and equitable practices. In addition, expanding the location to include schools with a more diverse population of students and teachers would provide interesting insight regarding equity and equitable practices.

Conclusion

Dual enrollment provides students with educational opportunities that promote persistence and completion in higher education; however, it fails to produce equitable outcomes among marginalized subgroups. Teachers directly impact student outcomes; therefore, it is important to understand how dual enrollment teachers define equity and promote it through their practices. Their understanding, which is informed by their learning environment, has the potential to inhibit or advance equity in dual enrollment. This study revealed that teachers' knowledge base was informed by best practices and was consistent with EdEquity, a framework for producing equity in education. However, interviews and observations revealed teachers' espoused theories did not always align with their theories-in-use, which was informed by a deficit ideology and resulted in the use of remediation as a means to ensure equity. Teachers were more likely to examine personal bias and create lessons that built students' critical consciousness when they were given time and opportunities to collaborate with their colleagues. Professional development was most effective at producing best practices when it was delivered in-house, by teachers' peers. Teachers relied primarily on their high schools for enrichment and were unaware of the services the community college had to offer. A lack of communication on the part of the community college prevented dual enrollment teachers from accessing potential resources for themselves and their students. In light of Argyris and Schön' (1974) theory of organizational learning, discrepancies between espoused theories and theories-in-use as well as implementation of single-loop learning contributed to inequitable outcomes within the dual enrollment program.

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Appendix A

IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

February 18, 2022

Michelle Yates
Kevin White

Re: IRB Exemption - IRB-FY21-22-508 EXPLORING DUAL ENROLLMENT FACULTY MEMBERS' PERCEPTIONS OF EQUITY: A COLLECTIVE CASE STUDY

Dear Michelle Yates, Kevin White,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix B

Site Approvals

December 6, 2021

After careful review of your research proposal entitled "Exploring Dual Enrollment Faculty Members' Perceptions of Equity: A Collective Case Study," I have decided to grant you permission to contact our faculty and invite them to participate in your study.

Check the following boxes, as applicable:

(✓) I will provide our dual enrollment faculty member list to Michelle Yates.

(✓) I grant permission for Michelle Yates to contact dual enrollment faculty members to invite them to participate in her research study.

Dear Mrs. Yates:

After careful review of your research proposal entitled "Exploring Dual Enrollment Faculty Members' Perceptions of Equity: A Collective Case Study," [redacted] has granted you permission to access our dual enrollment faculty list and invite them to participate in your study.

We will provide our dual enrollment faculty list to Michelle Yates, and Michelle Yates may use the list to contact our dual enrollment faculty to invite them to participate in her research study.

Dear Mrs. Yates:

After careful review of your research proposal entitled "Exploring Dual Enrollment Faculty Members' Perceptions of Equity: A Collective Case Study," I have decided to grant you permission to contact our faculty and invite them to participate in your study.

Check the following boxes, as applicable:

☑ I will provide our dual enrollment faculty list to Michelle Yates and Michelle Yates may use the list to contact our members to invite them to participate in her research study.

☑ I grant permission for Michelle Yates to contact dual enrollment faculty members to invite them to participate in her research study.

Dear Mrs. Yates:

After careful review of your research proposal entitled "Exploring Dual Enrollment Faculty Members' Perceptions of Equity: A Collective Case Study," I have decided to grant you permission to contact our faculty and invite them to participate in your study.

Check the following boxes, as applicable:

☑ I will provide our dual enrollment faculty list to Michelle Yates.

☑ I grant permission for Michelle Yates to contact dual enrollment faculty members to invite them to participate in her research study.

Appendix C

Teacher Recruitment Form

Dear Dual Enrollment Faculty Member,

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of the research is to understand how dual enrollment faculty members define and promote equity within the dual enrollment program. It also entails the role of the high school and community college's influence in shaping your understanding of the issue, and I am writing to invite eligible participants to join my study.

Participants must be a dual enrollment instructor, serve as adjunct faculty at Rappahannock Community College, and teach at one of the three identified high schools. Participants, if willing, will be asked to participate in a questionnaire, which includes demographic information and will take approximately five minutes, a 45 minute to 1 hour interview concerning your thoughts about dual enrollment. The interview will take place in-person or on-line at a mutually agreed upon time and location and will be recorded and transcribed. In addition, participants will be asked to take part in an approximately 15-20 minute follow-up meeting to confirm the accuracy of the transcript of your interview and to answer any additional questions. I will also ask to observe your class for approximately 30-45 minutes. Names and other identifying information will be requested as part of this study, but the information will remain confidential.

To participate, please contact me at [redacted] for more information.

A consent document will be given to you at the time of the interview, whether physically or by email. The consent document contains additional information about my research. If you choose to participate, you will need to sign the consent document and return it to me at the time of the interview.

Participants will receive a $50.00 Amazon gift card. The gift card will be mailed to you or hand-delivered upon completion of the questionnaire, interview, follow-up, and observation.

Sincerely,

Michelle Yates
[redacted]

Appendix D

Consent Form

Consent Form

Title of the Project: Exploring Dual Enrollment Faculty Members' Perceptions of Equity: A Collective Case Study
Principal Investigator: Michelle Yates, School of Education, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be a dual enrollment instructor, serve as adjunct faculty at Rappahannock Community College, and teach at one of the three identified high schools. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to understand how dual enrollment faculty members define and promote equity within the dual enrollment program. It also entails the role of the high school and community college partnership's influence in shaping your understanding of the issue.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following things:

1. Questionnaire to include demographic information. 5 minutes. (All participants).
2. Interview. 45 minutes to 1 hour. Interviews will take place online or in-person at a mutually agreed-upon time and location and will be recorded and transcribed. (All participants).
3. Review of the transcript. 15-20 minutes. (All participants).
4. Classroom observation. 30-45 minutes. (All participants).
    a. To be observed: physical setting, your characteristics, activities, interactions, conversations, and your own behaviors during the observation

How could you or others benefit from this study?

Participants will not receive any direct benefits from this study.

Benefits to society may include increased professional development in the area of equity in dual enrollment. This may help in creating equitable outcomes among all student subgroups.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.

- Participant responses will be kept confidential through the use of pseudonyms. Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.
- Observations will not be recorded.

How will you be compensated for being part of the study?

Participants will be compensated for participating in this study. Individuals will receive a $50.00 Amazon gift card for participating. Gift cards will be emailed or hand-delivered upon completion of the demographic questionnaire, interview, review of transcript, and observation.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University or Rappahannock Community College. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Michelle Yates. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted] or [redacted] You may also contact the researcher's faculty sponsor, Dr. Kevin White at [redacted]

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio-record me as part of my participation in this study.

_____
Printed Subject Name

_____
Signature

Appendix E

Interview Protocol

Interviewer:

Interviewee:

Date:

Time:

Research Questions

The purpose of this qualitative, collective case study is to understand how organizational learning influences how dual enrollment faculty members define and promote equity within the dual enrollment program. To understand the phenomenon, a central research as well as two sub-questions have been posed.

Central Research Question

How do dual enrollment faculty members define and promote equity within the dual enrollment program?

Sub-question 1

How has the partnering community college influenced the way dual enrollment faculty members define and promote equity within the dual enrollment program?

Sub-question 2

How has the individual high school influenced the way dual enrollment faculty members define and promote equity within the dual enrollment program?

Interview Questions

1. Tell me a little bit about yourself, including how you became involved in dual enrollment? CRQ

2. How do you define equity in terms of dual enrollment? CRQ
3. What value do you place on promoting equitable practices within the program and classroom? Explain. CRQ
4. What do you believe you do, specifically, in your classroom or within the program to promote equitable outcomes? CRQ
5. What does it mean to you to have a commitment to equity? CRQ
6. How do you believe you demonstrated that commitment? CRQ
7. Describe any professional development you have had related to this topic? SQ1 and 2
8. What role do you believe the community college partner has in creating equitable outcomes within the dual enrollment program? SQ1
9. To your knowledge, what current supports do you believe exist to help students achieve in dual enrollment and in higher education? SQ1 and 2
10. Why do believe inequitable outcomes exist among marginalized students? CRQ
11. How do you believe the community college influenced your understanding of equity and equitable practices? SQ1
12. How do you believe the high school influenced your understanding of equity and equitable practices? SQ2
13. Is there anything you would like to add concerning dual enrollment and equity? CRQ; SQ1, and 2

Appendix F

Observation Protocol

Name of Participant: **Observer:**

Date of Observation:

Time of Observation

To be observed: physical setting, participants, activities, interactions, conversations, and your own behaviors during the observation

Site:

Descriptive Notes	**Reflective Notes**
Physical Setting:	**Physical Setting:**
Participant:	**Participant:**
Activities:	**Activities:**
Conversations:	**Conversations:**

Behaviors:	**Behaviors:**
Social Factors:	**Social Factors:**
Environmental Factors:	**Environmental Factors:**

Appendix G
Participant Description Questionnaire

Please provide the following information.

Participant's Name: _____

School: _____

1. What is your age?

   _____

2. What gender do you identify as?

   _____

3. Please specify your ethnicity

   _____

4. What is your highest level of education?

   _____

5. How many years have you taught?

   _____

6. How many years have you taught dual enrollment?

   _____

7. How many years have you taught at your current school?

   _____

8. What is your content area?

   _____