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PERCEPTIONS OF HIGHER EDUCATION FACULTY OF THE QUALITY,
BENEFITS, AND CONSEQUENCES OF DUAL ENROLLMENT PARTICIPATION

By John Philip McElveen

This dissertation has been read and approved as fulfilling the partial requirement
for the Degree of Doctor of Education in Curriculum and Leadership.

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PERCEPTIONS OF HIGHER EDUCATION FACULTY OF THE QUALITY,

BENEFITS, AND CONSEQUENCES OF DUAL ENROLLMENT PARTICIPATION

by

John Philip McElveen

A Dissertation
Submitted in Partial Fulfillment of
the Requirements for
the Degree of Doctor of Education
in Curriculum and Leadership
(HIGHER EDUCATION ADMINSTRATION)

Columbus State University
Columbus, Georgia

December 2019

DEDICATION

I carry a profound sense of gratitude to my family for inspiring the effort and dedication required to complete my dissertation , and for illustrating for me throughout my life the value that should be placed upon education. First, my parents, both of whom are no longer with us, made education an expectation such that there was never a question whether my siblings and I would obtain college degrees, something neither of our parents completed due to World War II and other demands of life intervening. It is indicative of their values and support that my three siblings and I have all attained college degrees, including five bachelor's degrees, three master's degrees, and two doctoral degrees between the four of us, and each either now works or in the past worked in the field of education.

My wife, Dr. Kimberly McElveen, and my five children have also inspired my hard work in the field of education, and all have encouraged me (for the most part in a pleasant manner) to finish this endeavor. Kimberly occasionally has provided much more direct encouragement when needed, has many times provided insights as one might expect given the gifted educator and researcher she is, and has always been there for me. For my family's love, support, and encouragement, I will be forever thankful.

Last, I also dedicate this dissertation to Dr. Wayne Dempsey who, like my parents, is sadly not here to see the completion of this work. Wayne took a tremendous chance on me when I was completely without experience in educational leadership, entrusting me with a position the success of which was critical to his own. The faith he placed in me was astounding, and I look back now and understand his faith in his colleagues was informed from beyond this realm. Beyond the faith Wayne placed in me, he was the

definition of a true friend, and he inspired so many to love their fellow humans, laugh a

lot, and do their best. I am among an army of individuals who knew him for far too short

a time, who think constantly of what he meant to them, and miss him deeply.

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ABSTRACT

In this qualitative study, the researcher sought to address a gap in the literature related to identifying and understanding perceptions of collegiate faculty of the quality, benefits, and consequences of dual enrollment participation upon students, their higher educational organization, and their own career paths. Study participants included 36 collegiate faculty and administrators with faculty standing employed full-time by Columbus State University who have taught dual enrollment students in college settings, high school settings, or in both settings. The sequential qualitative design identified perceptions of the participants through application of a survey instrument. The initial phase of data collection was followed by a subsequent phase utilizing a semi-structured focus group identifying agreement and disagreement with the initial phase results and research literature regarding the quality, benefits, and consequences of dual enrollment participation, thus providing deeper understanding of the perceptions of faculty at Columbus State University. Research literature generally suggests many immediate and future benefits to students obtained by participating in dual enrollment but also suggests some level of disagreement between some stakeholders regarding the advantages and disadvantages of dual enrollment. Likewise, the study results indicate faculty at Columbus State University possess positive perceptions of the benefit to students, the institution, and to their own instructional experience, but also possess reservations . Results carry implications for institutions, their students, and their faculty for future implementation, sustainment, and assessment of dual enrollment instruction and partnerships.

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CHAPTER I

INTRODUCTION

Background of the Problem

What and how are potential academic and organizational benefits or challenges of participation in dual enrollment courses perceived by collegiate faculty members who teach such courses? Do potential and significant differences in these perceptions exist among the faculty with experience instructing dual enrollment students? If perceptual differences exist, does the degree to which such differences exist create obstacles to the utilization, efficacy, and potential improvement to such programmatic and course offerings, and does identification of such differences offer the opportunity to inform potential improvements? Traditional roles and timing in the provision of college-level general education courses have shifted as participation in dual enrollment has risen. General education courses, the college "core" courses, have increasingly shifted from the post-high school graduation time frame to pre-high school graduation (Guzy, 2016). Not only has the "when" shifted in general education course delivery, but increasingly the "who" has shifted in many states from college faculty employed directly by the university to high school faculty carrying the necessary academic credentials (Zinth, 2015). Given these shifts in traditional roles and timing, some tensions have arisen from that evolution (Guzy, 2016). This study examined the perceptions of university faculty of whether and how dual enrollment factors into academic quality and rigor, and the benefits and consequences accruing to students, their institution, and the faculty members themselves. Perceptual trends were identified from which potential obstacles and opportunities for

improvement and further research were extrapolated that, if left unaddressed, may impede access to the benefits of dual enrollment partnerships to dual enrollment programs, partnerships, and courses.

Dual enrollment is generally defined as enrollment by high school students in postsecondary-level courses prior to high school enrollment, and it includes both general education courses counting toward a baccalaureate or associate's degree as well as technical or career courses included in workforce-development certificate, diploma, or associate of applied science degrees and programs (Zinth, 2014b). This study primarily focused on perceptions related to the benefits of general education courses taken by dual enrollment students. Dual enrollment comes in several in several predominant forms (Zinth, 2014b). The term dual enrollment, in addition to its general-use definition, is also used to describe specifically the circumstance wherein high school students take postsecondary courses either on a college or university campus, or more rarely online. Concurrent enrollment, while sometimes used in a general sense as an alternative term to dual enrollment, is most often used to describe dual enrollment courses that are usually located physically in the student's particular high school (NACEP, 2017b). Most often, concurrent enrollment courses are taught on-site in the secondary school's facilities by high school instructors deemed as sufficiently credentialed to meet requirements of the postsecondary institution and its regional accrediting body for employment as an adjunct faculty member. Yet another form of dual enrollment comes in a programmatic format called Early College. Early College programs are most frequently offered in partnership with a local school system either upon the partnering college's or university's campus or in a standalone facility. Early College programs typically provide dual enrollment

opportunities for at-risk and underserved populations of students in a highly structured academic and student support environment (Lauen, Barrett, Fuller, & Janda, 2017). Early College programs provide important perspectives and data points for assessing the potential of dual enrollment programs in increasing college access and readiness for such students. For the purposes of this study however, the researcher focused primarily upon questions and perceptions pertaining to dual enrollment and concurrent enrollment in their respective specific definitions.

Statement of the Problem

Despite the majority of research literature indicating the benefits to students participating in dual enrollment courses prior to high school graduation, perceptual differences may exist among the stakeholders in dual enrollment partnerships, including faculty who serve as instructors for dual enrollment students in university and high school settings. The literature indicates some common beliefs in terms of increasing college readiness between administrators, faculty, and students (Dare, Dare, & Nowicki, 2017; Ferguson, Baker, & Burnett, 2015), but also differences in perceptions that may be informed by positional stations among dual enrollment stakeholders and faculty who perceive themselves as impacted by dual enrollment (Guzy, 2016; Klein, 2007; Mangan, 2016). There also may be perceptual differences that are based upon location of dual enrollment course delivery, and by whom (Arnold, Knight, & Flora, 2017). Perceptual differences, left unaddressed, may represent missed opportunities to inform and improve program assessments (Mangan, 2016). Perceptual differences coupled with concerns of accrediting bodies for ensuring academic program quality has led to definitive statements from such bodies and, in some cases, mandated policy changes with far-reaching

consequences (Gewertz, 2015). The existing research does identify some of the perceptions of the faculty from community college and high school sectors, but the research is very limited in documenting perceptions held by university faculty members who have taught dual enrollment students of the quality, benefits, and consequences of dual enrollment participation. Further, the perceptions of university faculty regarding dual enrollment have not been compared to the depth and breadth of research literature that focuses upon suggesting benefits to students, faculty, and institutions who participate in dual enrollment. Further, what perceptual studies focusing upon faculty providing dual enrollment instruction do exist, little has been done to explain the reasoning for the limited perceptions that have been identified in the research. Therefore, it is imperative that any such perceptual similarities and differences regarding the quality and benefits of dual enrollment participation that exist between faculty members who provide delivery and assessment of such programming be identified and the underlying reasons for perceptual similarities or differences understood. Without such understanding the provision and outcomes of such programs may be diminished.

<div style="text-align:center">Research Questions</div>

The research questions to be used to guide this study are as follows:

(1) What are the perceptions of university faculty about the rigor and academic quality of dual enrollment instruction, and do those perceptions vary based on whether the instruction is delivered in a traditional postsecondary classroom versus in a concurrent, dual enrollment-only classroom setting with a high school?

(2) What are the perceptions of university faculty regarding impact upon the college readiness, academic performance in the first year beyond high school graduation,

and likelihood of eventual degree completion of students participating in dual enrollment?

(3) What are the perceptions of university faculty regarding impacts of the growth in dual enrollment credit delivery upon their own professional situation and upon their educational institution?

(4) What are the perceptions of university faculty of the advantages and disadvantages of the dual enrollment concept?

Conceptual Framework

The conceptual framework (see Figure 1) for this study entailed studying university faculty perceptions related to three categories of importance through the prism of dual enrollment: academic quality and rigor, academic performance and degree attainment, and professional and institutional benefits and consequences. The researcher sought to understand the values faculty members who have taught dual enrollment placed upon each category and to understand whether those values were largely positive, negative, or neutral. Prior to the study, the researcher expected that faculty members may express significant reservations about dual enrollment. These expectations were to a large degree based on observations through professional experiences with acting as an administrative liaison during the conceptualizing, structuring, implementation, and operation of dual enrollment partnerships and programs. Given that the research literature provides data that suggest numerous benefits associated with dual enrollment, the researcher expected a high degree of divergence between the perceptions of faculty documented in the study and the literature.
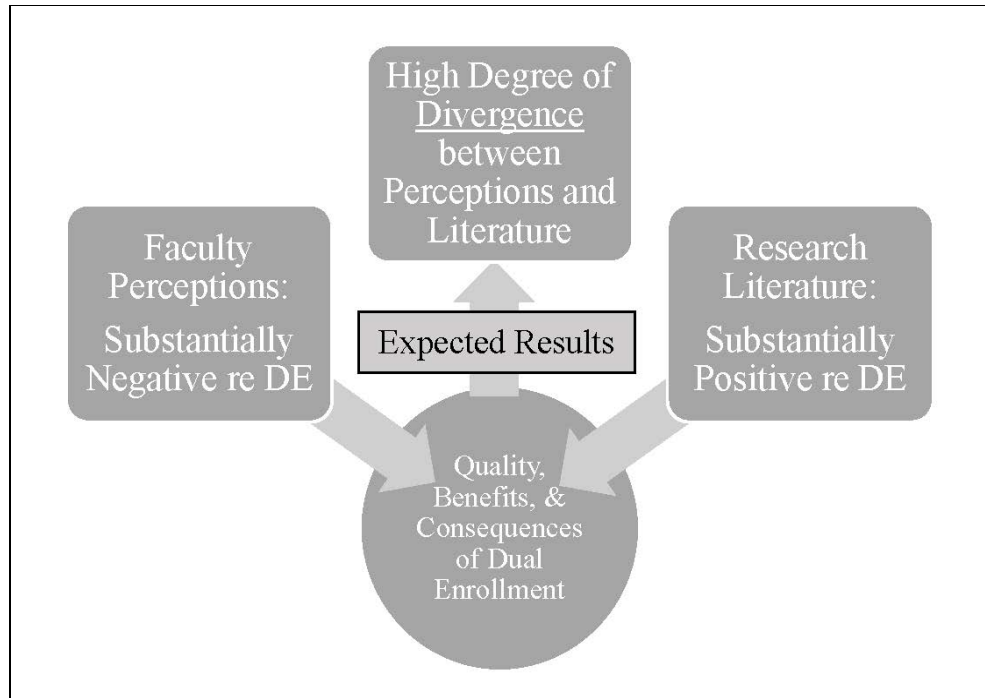
Figure 1. Conceptual Framework Diagram.

Purpose of the Study

The purpose of this sequential qualitative methods study was to ascertain and compare the perceptions of faculty who have served as instructors in courses including dual enrollment students in university classroom and/or high school settings regarding the quality, benefits, and consequences accruing to students, faculty, and universities of participation in the delivery of dual enrollment courses and programming. Results were obtained through collection of qualitative perceptual data from surveying university faculty who have served as instructors for courses including or comprised of dual enrollment students at Columbus State University, a member institution of the University System of Georgia.

The study sought to confirm and more fully understand the reasons for their perceptions through analysis and comparison of qualitative data obtained in a second

phase of data collection through a focus group of university faculty voluntarily sampled from participants completing the initial phase qualitative survey. The results were analyzed for perceptual similarities and differences, agreement or disagreement with the research literature, and implications for future evaluations and implementations of dual enrollment programming were identified.

Methodology Overview

The researcher utilized a two-phase qualitative research methodology employing a sequential design in order to collect data related to the perceptions of faculty members who had experience with dual enrollment instruction in the context of on-campus delivery of instruction within course sections including dual enrollment and non-dual enrollment students, and within partnerships between high schools and Columbus State University. The research questions for first phase of the study were as follows:

(1) What are the perceptions of university faculty about the rigor and academic quality of dual enrollment instruction, and do those perceptions vary based on whether the instruction is delivered in a traditional postsecondary classroom versus in a concurrent, dual enrollment-only classroom setting within a high school?

(2) What are the perceptions of university faculty regarding impact upon the college readiness, academic performance in the first year beyond high school graduation, and likelihood of eventual degree completion of students participating in dual enrollment?

(3) What are the perceptions of university faculty regarding impacts of the growth in dual enrollment credit delivery upon their own professional situation and upon their educational institution?

The research question for second phase of the study was:

(4) What are the perceptions of university faculty of the advantages and disadvantages of the dual enrollment concept?

The research subjects for both phases of the research were employed by Columbus State University. Qualitative survey data were collected and compared based on the first three research questions. Additional qualitative data were collected through a subsequent focus group and coded for themes and compared to data collected through the survey administered in the initial phase. Identified themes were used to generalize comparative perceptions. Themes were analyzed to determine varying degrees of agreement and disagreement that may be used as a lens for evaluation of possible changes and practices related to administration of dual and concurrent enrollment partnerships and programming between the entities.

Limitations and Delimitations

Some limitations of the study that could have potentially impacted the results of the qualitative study could include the biases of the researcher upon the benefits to students, educational institutions and other stakeholders, which are favorable. The researcher, while presently employed as Associate Vice President for Student Affairs and Dean of Students at Columbus State University, formerly served at the chief enrollment officer of the university, and thus maintains institutional and collegial interests in dual enrollment programs and the level to which they are subscribed. Dual enrollment has in

recent years been consistently one of the fastest growing segments of enrollment of the university. Therefore, the researcher has an experiential interest in the continuing growth of dual enrollment. The researcher also has benefited economically from the participation of three of his five children in dual enrollment and expects that one more of his children will participate in dual enrollment. Therefore, the researcher has benefited and expects to continue to benefit economically due to the cost savings provided by his children's participating in the low cost/no cost dual enrollment programs provided in the University System of Georgia.

Given the relatively small scope of the study that was limited to participants from Columbus State University, responses provided during the survey process could have been influenced by positional and political considerations. Participants could have been reluctant, despite not being specifically named in the study, to freely espouse positions that they may deem as being contrary to expectations of others in the public, in peer groups, and in positions of power over them. Furthermore, some potential participants may have chosen to not participate in the study due to concerns similar to the concerns listed above that provided a rationale for possible diminishment of responses, possibly resulting in response bias (Creswell & Creswell, 2018).

<p align="center">Significance of the Study</p>

If the balance of the research literature touting the benefits of participation in the various iterations of dual enrollment is correct, then dual enrollment has important benefits that are aligned with the U.S. college completion agenda (Karp, 2012, 2015). In some respects dual enrollment may challenge traditional frameworks for the admission of students, how and where courses are delivered, and by whom (Speroni, 2012). Thus,

natural tensions are created between various constituencies impacted by dual enrollment. Proponents cite enhancements of college readiness, persistence, and completion, particularly for students from underserved populations (An, 2013; Ganzert, 2012). Other voices counter with concerns about whether academic rigor is threatened when students are admitted too soon, implying lack of complete preparation for college enrollment, and particularly when concurrent enrollment courses are taught in high schools by teachers whose typical professional activity is to teach courses in a traditional high school curriculum (Arnold et al., 2017; Klein, 2007; Mangan, 2016). Some regional accreditors have issued edicts and enacted practices to address such concerns, insisting that consistent instructional and credentialing standards must be applied to dual enrollment and traditional courses, a course of action akin to past accreditor actions as online programs quickly increased in popularity and utilization (Gewertz, 2015). State governments have increasingly acted in support of dual enrollment as a public benefit, citing positive mitigating impacts upon the rising costs of higher education and college completion (Zinth, 2014b). Legislatures have responded to reports of resistance on the part of some institutions, generally more selective ones, to acceptance of dual enrollment course credits by in some cases legislating required transfer of credits (Guzy, 2016; Zinth, 2014b).

Georgia is one of the most engaged states in terms of public support of dual enrollment, providing students access to college-level general education and technical education courses tuition and fee-free, with the exception of approved, very limited lab and course fees (Board of Regents, 2017b; Zinth, 2016b). Influential Georgia state government officials have indicated that despite rising costs of the program to institutions

and the state, support will continue (R. Smith, personal communication, November 20, 2017).

If perspectives of key stakeholders within K-12, higher education, and public officials are in conflict, and such perspectives are not well documented and understood, optimized implementation, access to, and application of dual enrollment programming and enrollments could be diminished. The study is important as it identified perceptions and reasoning for those perceptions of faculty members who have served as instructors in courses including or comprised of dual enrollment students in university and/or high school settings as to the benefits, challenges and quality of dual enrollment programming and courses. Identification of these perceptions of university faculty and the rationales for them may inform future research as well as professional practices, thus enabling more robust evaluation and future improvement of dual enrollment programming.

<div align="center">Definition of Terms</div>

Usage of terms that describe and label participating high school students and their enrollment in courses for which successful completion yields postsecondary institutional credit varies. Terms, such as dual enrollment, concurrent enrollment, dual credit, and Early College, are often utilized as broad labels generally descriptive of high school students and activities associated with enrollment in college-level, for-credit courses prior to high school graduation. Yet, each of these major associated terms, in addition to be used as general descriptors, may be used to label specific types of enrollment distinguished by the contextual frameworks in which the course is taught. When considering the use of descriptive terms and labels, by whom, where, and with whom the student attends the course all matter. Selection of terminology related to dual enrollment

is also informed by whether the course is a - course chosen individually by or for the student or whether the student is enrolled in a cohort-based program wherein all classmates are also dually enrolled. Further adding to the complexity of the associated terminology is that delivery models, policies, and targeted students may vary regionally or state-by-state, and states utilize a wide array of branding and acronyms in referring to dual enrollment programs, laws, and policies.

For these reasons, it is necessary to understand how terminologies are to be used for the purposes of this qualitative study both specifically and generally, and when needed to be able to draw distinctions between the terms.

- *Advanced Placement* – "Advanced Placement (AP) offers a series of college-level courses and assessments for which students may receive college credit while still in high school. The AP program was established by the College Board, and this entity is responsible for certifying AP courses throughout the nation. Schools that decide to offer AP coursework must assign an AP coordinator to handle logistical aspects of using curricular and assessment materials, and school-designed AP curricula must pass an audit process to receive the AP designation" (Gagnon & Mattingly, 2016, pp. 266-267).

- *Career and technical education* – Career and technical education (CTE), sometimes referred to as vocational education, is typically comprised of postsecondary business, vocational, or trade courses that are designed as part of career or technical programs of study designed to allow students to directly enter the workforce after receiving a certificate or applied associate's degree from a technical or community college. CTE courses may be offered to

students as dual enrollment courses prior to high school graduation. CTE certificates and degrees also typically include, in addition to specific technical courses, general education courses designed to support full optimization of the CTE academic credentials (Bottoms & Sundell, 2017).

- *Community colleges* (Two-year colleges) - "Two-year colleges offer programs that last up to two years that lead to a certificate or an associate degree. These include community colleges, vocational-technical colleges and career colleges." (College Board, 2017, "Four-year and two-year colleges," para. 2).

- *Concurrent enrollment* – "Concurrent and dual enrollment partnerships provide high school students the opportunity to take college credit-bearing courses. National Alliance of Concurrent Enrollment Partnerships (NACEP) defines concurrent enrollment as the subset of dual enrollment courses taught by college-approved high school teachers" (NACEP, 2017b, "What is Concurrent Enrollment,", para. 1). Concurrent enrollment is sometimes uses as a ubiquitous term for dual enrollment, but the term is typically used in its more specific, course-locale based meaning.

- *Dual enrollment* – "Dual enrollment programs allow eligible high school students to take postsecondary courses for college and, usually, high school credit" (Zinth, 2014b, p. 1). Used as a ubiquitous term to describe all forms of programs and courses wherein high school students take college courses for credit prior to graduation from high school, or may at times be used in contrast to other terms such as concurrent enrollment (see concurrent enrollment definition) and Early College (see Early College definition) to

label such courses taken for both high school and college credits taught specifically on a college campus or to a lesser degree on-line.

- *Dual credit* – See definition for dual enrollment.

- *Early College* – "Early college high schools are defined as programs intended to serve at-risk and traditionally underrepresented students, including low-income, first-generation college-goers, students of color and English language learners. Starting in ninth grade, students embark on a curriculum of high school and, increasingly, postsecondary coursework". After program completion, "students will have concurrently earned a high school diploma and an associate degree, technical credential or 60 credit hours of postsecondary coursework, allowing them to enter a four-year postsecondary institution as a junior. Programs may be located on a high school campus (in a school-within-a-school), on a two-or four-year postsecondary campus, or at a third-party location. Early college high schools are typically small (fewer than 100 students per grade), and engage all students in a comprehensive support system that develops academic and social skills as well as the behaviors and mindsets necessary for college completion" (Zinth, 2016c, p. 2).

- *Four-year colleges* – Four-year colleges offer programs that lead to a bachelors or higher degree. These include universities and liberal arts colleges (College Board, 2017).

- *General education* – Courses and courses of study that are designed to provide a broad array of learning and competencies that support a broad or liberal education. General education courses, sometimes referred to as core courses

or liberal education, may be included in many types of postsecondary certificate and degree programs. General education may also be used to describe non-career/technical education.

- *Postsecondary* – Generally describes institutions such as community colleges, technical colleges, and four-year colleges and universities that offer academic credentials and degrees, and courses administered by those same institutions.

- *Secondary* - Generally describes high schools and courses administered by high schools.

<center>Summary</center>

The purpose of this qualitative study was to ascertain and compare perceptions of university faculty regarding the quality, benefits, and challenges of participation in dual enrollment, and the reasons for those perceptions. Differences in these perceptions are implied in the research and through presentations at various conferences, and lack of agreement could impede optimized implementation and evaluations of dual enrollment programs, practices, and courses. Thus, the results of this study could yield important information that could assist institutional stakeholders and partners in enhancing the effectiveness of dual enrollment efforts. The study utilized a survey instrument to collect qualitative perceptual data followed by a focus group. Participants were comprised of instructional personnel from Columbus State University identified as having taught dual enrollment students between the fall 2017 and spring 2019 semesters. The University delivers instruction to dual enrollment students blended into standard general education courses as well as engaging at the current time in two partnerships with local high schools that delivers instruction on location in those high schools. Perceptions of faculty

members were collected first through a survey, followed by a qualitative focus group that sought further data intended to more deeply understand those perceptions and the reasons thereof. The study was intended to inform future implementation, assessment, and sustainment of dual enrollment programming and partnerships.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Dual Enrollment, or enrollment in college-level courses by students not yet graduated from high school, has become a fundamental feature in the landscape of higher education credit delivery options, a trend noted by many (Cowan & Goldhaber, 2015; Speroni, 2012; Tobolowsky & Allen, 2016). Successfully acquired credits in such courses are generally applied to high school graduation requirements while providing the double benefit of applying to college degree attainment. The acceleration in the higher educational degree pathway is considered beneficial in itself, but many states have chosen to enhance the beneficial aspects of dual enrollment for those students who qualify to participate by reducing or eliminating typical tuition and fees (NACEP, 2017a). ACT, Inc. (2015) reports that the rise in state support and political popularity is evidenced by the number of unique mentions of dual enrollment in state of the state addresses across the country from 2013 to 2015. In 2013, ACT, Inc. notes that there were mentions of dual enrollment in the state of the state addresses by three governors. In 2014, that number quadrupled to 12 governors mentioning dual enrollment in their state of the state addresses, and during 2015, the number of such speeches including mentions of dual enrollment had risen to 17 states (ACT, Inc., 2015). Cowan and Goldhaber (2015) noted another benefit to states that choose to fund dual enrollment program: students who participate in dual enrollment programs are more likely to remain within that state when

seeking higher education. Tobolowsky and Allen (2016) pointed to the cost reductions inherent in dual enrollment but noted that when costs to families are unsubsidized by state government, increased access to higher education credit attainment may not result to the degree to which it could.

Dual enrollment credits are available to students who seek participation ranging from workforce development programs to advanced academic preparatory curricula leading to baccalaureate and even graduate degrees (Loveland, 2017). Given the range of student curricular preparation tracks and abilities, perceptions of the quality and outcomes of dual enrollment versus traditional post-secondary college enrollment can vary among participants and stakeholders. Hanson, Prusha, and Iverson (2015) found variations within the structure of high schools that seemed to be related to the roles administrators, counselors, and teachers played in delivering concurrent enrollment courses. Perceptions can influence policy decisions, resource allocations, and even implementation decisions. Variations in perception are borne out in the research, with findings ranging from neutral (Speroni, 2012), to questioning comparative quality (Klein, 2007), to trumpeting positive learning outcomes (Hebert, 2001).

Hofmann and Voloch (2012) describe dual enrollment as a "liminal space" for students preparing for or engaging in the transformation from high school to college student. A liminal space is a transitional location or period in time, wherein a subject is moving from one situation to another. The researchers contend that as a liminal space, dual enrollment's transitory nature creates certain tensions among practitioners and students related to "dissolving boundaries" with the curriculum and credits exceeding high school levels, but often without students being fully immersed in a university

academic and social fabric. Their contention is that tensions stem from questions, such as what constitutes college-level work, who is responsible for academic preparation of dual enrollment students, and how one determines that students are actually prepared to succeed at enrollment in programs providing college credit prior to graduation from high school. Hofmann and Voloch contend that navigation of this transition requires self-awareness and commitment to evolving as a student. Hofmann and Voloch also advocate for secondary and post-secondary educational institutions to embrace the tensions between created in the transitional space associated with dual enrollment by strengthening interactions and academic support frameworks associated with the partnerships between the two associated institutional levels.

Lukes (2014) lists several benefits to students who participate in dual enrollment courses including engaging in college level courses that are more challenging than the high school level courses the student would otherwise be taking. Lukes identifies structured academic support and advising, which the researcher refers to as academic scaffolding, as important to academic success. Lukes points out the more academic support scaffolding inherent to many dual enrollment environments better mitigates the academic challenges and potential culture shock often experienced by traditional students during the transition to full college enrollment. Lukes, likewise, touts the cost-savings benefits to dual enrollment participants and their families.

<div align="center">History and Growth of Dual Enrollment</div>

Howley, Howley, Howley, and Duncan (2013) differentiate the intent and purpose of dual enrollment and early college programs between prior to and after the year 2000. They indicate that prior to the year 2000 the typical intent was to provide academic

excellence through a more rigorous high school experience as suggested by Clifford Adelman (1999) in his "Tool Box" report. Throughout much of the 20th century Howley et al. (2013) tell us that special programs allowing for acceleration were limited to relatively small populations of students who were categorized as exceptionally high-achieving, and often for students with IQs above 160. After 2000, however, the conversation regarding "the why" of dual enrollment also began to include the question of equity for access to academic acceleration and college credit for underrepresented populations of students.

Dual enrollment by high school students in college-level courses prior to high school graduation has grown exponentially in recent years. The latest figures available from the National Alliance of Concurrent Enrollment Partnerships indicated in 2010-11 that over 1.4 million high school students enrolled in over 2 million college courses (NACEP, 2017a), an increase of almost 13% in only 4 years. It is easy to project further growth with a number of states expanding initiatives in the intervening years (Zinth, 2014b). Continued growth should continue for some time as governmental support and policies enabling expansion of dual enrollment are on the rise, and Zinth cited benefits attractive to governments and the public, such as increased college readiness, rates of college attendance, less likelihood to need remedial course work in English and mathematics, higher grades during the first year of college, higher second-year retention rates, higher four- and six-year retention rates, and shorter average time to completion of a bachelor's degree. Zinth further noted the degree of positive impact is even greater for students from traditionally underrepresented segments of the population.

Karp (2015) posited that not only are students the positive beneficiaries of dual enrollment, but high schools and colleges benefit from dual enrollment as a structural change. Karp explained that schools and colleges are forced to adapt through serving dual enrollment students and thus develop additional competencies supporting the delivery and assessment of higher education. Lukes (2014) likewise noted benefits to colleges and universities offering dual enrollment courses, particularly the opportunity to recruit competitive dual enrollment students for continued post-high school graduation enrollment at the postsecondary institution. Additionally, Lukes cited lower facilities overhead costs to the college or university when concurrent enrollment courses are taught in a high school.

Kinnick (2012) noted a number of benefits to the institution beyond enrollment and funding generated by dual enrollment itself. Kinnick noted one-third of dual enrollment students at Kennesaw State University choose to remain and continue enrollment at the university after high school graduation. Of those students continuing enrollment, 43% indicated that prior to participating in dual enrollment they were not considering Kennesaw State University as their choice for post-high school graduation enrollment and degree-seeking. Kinnick also noted positive impacts on retention, progression, and graduation rates of the institution. Kinnick indicated that students participating in the dual enrollment program who chose to remain at the university after high school graduation were 52% more likely than their non-participating classmates to graduate from the university in four years. Kinnick showed that former dual enrollment students were over 20 times more likely to enter a graduate program at the university.

The Community College Research Center of Columbia University (2012) in a research overview report identified the opportunity to achieve greater curricular alignments when high schools and colleges participate in a defined dual enrollment partnership. The report discussed the opportunities for colleges and high schools to discuss pedagogies, course content, and student support services that can result in greater college preparation. Lukes (2014) also cited the partnership opportunities between K-12 systems, high school administrators and faculty, and institutions of higher education.

<div align="center">The Concepts and Definitions of College Readiness</div>

One of the central questions regarding the perceived benefits of participation in dual enrollment is whether or not such participation increases college readiness. Lauen et al. (2017) discussed issues with college readiness that led to 20% of high school graduates entering higher education requiring remedial or developmental coursework in order to meet requirements for degree-seeking enrollment. Perceptions vary with perspectives, and gauging such perspectives is made more difficult given that the definitions of "college readiness" range broadly within the different sectors of the secondary and higher education communities. Hess (2016) pointed out that the concept of college readiness varied between sectors of institutions, such as national, selective research universities and community colleges. In fact, the question and concern of college readiness is a question that has been documented in the United States since at least the mid-1800s. Doyne and Ojalvo (2011) in a *New York Times* blog referred to a *New York Times* editorial from 1870 in which the president of Harvard lamented the lack of secondary schools capable of adequately preparing young men for the expectations of a proper college education. Hess (2016) discusses practical dichotomies in the often used

mantra of universal college readiness and gives statistical information that he asserts demonstrates that raising the bar sometimes results in lowering expectations simultaneously. Hess relates that between 1990 and 2005 the average high school grade point average rose from 2.68 to 2.98, and an increase concurrent with more students taking higher level academic courses designed to better prepare students to take university level courses in disciplines, such as mathematics. Yet, the scores on nationally normed mathematics assessments showed declines in actual mathematics learning. Such statistics have, Hess tells us, raised questions in the mind of many academics about the efficacy of college readiness efforts at the secondary school level.

However, such lack of definition and doubts of efficacy have led some researchers and organizations to focus on the question of whether traditional, cognitive indicators of college readiness, such as grade point average, standardized test scores, and completion of a rigorous set of core preparatory courses are adequate to assess actual readiness for postsecondary academic success (ACT, Inc., 2014). ACT, Inc. (2014) sets forth a broader definition of college readiness that provides more non-cognitive behavioral and skill set indicators, such as critical thinking, adaptability, lack of absenteeism, dependability, cooperation skills, career comparison knowledge, and self-awareness, as important complementary additions to traditionally espoused academic performance measures that have been accepted as the primary indicators of college readiness. ACT, Inc. asserts that this broader set of college readiness indicators reinforce that college readiness begins well before even secondary level enrollments. Holles (2016) noted the wide disparities between perceptions of high school versus college faculty the degree to which their students are college ready. Holles noted that while both viewpoints agree about the

importance of college readiness, there are few collaborative discussions or research efforts bridging the gap between the two groups. Holles examined perceptions of college students on the degree to which they felt well prepared for college and why they felt prepared or under-prepared. Her research indicated that students articulated a multifaceted set of preparatory circumstances and experiences they deemed important to their academic success or struggles in college. Curricular rigor was consistently mentioned as a factor, both positively and negatively, in their view of their own level of preparedness. However, many mentioned life circumstances and experiences as of great importance, thus validating in some respects the call from ACT, Inc. for a broader definition and approach to college readiness.

Hess (2016) expressed doubts about the non-cognitive aspects of a broader definition of college readiness because skills and behaviors, such as critical thinking, civility, and inquisitiveness, are not outcomes for educators to instill and develop in their students. Hess expressed concern that broader definitions of college readiness lend to faddism and mandated policies that are in pragmatic terms non-sustainable. Hess pointed out that educators and lawmakers look for a silver bullet, often seeing them in local school system successes that are due in part to the right combination of parental and educator investment in success and due in part to other combinations of circumstances and available support that are not easily replicable at a larger scale where often the circumstances are not the same. Thus, Hess strongly cautioned against educational mandates and policies that are inspired by localized successes designed to foster college readiness.

Dual Enrollment in the Context of Other Accelerated Credit Programs

Dual enrollment forms one leg of the accelerated credit triangle. Advanced Placement, or AP, as it is popularly known, and the International Baccalaureate (IB) Diploma Program make up the two other legs. All provide widely accepted methodologies for obtaining prior learning credits.

Some administrators and faculty in the rigorous curricular space traditionally occupied by college and university honors programs offer somewhat dissenting views to the growing popularity of dual enrollment, AP, and other prior credit programs, such as the IB Diploma Program. Guzy (2016) notes a widespread consternation about shifting roles in general education course delivery from honors program administrators evidenced through exchanges in online discussion groups, in publications, and presentations at conferences. Guzy contends that legislatures around the country are adding to the anxiety of honors program advocates by mandating acceptance of dual enrollment and other forms of accelerated credit by publicly funded institutions of higher education. Adams (2014) also notes this trend . Guzy (2016) emphasizes that not only are states mandating acceptance of credit, they are in a number of cases mandating the scores and grading necessary to award credit. Guzy expresses concern that the decision as to whether students should receive accelerated credit is no longer solely the purview of the institutions of higher education awarding the credit toward their degrees. Guzy acknowledges the cost-savings to families and students that are the most widely acknowledged rationale for such mandates but contends the traditional liberal arts core education that forms the basis for most honors program experiences "is being gutted" (Guzy, 2016, p. 7). However, Camp and Walters (2016), in response to Guzy (2016),

suggest that honors programs can leverage non-traditional and creative curricular structures to invigorate and extend the value of honors program participation in meeting the challenges of expansive, often mandated competition of dual enrollment and other forms of prior credit generation. Coleman and Patton (2016), also in response to Guzy (2016), describe such a curriculum within the honors program at Eastern Kentucky University that was motivated by the influx of dual enrollment, AP, and other forms of prior learning. Coleman and Patton (2016) describe a response primarily based on creation of advanced, individual, and sequenced interdisciplinary courses cross-listed in more than one discipline. Integration of such advanced courses into the honors program curricular requirements was made possible by large numbers of honors program entrants bringing credits that satisfied core course requirements for degree programs.

The State of Georgia has recognized the value to the State and its citizenry of an accelerated high school curriculum accompanied by awarding of advanced credit counting concurrently toward high school and college graduation, thereby allowing students to more quickly and cost effectively move through their higher education process (R. Smith, personal communication, November 20, 2017). The IB program is recognized and acknowledged as a rigorous high school curriculum (Board of Regents, 2017a; CSU Admissions, 2017; Ryan, Heineke, & Steindam, 2014) along with other types of coursework that purport to be college-level in content and learning outcomes, such as dual enrollment and AP (Park, Caine, & Wimmer, 2014). The IB Diploma Program is designed to engage high school juniors and seniors in active learning and critical thinking and through a lens of global awareness and knowledge (Mayer, 2008; Ryan et al., 2014). Six subject groups are included in the curriculum (IB Curriculum,

2017), with multiple courses available within each of the subject groups. The six subject groups include language and literature, language acquisition, individuals and societies, sciences, mathematics, and the arts. Students may opt to take additional science, social science, or language courses in lieu of courses in the arts (IB Curriculum, 2017).

The six subject groups included in the IB Diploma program are closely mirrored by six subject groups in the AP program courses offered under the auspices of the College Board. English, mathematics and computer science, science, history and social science, world languages and cultures, and the arts are the subject groups for AP coursework. Additionally, two capstone courses are offered that are designed to further strengthen college preparation, AP Research and AP Seminar. AP courses were first offered in 1955, and have evolved over time. Like dual enrollment and IB courses, AP courses provide opportunities to obtain accelerated college-level credit based on achievement of demonstrated learning outcomes. Like IB-derived credits, awarding of advanced credits are based on performance on examinations generally given at the end of a particular course. Also similar to IB courses, various institutions will award credit based on a matrix of score ranges tied to particular courses (Zinth, 2016a).

Early College as Construct of Dual Enrollment

Another type of dual enrollment is often referred to as Early College. Early College typically targets minority students with other at-risk factors, such as economic disadvantage, first generation student status, and English language learners (Lauen et al., 2017; Zinth, 2016c). Lauen et al. (2017) noted that between 2003 and 2014 over 240 such programs were established and typically located on college and university campuses. Early College programs often provide access to up to two years of college credits that

also count toward high school graduation at no or little cost to students. Students enrolled in Early College may obtain an associate degree in postsecondary institutions where such degrees are offered. Early College programs are distinguished from typical dual enrollment participation structures in several ways (Ndiaye & Wolfe, 2016; Zinth, 2016c). First, Early College models are typically geared toward general education coursework whereas non-Early College dual enrollment programs are arrayed across the career-technical and general education spectrum (DiMaria, 2013). Early College programs admit students across the academic performance spectrum, whereas typical dual enrollment programs focusing on general education courses often have minimum admission standards, including minimum grade point averages and standardized test scores (Barnett, Maclutsky, & Wagonlander, 2015). Early College participation more often begins as early as the freshman year of high school whereas many conventional general education dual enrollment programs limit initial enrollment to 10th or 11th grades (Ndiaye & Wolfe, 2016). Early College programs are usually formed in cohort structures providing a more defined partnership model between secondary and postsecondary institutions, thus providing a somewhat higher level of systemic academic and student service support than would normally be experienced by individual dual enrollment students participating in classes on a college campus or sometimes in a small, stand-alone school environment (Edmunds, 2016). The cohort model also has a more cohesive curricular framework wherein the members of the Early College cohort take a defined array of courses counting toward a high school diploma and college degrees simultaneously. The cohort model offers a contrast to conventional dual enrollment approaches wherein students select and enroll in individual college courses while often

mixing in high school courses in the same academic term (Ndiaye & Wolfe, 2016; Zinth, 2015). Unlike concurrent enrollment programs and partnerships that deliver college courses on high school campuses, Early College students experience daily immersion into the postsecondary campus environment unless the program is housed in a stand-alone Early College school. Thus, familiarity with and ability to navigate the complexities and services of the college campus environment is enhanced at an earlier point in the academic careers of Early College participants when the program is housed fully or partially in an on-campus model (Zalaznick, 2015).

Zinth (2016c) suggests four aspects common to model state policy components related to Early College. First, Zinth states that model policies include a strong framework to ensure programmatic access and student support services. Zinth points out the importance of a strong, proactive awareness program that recognizes that the body of research suggests that underserved students and their families are not typically and adequately connected to community and school support networks. These networks would typically be utilized to match students to opportunities afforded through such programs as Early College. Therefore, Zinth suggests it is incumbent upon state policies to ensure proactive actions aimed at bridging the awareness and communication gaps for underserved populations. Texas, for example, requires school districts to notify parents of each ninth-grade student of opportunities to earn college credit while in high school, including Early College programs. Zinth notes that other states more optimally inform students and parents of such opportunities during middle grades enrollment since some opportunities, such as Early College, often start at the ninth-grade level. North Carolina and Tennessee are two examples of states that mandate such notifications at the middle

grades stage of K-12 enrollment. Similarly, Barnett et al. (2015) hold up New York and Michigan as being at the forefront of developing opportunities for early college credit and program participation as early as middle school.

Zinth (2016c) also holds up North Carolina and Tennessee as states that require articulated programs of counseling, advising, and parent conferences that support informed decision-making about participation in various dual enrollment and Early College programming. Zinth touts Michigan's requirement that teachers act as academic advisors who supervise course selections and monitors of student academic progress. Zinth suggests that systemic academic support scaffolding is particularly important given that many Early College students are first-generation college students, and therefore their parents may be less knowledgeable and experienced with the expectations and challenges of college course enrollment. For that same reason, Zinth suggests that required parental involvement on a continuing basis is optimal for ensuring a higher rate of academic success for Early College students.

Zinth (2016c) also lists program quality assurance regulations and policies as a necessary aspect to a model Early College policy on a state level. Zinth insists that states should, through their policies, ensure that instructor qualifications and course rigor are consistent with the expectations of conventional college coursework. Texas, through a policy that could be construed as redundant to the requirements of the regional accrediting agency for Texas educational institutions, the Commission on Colleges of the Southern Association of Colleges and Schools (SACS COC), requires that the postsecondary institution select and ensure the qualifications of dual enrollment instructors. DiMaria (2013) also stated the requirements in Texas requiring equivalent

minimal credentials but noted that intra-institutional faculty partnerships were required in order for high school faculty to be fully perceived as true college adjunct faculty by the college instructors. Additionally, Texas policies as well as policies of some other states require that dual enrollment instructors in programs, such as Early College units, are provided with the same supervision and oversight requirements as regular higher education faculty. Similarly, Zinth notes that many of the same states require institutions to ensure equivalent course content and quality between dual enrollment programs, including Early College programs and traditional academic programs in that high school graduates enroll. Zinth contends that policies, such as North Carolina's that limits size of Early College programs, are beneficial to ensuring quality learning and student outcomes. Zinth, along with Unlu and Furey (2016), also suggests Early College program locations on postsecondary campuses are optimal for improving the transition to full, post-high school graduation enrollment in an institution of higher education. Additionally, when considering Early College programs that include workforce development coursework that regional workforce needs should be considered in order to maximize student employability and regional economic development.

Another aspect of model state policies on Early College programs and participation suggested by Zinth (2016c) is a strong cadre of accountability and evaluation measures that are transparent and shared widely between secondary and postsecondary partners. States, such as North Carolina and Tennessee, require state-level evaluations of Early College programs. Data reviewed during evaluations include retention, completion and dropout rates, certification and degree completion, admission rates to four-year institutions, and post-graduation employment for those Early College

students focused upon career and technical courses. Texas allows more local system definition of evaluative standards but nonetheless mandates evaluation by local systems of Early College programs. Vargas, Hooker, and Gerwin (2017) contend that states must support a strong instructor training and assessment program to support dual enrollment and early college instruction.

Zinth (2016c) covers a third broad category, finance and facilities, of suggested components of model Early College state policies. Zinth notes the importance of providing state funding levels to both K-12 and institutions of higher learning equivalent to funding that the entities would receive for conventionally enrolled high school and college students, the absence of which could provide significant disincentives for Early College program support and participation. Likewise, Zinth lists state coverage of tuition costs, particularly given the targeting of underserved populations of students who often are economically disadvantaged as a critical component. Zinth points out that some states encourage the use of facilities and personnel shared between the secondary and postsecondary partners in order to maximize efficiency of funding utilization. Some states also encourage seeking out private support, such as corporate sponsorships and non-profit foundation grant monies, for the benefit of Early College programs. There are opposing voices in the low cost-no cost debate. Leonard (2013) cited results of a study conducted by him of early college partnerships in Massachusetts that showed that students were more successful when their families had an increased sense of co-ownership of the student's enrollment through having some level of income-commensurate out of pocket costs.

The last major aspect of model Early College state policies listed by Zinth (2016c) is ensuring the transferability of earned credits to two and four-year institutions of higher education in the state. Again, Zinth reminds policy makers that the underserved populations of students that largely make up Early College program enrollments are typically less able to afford to retake coursework at the postsecondary level due to lack of credit acceptance by their destination college or university. Zinth suggests systemic and comprehensive articulation agreements as another policy component that supports transferability of credit for Early College students.

Venezia and Jaeger (2013) call attention to a possible limitation of the effectiveness of Early College programs in that participants' grade point averages tend to drop to some degree after high school graduation and departure from the Early College program and enrollment in college full time. Venezia and Jaeger contend that this decline in academic performance is a result of the post-Early College absence of the academic support scaffolds that Early College programs typically provide their students. Students may return to less disciplined approaches to their coursework when a systemic accountability and support framework is no longer present.

Quality Assurance for Dual Enrollment Programs: Regional Accreditation, State Policies, and Program-Based Data Utilizations

As dual enrollment participation has grown regional accreditation bodies have focused more attention upon dual enrollment programs, particularly concurrent enrollment programs. This form of dual enrollment typically consists of college courses delivered in high schools and taught by instructors who are employed as standard high school faculty by their district and school administration. Thus, in the context of the

mission of accrediting bodies to ensure quality standards are adhered to by institutions carrying regional accreditation, concerns about the qualifications of dual enrollment instructors primarily employed by a high school are understandable (Horn, Reinert, Jang, & Zinth, 2016). In 2015, the growing concern of accrediting bodies about ensuring quality through standardizing faculty credentials for dual enrollment instruction was embodied in a ruling by the Higher Learning Commission, the regional accrediting body for 19 states in the West and Midwest United States. The ruling, noted by few prior to official documentation being released by the Commission, stated that high school instructors must have a master's degree in the discipline in which the dual enrollment courses they teach reside. If the master's degree in the subject area has not been obtained, then the instructor must have at least 18 graduate hours in the particular discipline (Gewertz, 2015). Prior to the ruling, college personnel in the states under the accrediting jurisdiction of the Higher Learning Commission often voiced concerns similar to a professor of history at Indiana University who stated that only about one-third of the dual enrollment teachers in high schools teaching history courses as adjuncts for the university had any graduate level history credits (Mangan, 2016). While that contention was neither confirmed nor refuted by any presented data, the statement spoke to some of perceptual concerns for instructional quality in the context of expanded concurrent enrollment programs.

The ruling of the Higher Learning Commission created large scale concerns for many school systems who employ teachers who teach dual enrollment courses, but who may not have the required graduate credentials and credits necessary to meet the Higher Learning Commission's requirements (Gewertz, 2015). Gewertz (2015) noted that some

principals estimated that up to 90% of their faculty who currently taught dual enrollment might not be eligible under the ruling of the Commission. The conclusion drawn by many school and government officials was that the ruling would diminish opportunities to deliver the benefits of dual enrollment on a broad basis.

Policies of SACS COC similarly require a master's degree or higher directly applicable to the course discipline or a master's degree and at least 18 graduate credits in the discipline. However, SACS COC does allow institutions the ability to make the case for exceptions based on substantial and applicable professional experience. Other regional accrediting bodies, including the Middle States Commission on Higher Education, the New England Association Commission on Institutions of Higher Education, the Northwest Commission on Colleges and Universities, the Western Association Accrediting Commission for Community and Junior Colleges, and the Western Association Senior College and University Commission allow their member institutions latitude to determine and document faculty qualifications that align with institutional missions.

States have also taken upon themselves to formulate policies aimed at providing dual enrollment students with academic course quality and student experiences that are equivalent to the quality and experiences inherent to conventional course enrollments (Taylor, Borden, & Park, 2015). Taylor, Borden, and Park (2015) note great variations in dual enrollment-related policies among states. Taylor et al. state that 34 states regulated the types of courses that could be offered and for which cost reimbursements or tuition would be paid to the college or university by the state. Horn et al. (2016), in a state-by-state analysis of state policies regarding faculty qualifications for dual enrollment

instruction, compiled and categorized in four ways such policies. Horn et al. listed 10 states in which state laws required dual enrollment faculty to be aligned with the requirements of the applicable regional accrediting agency. Two of those 10 states, Kansas and Missouri, allow exceptions that require documentation of extensive experience and expertise in limited cases in which the instructor's credentials do not fully meet the requirements of the accrediting agency. Such policies bear watching as conflicts between state law and accreditation agency policies could place institutions in difficult positions. In both cases, however, the exceptions are limited to dual enrollment courses classified as career and technical education. Horn et al. (2016) list 35 states that simply require dual enrollment instructors to be credentialed equivalently to other faculty employed by the postsecondary institution. Nine other states require a master's degree or higher. Horn et al. list six states that use a standard requiring a minimum of 18 graduate credits in the course discipline and one other state that uses a minimum of 15 graduate credits.

Another approach taken by at least eight states is to require institutions to seek dual enrollment program accreditation through the NACEP. Inherent in the standards of NACEP are standards that require equivalent faculty credentialing and encourage continuing professional development within a secondary/postsecondary dual enrollment partnership (Taylor et al., 2015). Taylor et al. (2015) also list 14 states that require training prior to engaging in dual enrollment instruction, 17 states that have policies requiring on-going professional development, and 30 states had annual reporting requirements related to dual credit Taylor et al. (2015) also found other dual enrollment quality assurance policies: 32 states had policies related to course rigor, 23 states

regulated secondary-postsecondary partnerships, 20 states mandated certain support services, 16 states required some form of intra-faculty interactions, 16 states required monitoring student outcomes, 12 states required classroom observations and visits, and five states required applying surveys to stakeholders. Light (2016) calls for integrating dual credit program assessments into the state's annual high school data report in a report on dual credit in the state of Washington on behalf of the Washington Student Achievement Council.

Horn et al. (2016) relate some strategies employed by a limited number of states aimed at increasing the number of high school instructors who qualify to teach dual enrollment courses for a college or university. Two types of approaches are employed to that end. First, financial aid is made available to high school instructors in order to obtain the necessary graduate credentials and/or credits that will enable the instructor to achieve the minimum qualifications. Four forms of financial aid are used. The first involves using district professional development funding to pay tuition and other associated costs. The second is a loan forgiveness model in which educational loans taken out by the instructor in order to specifically achieve the minimal credentials or credits may be forgiven by continuing teaching employment in the state of a defined length. The third approach is state-funded competitive grants for which teachers may apply in order to use the grant funds to meet educational costs. The last financial aid approach is utilization of vouchers made available to teachers based on the numbers of dual enrollment courses that they have previously taught. Other than financial aid-related approaches designed to facilitate attainment of additional credits and/or credentials necessary to qualify to provide dual enrollment instruction, some states employ alternative credit delivery programs, typically

online courses for increasing the numbers of qualified dual enrollment instructors (Horn et al., 2016).

Dual enrollment programs that have a strong framework for data collection and utilization may benefit from post-assessment improvement implementations and ability to communicate program efficacy. Kim (2012) provides an overview of data collection and reporting practices associated with a dual enrollment partnership between City University of New York and the New York City Department of Education. City University of New York collects extensive data regarding course and degree outcomes for students participating in dual enrollment and structures the data into a "Where Are They Now" report. The report was provided to high school principals and other school district and high school personnel. The report suggests which practices and policies are effective and which practices and policies may need revision on some level. The data collection, reporting, and utilization are effectively leveraged by a centrally staffed office at the College that not only acts as a repository and reporting center, but this centralized office structure also provides practical application of the data by engaging in professional development and course design consulting for faculty members engaged in providing dual enrollment instruction. The office also coordinates the activities of the individual campus directors, though the directors have some level of autonomy to administer the dual enrollment programming on their particular campus. Issues and opportunities that constitute potential multi-campus impacts are disseminated to the campus program directors through centralized, on-going communications and workshops.

Overview of Current Dual Enrollment Policies in Georgia

Georgia provides one of the most extensive state-supported dual enrollment frameworks in the United States (Zinth, 2016). The framework is legislatively enabled through the Move On When Ready Act that mandates that out of pocket costs to students and families be limited to only approved, course-specific fees, such as lab fees. All other application fees, tuition, enrollment fees, course material, and textbook expenses must be waived for participating students by participating postsecondary institutions. Use of textbooks must be provided to students, although in many cases students are required to return the textbooks after course completion to avoid charges being assessed. Funding from the state is distributed to both the secondary and postsecondary institutions equally, thereby eliminating financial disincentives for secondary schools whose students take dual enrollment courses at a college or university. However, participating postsecondary institutions must accept the standard reimbursement for tuition hours and textbooks that may be well below the tuition rates and actual textbook costs of and to the institution (GSFC, 2018). Courses, after submittal by the college or university and approval by the state, may be delivered on college campuses, in high schools, or online. The credits earned may count toward both high school diploma requirements and postsecondary degree requirements. The Georgia law allows both general education and career and technical education courses to be approved and offered to students in Grades 9 through 12. However, many universities typically limit their general education offerings to student in Grades 11 and 12, with lower grades typically participating to a greater degree in either career and technical courses offered by postsecondary technical institutions or Early College programs offered by both technical colleges and non-technical

postsecondary institutions. Students may not take remedial or developmental courses that do not count toward a degree. While there is no cap on the number of dual enrollment credits a student may earn, costs are only covered up to 15 hours per semester. Admission requirements for dual enrollment participation are not mandated by state law, but public two-year and four-year institutions part of the University System of Georgia are required to meet at least minimum system standards unless policy exceptions are approved. Policies allow University System of Georgia institutions to set admission standards for dual enrollment students that are higher than the general admission requirements required by the system for institutions within their sector within the system (Board of Regents, 2017b). Thus, minimum system standards for dual enrollment are, in many cases, higher than an institution's minimum admission standards for first-year students who have previously graduated from high school. In order for costs to be covered by the state, secondary schools must sign a participation agreement each year with the state agency administering the law, the Georgia Student Finance Commission (GSFC). The law in current form has expanded participation to year-round. Before the current iteration of enabling legislation was passed, students could only participate in fall and spring semesters, but currently courses may be completed during the summer semester as well.

Does Dual Enrollment Improve Access and Degree Attainment

for Underrepresented Students?

Lauen et al. (2017) discuss some of the challenges associated with minority enrollment in colleges and universities, such as "under-matching" of minority students to enrollment rates and into levels of degree programs relative to their academic ability and performance when compared to non-minority students. Lauen et al. note that minority

students often lack guidance and support frameworks to assist with basic admission processes and requirements. Lauen et al. suggests that dual enrollment programs, including early college programs, that typically have more structural support at both the high school and postsecondary levels can be very useful in improving minority student enrollment rates. In a 2017 meta-study, the What Works Clearinghouse noted four research studies meeting the Clearinghouse's standards for being classified as rigorous research studies that indicated significant increases in college access correlated to dual enrollment participation. In the four studies reviewed by the Clearinghouse, the positive impacts of dual enrollment participation on post-high school graduation college enrollment rates ranged from 12% to 19% higher than participation rates for non-dual enrollment students, with an average improvement over the four studies of 15%. Hofmann (2012) fits dual enrollment squarely into the national degree completion framework that seeks a higher return on public-derived investments in higher education. Hofmann also posits advanced levels of college readiness as beginning at least in high school, if not in middle school, and notes the effect of dual enrollment participation upon higher levels of college readiness. This connection is vital as one considers data and research that show disparities in college completion when disaggregated by ethnicity and socioeconomic status. Engberg and Wolniak (2010) point out the disparities between African American, Hispanic, and low-income students with other students with regard to educational continuation beyond high school. A number of studies have suggested dual enrollment in technical education courses benefits students of color and low socioeconomic status (Hughes, Rodriguez, Edwards, & Belfield, 2012; Lynch & Hill, 2008).

Lochmiller, Sugimoto, Muller, Mosier, and Williamson (2016) undertook an extensive look at participation and credit attainment outcomes for 11th and 12th grade public school students for the Kentucky College and Career Readiness Alliance of Regional Educational Laboratory Appalachia. Though other research summarized in this literature review suggests the benefits to underrepresented student populations in terms of access to higher education and degree attainment, the findings of Lochmiller et al. (2016) suggest some of the challenges inherent to access to higher education after post-high school graduation also exists for access to dual enrollment itself. Differences in dual enrollment participation rates for particular populations followed to a large degree disaggregated participation rates for access to higher education itself. Higher rates of dual enrollment participation were exhibited for female students, Caucasian students, students whose primary language is English, low income students as evidenced by non-eligibility for free or reduced school lunches, and students with the highest grade point averages and standardized test scores. The dual enrollment course participation rates for African American, Hispanic, and Asian/Pacific Islander students were approximately half that of Caucasian students. Similarly, participation rates for students eligible for the free or reduced lunch program were a little more than half of the dual enrollment participation rate for students not eligible for the school lunch program. Once enrolled, dual enrollment course completion rates were lower for minority students and those students who had lower grade point averages and standardized test scores, further exacerbating issues related to lower participation rates.

Columbia University (2012) noted that male, low-income, and students with grade point averages in the lowest quartile in their high schools all benefited from dual

enrollment participation to a greater degree in terms of improved grade point averages than did female students of greater academic standing and higher socioeconomic status. The implication is significant that such groups that typically are more challenged in terms of college enrollment and degree attainment can achieve greater percentage gains in academic performance than the typically highest achieving group, socioeconomically advantaged females.

Zinth (2014a) noted that the college going rates for students from rural, low-income high schools do not compare favorably to other geo-economic groupings. The college enrollment rates for students from rural, low-income areas were three percent lower than students from urban, low-income, high minority areas and five percent lower than urban, low-income, low minority areas. The college participation rates for students from rural, low-income regions were a full 20% below completion rates for students from areas who were more urban, higher-income, and with lower minority demographics. Johnson and Brophy (2006) also suggested access to higher education was often more difficult for students from rural areas and cultures. They noted that dual enrollment programs, when funded such that costs of attendance were covered or nearly covered for participating students, provided a positive economic choice for rural students and parents allowing for earlier access and completion at a lower cost. Zinth (2014a) suggested dual enrollment as an effective strategy to increase college enrollment and degree attainment rates of rural students and provided various recommendations for overcoming instructor qualifications, costs, and logistical issues associated with the delivery of college courses in rural high schools. Grubb, Scott, and Good (2017) noted similar negative gaps in college enrollment between students from rural areas and other students and advocated

for governmental policies based on research-documented benefits and that made dual enrollment systemic for students from all geographic regions of Tennessee.

Lochmiller et al. (2016) looked at participation and credit attainment outcomes for 11th and 12th grade public school students for the Kentucky College and Career Readiness Alliance of Regional Educational Laboratory Appalachia. The researchers found mixed results for participation and outcomes for students in rural school districts. In looking comprehensively at dual enrollment participation and outcomes from 2009 to 2014 across Kentucky, initial participation rates for students from rural Appalachian counties were initially promising after the passing of a 2009 law in Kentucky that supported dual enrollment as a key component in meeting state goals for increased college readiness, access, and degree attainment. Participation rates from the rural counties were substantially higher than non-rural counties over the four years of the study. However, participation rates from students from school districts of the Appalachian counties declined after the initial two years included in the study, and successful course completion rates and credit accruals were lower among students from the rural counties than for non-rural students. The participation rates tied to the rural counties mirrored to some degree the percentage of dual enrollments in career and technical courses versus general education courses. As a higher percentage of courses shifted over the four years of the study from career and technical courses to general education courses, the participation levels of rural, Appalachian counties fell.

Roach, David, and Gamez Vargas (2015) noted that costs associated with attendance, such as tuition, fees, and transportation costs, can factor into participation in dual enrollment courses where applicable. Online courses are often mentioned and

implemented as a counter-strategy to offset transportation costs and schedule constraints associated with on-campus dual enrollment. Zinth (2014a), however, named several limiting factors for rural students taking online courses, including technological challenges, particularly broadband limitations often found in rural areas. Johnson and Brophy (2006) related the early approach taken in Washington State when the legislature passed a bill providing for funding a new dual enrollment program. Called Running Start, the program funded tuition for dual enrollment courses at 33 different community colleges around the state, thus making dual enrollment within commuting distance of many eligible high school students. Moreover, Howley et al. (2013) described beliefs among teachers of students from poor, rural communities that dual enrollment provided a gateway to higher education and offered opportunities for exposure to a much broader array of perspectives than to those which the students would normally have access.

Piontek, Kannapel, Flory, and Stewart (2016) in a study on behalf of the Kentucky Regional Educational Laboratory Appalachia of six rural school districts found extensive challenges for identifying adequate numbers of high school faculty to deliver dual enrollment courses as adjuncts for partnering colleges. Piontek et al. (2016) also found that variations in the costs to students and their families associated with dual enrollment could present challenges of access for students from poor rural districts, even though the six districts studied largely had limited transportation-based or location-based inhibitors to dual enrollment participation. Wide variations in costs of attendance existed within the six rural districts where dual enrollment partnerships occurred. All dual enrollment students received some level of discounted tuition and fees through either support provided by the school systems in the case of two of the most socioeconomically

challenged districts or from the partnering postsecondary institution. Yet, administrators and other personnel in all six districts believed that even discounted tuition or simply an administrative fee of $50 per semester kept some students from participating who otherwise could have benefited from dual enrollment.

Adelman (1999) showed that a challenging high school curriculum that may include dual enrollment, AP courses, and other forms of acceleration had a disproportionately positive impact on degree attainment for African-Americans and Latino students when compared to that of Caucasian students. Giani, Alexander and Reyes (2014) found that participation in dual enrollment increased the likelihood for college attendance and performance for Hispanic students particularly when financial and transportation obstacles were diminished or eliminated. Pretlow and Wathington (2014) discussed the State of Virginia's dual enrollment program as facilitating a higher level of enrollment and progression for Hispanic students. Roach et al. (2015) reported a similar result in Oklahoma where a tuition-free program saw a rise in minority participation in dual enrollment with Hispanic enrollment almost quadrupling over a two-year period.

Ganzert (2012) analyzed data from over 15,000 community college students in North Carolina that revealed factors affecting academic performance as indicated by grade point average and degree attainment. Ganzert's analysis showed a positive correlation between dual enrollment credit with higher grade point averages and graduation rates for minority students. Ganzert found that minority students with dual enrollment credit experienced statistically higher grader point averages their first year of college and were more likely to graduate with a degree. Dual enrollment seemed to have no significant impact on academic performance when Ganzert used gender as a variable

given that male and female students both saw significant increases in first-year college grade point averages if the students had participated in dual enrollment.

<p align="center">Improved Retention and Degree Attainment</p>

Foster (2010) looked at students enrolled in an associate of applied sciences degree program at a community/technical College who had participated in a dual enrollment program in Oklahoma either as a traditional high school student or as an adult learner. Foster engaged in quantitative research that compared academic performance, retention, and graduation rates of students who had and had not participated in dual enrollment. Despite the fact that non-dual enrollment participants had ACT scores almost a full point higher upon entering the degree program, the academic performance and retention for the students who had participated in dual enrollment varied from the non-participants significantly. First to second-year persistence, average grade point average, and hours earned all showed a positive correlation to previous participation as a dual enrollment student. Past dual enrollment participants were 67% more likely to remain enrolled the second year of the degree program, had a 49% higher grade point average, and earned on average 97% more hours than students in the same degree program who had not participated in dual enrollment prior to entering the program. Given these positive academic performance correlated to dual enrollment participation prior to entering a degree program, Foster reached the conclusion that dual enrollment was an important preparatory step that improved the transition to college.

<p align="center">Time to Degree</p>

Shorter time to degree attainment is an expected outcome for dual enrolled students (Morrison, 2007). Morrison found an advantage of over 800 days in the average

time-to-degree for dual enrollment participants versus non-participants. Grubb et al. (2017) found community college students who participated in dual enrollment were 2.5 times more likely to obtain an associate's degree in two years and 1.5 times more likely to graduate in three years with the same degree versus their classmates who did not. An (2013) found significant benefits in increasing degree attainment and time-to-degree for students of low socio-economic status and specifically first-generation college students. An found that the relative positive effects of dual enrollment on low socioeconomic status students were far greater than the degree of positive variation for students of higher socioeconomic backgrounds and level of parental education. Cowan and Goldhabor (2015) described particular benefits to low-performing, low-socioeconomic status students in terms of college enrollment rates and posited that such positive impacts were largely due to reductions in cost of enrollment for students in government-funded dual enrollment programs that transferred little of the responsibilities for costs to students and their families.

Huerta and Watt (2015) found that students in the Advancement Via Individual Determination (AVID) college readiness program, a multifaceted academic credit program, made more progress toward degrees before and after high school graduation than non-participants. Additionally, AVID program participants were much more likely to remain enrolled in the second year of post-high school graduation, thus demonstrating the impact on retention of a program that encourages dual enrollment and other forms of advanced credit courses coupled with a scaffold of academic and advising support structure. This relatively higher retention rate is particularly significant because almost 85% of students in the program were part of ethnic minority groups (i.e., 50% Hispanic,

24% African American, 6% Asian American, and 4% other). However, Huerta and Watt noted that students who enrolled at a four-year college after high school graduation accrued credits toward a degree at a higher rate than did students who enrolled in a community college.

Kim (2014) indicated that obtaining academic dual credits had a positive correlation to credit hours attained after full, post-secondary admission into a degree program. Kim examined the results of cohorts in Florida and Oregon, primarily in community college settings. However, Kim found some negative correlation between dual credit and retention in Florida. Kim suggested that the negative effects upon retention in this case could be explained by attainment of dual credits allowing participating students broader college admission options at an expanded number of institutions within and outside of Florida.

Pretlow and Wathington (2014) found that dual enrollment participants were more likely to enroll in higher education institutions immediately after graduation, thus avoiding the negative impacts of delayed enrollment upon degree attainment. Cowan and Goldhaber (2015) indicated that chances for high school graduation and success in college were particularly improved for students who had previously underperformed academically.

Kinnick (2012) found, in a study limited to Kennesaw State University, that students who had participated in the university's dual enrollment program were over five times more likely than non-participants to graduate in four years (i.e., 64% versus 12%). Further, Kinnick found that students who participated in the dual enrollment program

who continued on to receive a bachelor's degree at the institution were over 20 times more likely to continue into a graduation degree program at the university.

Blankenberger, Lichtenberger, and Witt (2017) conducted a study comparing data derived from the academic records of over 8,000 high school graduates in Illinois from the class of 2003 who participated in dual enrollment to the results from a like number of non-dual enrollment participants from the same class. The researchers found positive benefits in terms of time to degree attainment related to participation in dual enrollment. Unlike most previous research studies, Blankenberger et al. (2017) disaggregated students based on the selectivity of their chosen colleges or universities utilizing the Barron's college selectivity scale. While the research showed a greater impact on lessening time to degree in less selective and non-selective colleges, time to degree was shortened for former dual enrollment students enrolled in postsecondary institutions across the spectrum of institutional selectivity. Blankenberger et al. also found significant impacts about degree attainment that correlated with participation in dual enrollment. As with time-to-degree, degree attainment was most positively impacted for students initially enrolled in community colleges and less selective four-year colleges after high school graduation. Former dual enrollment participants who started at a community college then transferred to a four-year postsecondary institution completed a baccalaureate degree at a nine percent higher rate than did students who initially enrolled in community colleges and who were without dual enrollment credits in their academic histories.

<center>Effects on Academic Performance</center>

Hughes and Edwards (2012) concluded that dual enrollment classes can serve a role in identifying weaknesses in college preparation at an earlier stage of the higher

education process when it is more possible to correct such deficiencies. Thus, implications for effective advisement and mitigation of academic weaknesses were suggested by analysis of performance in dual enrollment by individual students. The researchers contended that the academic support structures and mechanisms inherent in the dual enrollment classrooms located in high schools were better suited to ferreting out potential learning differences and culture-based challenges than a typical classroom setting.

An and Taylor (2015) found that dual enrollment participants exhibited greater degrees of college readiness than non-participants. An and Taylor examined readiness through cognitive (Conley, 2012) and non-cognitive (Karp, 2012) lenses. In both cases, the researchers found positive impacts on college readiness for dual enrollment and other college-acceleration vehicles, such as AP and IB versus non-participants (An & Taylor, 2015).

An (2011) found that dual enrollment participation increases first-year grade point average and decreases the need for remedial courses and that the difference was particularly more impactful for students of low socioeconomic status. An found these positive impacts on academic performance and college readiness particularly significant given the correlation between socioeconomic status and college success in terms of participation, academic performance, and degree attainment.

Allen and Dadgar (2012) found that dual enrollment participation increased first-semester grade point average and the average number of first-semester credits earned. Their research also showed an increase in first-year to second-year retention rates. An (2015) also found that dual enrollment participation played a role in increasing first-year

grade point average and found dual enrollment students to be more motivated and engaged within their college classrooms. An found that when taking into account the selectivity of the college or university where the student enrolled, impacts of dual enrollment on first-year grade point average grew as college selectivity diminished. Students at highly selective colleges saw fewer negative impacts on their first-year grade point average when they had participated in dual enrollment. Kinnick (2012) also noted a positive correlation between dual enrollment participation and first-year grade point average.

Hoffman, Vargas, and Santos (2009) contended in a study on City University of New York's College Now program, a dual enrollment partnership program, which participating students were more likely to persist into the second year and beyond, and obtained more credit on average by the end of the second year than students without dual enrollment credits. Giani et al. (2014) found that for each dual enrollment course completed, the likelihood that a student would attend college, would persist in college, and would graduate from college increased. Several studies have suggested benefits from participation in dual enrollment upon discipline-specific courses. Zuidema and Eames (2014) asserted that students taught dual enrollment first-term chemistry in a high school setting performed better as measured by learning outcomes assessments than did students enrolled in a traditional on-campus setting and taught by the same instructor. Deneker (2013) showed that dual enrollment English composition outcomes utilizing both high school and university instructors created positive writing outcomes that translated into more academic success in higher education. Speroni (2012) demonstrated a significant positive correlation between students taking dual enrollment college algebra and degree

attainment. Dutkowsky, Evensky, and Edmonds (2006) applied an instrument named the Test for Economic Literacy (TEL) to students who had taken economics coursework in high school, comparing the scores for students who had taken the courses as concurrent (dual) enrollment courses, AP courses, or as an honors course. Their findings showed students enrolled in the concurrent enrollment formats did at least as well or better on the TEL than their peers who took economics in an AP or honors format.

The Impact of Dual Enrollment Course Location and Delivery Methods upon Academic Performance

Generally, dual enrollment courses are experienced and enrolled in by students in several different settings and through several methods. Arnold et al. (2017) list the three main settings as face-to-face in high schools, face-to-face on college campuses, and online.

Arnold et al. (2017) examined the impact of participation and delivery method in specific core courses as dual enrollment courses upon academic performance. Furthermore, the researchers also examined whether there was a significant impact upon academic performance due to whether the student took the dual enrollment course in a high school, online, or on campus at a college or university. Arnold et al. compared the course grades of academically comparable students who took introductory English, biology, math, and history core courses as dual enrollment students or after graduation in a conventional, non-dual enrollment manner. The researchers found that grades in all four courses varied significantly higher when taken as a dual enrollment student rather than post-high school graduation. However, when Arnold et al. examined whether the grades assigned to dual enrollment students varied due to whether the dual enrollment course

had been taken face-to-face in high schools, face-to-face on a college campus, or as an online student, there were more variations in the results. In the English and math classes grades were statistically significantly higher in the high school and online environments versus face-to-face on campus. Grades in the biology course, however, demonstrated no statistically significant variation based on environment and delivery mode. Because the sample size was too small with regard to the number of students who had taken dual enrollment history on campus, the statistical analysis was confined to whether there existed differences between taking the course online versus face-to-face in the high schools. In this case, the online version of delivery resulted in higher grades at a significant level.

Vargas et al. (2017) note that research results are mixed in determining whether dual enrollment taught on-site in high schools by qualified teachers on behalf of colleges is as effective as dual enrollment on college campuses wherein dual enrollment students are integrated in the classroom setting with college students who previously graduated from high school. Vargas et al. suggest that experiences that are as close to authentic and full enrollment in a university setting are the most beneficial in increasing college readiness, but, given inequities associated with the inability of some students to obtain transportation to university campuses for purposes of dual enrollment, it is important to offer courses in high schools as well as on college campuses.

Perceptions of Students Regarding the Value and Benefits of Dual Enrollment

Kanny (2015), in a study limited to a small number of students from a small charter school participating in dual enrollment courses at a large, urban community college, found that students were able to articulate both positive benefits and negative

experiences associated with participation in courses along with non-dual enrollment students. The benefits Kanny noted include measured exposure to college-level course expectations before fully committing to full-time college enrollment, increased awareness of the "hidden curriculum" or unwritten expectations not included in the syllabi, and an accelerated sense of academic freedom and maturity. Kanny also noted that the level of freedom, or conversely the lack of structure, could in some cases be perceived by the students as contributing to their academic failures in some courses. Some students, who were readily identifiable as high school students due to wearing a school uniform or other appearance clues, noted negative interactions with regular college students whose comments singled out the dual enrollment students. Students discussed their realizations that the double impact of dual enrollment could cut both ways when grades in college courses were below the student's typical level of performance in high school courses. Kanny concluded that more awareness among college and high school officials of the positive and negative experiences of dual enrollment students could lead to more positive support and outcomes for those students. In a broader study of recent participants in dual enrollment at City University of New York, Allen and Dadgar (2012) found that students' overall perceptions of dual enrollment were highly positive.

The results of the 2016 National Survey of Student Engagement (NSSE) provides some important insights on the value students experienced as a result in dual enrollment, either as a singular experience in obtaining college credits prior to high school graduation, or in combination with AP courses. The results were primarily viewed through a college readiness lens (NSSE, 2016). Utilizing results from the Beginning College Survey of Student Engagement (BCSSE), a pattern of impact upon some

important aspects of college readiness immerged. The BCSSE survey subdivided students into four groups: students with no dual enrollment or AP coursework, students with dual enrollment coursework only in terms of taking courses during high school designed to achieve advanced college credit, those students who took a combination of both dual enrollment and AP credit in an attempt to receive college credit early, and students who only sought advanced credit through AP coursework. Students who took a combination of dual enrollment and AP courses and students who took AP courses only had the highest expectations of how much they would have to study in their first year. However, students who took dual enrollment courses only or who took dual enrollment courses in combination with AP courses were the most accurate in terms of expectations of academic demands aligning with their actual experiences. Thus, one of the most important aspects of college readiness and positive transition to higher education, accurate expectations of the time demands upon college students, is demonstrated at a higher level in students who actually engaged in college courses through dual enrollment prior to high school graduation. The benefits of taking rigorous dual enrollment were not limited to more accurate expectations about time demands of college enrollment. While 11% of those students who took dual enrollment courses felt their dual enrollment courses were no more rigorous than their high school courses, the majority of former dual enrollment students believed college courses were more rigorous. Those students who saw their dual enrollment courses as more challenging reported higher levels of academic progress during their first year of college after high school graduation, higher levels of student engagement, and higher level use of effective learning strategies. The NSSE/BCSSE results demonstrated that students perceived they accrued several positive

college readiness benefits as a result of enrolling in dual credit courses during high school.

<div align="center">Faculty Perceptions of Dual Enrollment</div>

Direct research upon the perceptions of faculty regarding dual enrollment is very limited as evidenced through the body of research literature. Dare et al. (2013) compared the perceptions of educators of students' motivations for seeking accelerated credit, comparing those perceptions to the motivations reported by students. It is unclear what professional roles the educator participants in the study held, and neither is it clear what time of educational organization employed the participants. Therefore, it may not be assumed that the participants were instructional personnel at a college or university level. There are a limited number studies that document perceptions of high school teachers or community college faculty (Ferguson et al., 2015; Hanson et al., 2016; Hofmann & Voloch, 2012; Howley et al., 2013; Piontek et al., 2016). Other perceptions, particularly the perceptions of university faculty, may at best be inferred by reading studies by individual university faculty and administrators (Guzy, 2016; Mangan, 2016; Walsh, 2016) that relate the researchers' conclusions. Inferences based on singular studies are in no way generalizable, and thus there appears to be a substantial absence of studies that might offer insight into the perceptions of faculty, particularly university faculty, delivering dual enrollment instruction.

Dare et al. (2017) examined the differences between educators' and students' perceptions of why students chose to enroll in concurrent enrollment classes. While both groups listed preparing for the future, love of learning, seeking challenges, and social aspects as motivations for enrolling in college courses while still enrolled in high school,

the educators' views were much more simplistic than and not as nuanced as the students' list of reasons. Dare et al. concluded that educators needed a much better understanding of the motivations of such students lest unintended barriers to success be erected in the classroom.

Howley et al. (2013) considered the perceptions of educators involved in dual enrollment with regard to the continued expansion of dual enrollment participation opportunities to broader cross-sections of participants. Howley et al. focused on the perceptions of active instructional personnel in order to better assess the feasibility, rather than the efficacy, of such expansions. The research method involved semi-structured interviews, and the results culminated in four identifiable themes that together provided a framework for understanding the feasibility of expansion of dual enrollment programs and access to them. The themes were Organizational Conditions and Motives, Border Crossers, Organizational Power Dynamics, and Personal Attitudes Regarding Early College and Dual Enrollment. Organizational Conditions and Motives refers to the real and perceived motives of the secondary and post-secondary institutions involved in a dual enrollment partnership, as well as the overlay of the conditions imposed by and on each, such as location, funding, and policies. Border Crossers refers to the employees of each of the partnering organizations who are the key liaisons to the other organization. Success and progress in the partnership depended largely on the willingness to engage in the partnership and to work cooperatively together. Organizational Power Dynamics were found to be important in that Border Crossers often found that faculty policies and cultures at the postsecondary institution created roadblocks and perceived power differentials that disadvantaged the secondary school partner. Personal attitudes about the

quality and benefits of dual enrollment held by various members of the two partnering organizations were also identified as important, both positively and negatively. When influential members of the organization held such attitudes they were found to influence partnership outcomes.

The dual enrollment programming context in which the researchers focused their examinations was that of partnerships between higher education institutions and high schools with college-credit courses being taught by qualified high school teachers on-site in the high schools, or in common parlance "Concurrent Enrollment". Therefore, the results of the research revolved around the partnerships, the obstacles, successes, and particularly those personnel from both educational entities who helped bridge the gaps and work through roadblocks that might otherwise have stopped the partnership from working. Howley et al. (2013) discussed governmental frameworks that, if left unchecked, might contribute to failure or at least diminishment of the success and reach of the partnerships. Particularly dis-incentivizing in the partnerships in this research, and often elsewhere particularly in the earlier days of such partnerships, were the funding rules that shifted funding away from the local school system to the institutions of higher education based on enrollment. As such, budget-challenged school systems, often in poorer urban and rural areas, found highly persuasive funding-based arguments against participating in such partnerships.

Howley et al. (2013) identified the theme of "Border Crossers" that described the importance to partnership success of those from both types of educational institutions who were willing and able to bridge the gaps between policy and practice. Border Crossers also provided appropriate levels of understanding by actively engaging partners

at the other institution on matters of mutual concern and interest. This type of partnership in turn led to bipartisan suggestions and improvement initiatives. Howley et al. also examined the perceptions of participants in dual enrollment partnerships from both the higher education and high school levels. Perceptual themes brought to the surface both positive and negative attitudes about dual enrollment, with the attitude most frequently documented being that early access to college credit was good because of the opportunities it afforded students. The second most prevalent attitude was that such enrollment was a negative because it forced students to grow up too quickly and competed with formative experiences that were extracurricular in nature.

Guzy (2016) outlines the threat posed to honors college programs within universities as the delivery of general education courses, enhanced versions of which have traditionally been the basis upon which honors program have focused instructional delivery. Guzy elaborates the threats posed to quality inherent to honors coursework as largely connected to the growth of AP and dual enrollment programs providing accelerated college credit attainment. Guzy connects the growth of these accelerated credit vehicles as growing exponentially in large part due to pressures from parents and actions by state lawmakers that effectively mandate acceptance of such credits in order to reduce the costs of higher education. Thus, Guzy constructs a string of logic that would infer that mandates and consumer actions aimed at increasing affordability may damage quality.

Hanson et al. (2015) surveyed 150 school professionals from 35 high schools including principals, counselors, and teachers who were stakeholders in concurrent enrollment programs, wherein college courses of one large community college were

taught on location in the high schools by high school faculty. The study examined the perceptions of how the concurrent enrollment programs impacted their schools and their students. All three groups indicated perceptions that concurrent enrollment programs provided substantial benefits to schools and their students. In consideration of the impact on schools, principals and teachers were significantly more likely than counselors to indicate a strong sense that concurrent enrollment enhanced the reputation and academic rigor of their school. The researchers postulated these differences as largely being role-based. When the focus turned to the impact of concurrent enrollment on their students, all three groups indicated a strong sense that students experienced positive impacts. Counselors, however, varied significantly again with principals and teachers when asked if concurrent enrollment increased participations levels in academically challenging courses and if participating students experienced more rigorous learning.

Hofmann and Voloch (2012) note that perceptions of the quality of dual enrollment by high school counselors and other secondary school leadership can correlate with the tiered nature of higher education institutions in the United States. Hofmann and Voloch (2012) contend that counselors and other high school officials often perceive that obtaining dual enrollment credits from four-year institutions will be of more value to their students as they apply for admission and matriculate into degree-seeking programs upon high school graduation.

Ferguson et al. (2015) examined the perceptions of dual enrollment students and rigor among community college faculty teaching dual enrollment-specific courses on their campus, high school faculty teaching concurrent enrollment courses as adjuncts on site in their high schools, and community college faculty teaching regular general

education courses on the college campus. Ferguson et al. (2015) concluded that all three groups perceived the rigor of dual enrollment or concurrent enrollment-specific courses, regardless of location, as higher than those same courses taught as a standard general education course. All three groups also concluded that dual enrollment/concurrent enrollment students were better prepared and more academically talented than non-dual enrollment students, but also less mature than non-dual enrollment students. Given this potential and relative lack of academic and social maturity, Ferguson et al. concluded that institutions of higher education would do well to provide academic and behavioral support for students in dual and concurrent enrollment programs. The researchers also analyzed the contents of course syllabi and faculty interviews to determine relative rigor of the courses taught on the college campus and the courses taught as concurrent enrollment courses in the high schools. The researchers concluded that academic rigor was at least as high, and generally higher, in dual enrollment/concurrent enrollment courses than in parallel general education courses.

Hofmann and Voloch (2012) call attention to the irony of college faculty questioning whether dual enrollment actually fosters college level work given that a study (Arum & Roksa, 2011) based on the College Learning Assessment suggested that little progress in learning is made during the freshman year of postsecondary education. Hofmann and Voloch (2012) contend that the assumption that all learning that happens in the physical confines of a college classroom is college-level quality is at best a reach. Conversely, the researchers contend that college faculty critical of concurrent enrollment because the course is delivered elsewhere are largely not basing their position on real performance data. The implication was that questioning the quality of credits earned

through dual enrollment should be viewed clearly within the broader context of the level of success in delivering expected learning outcomes, the location and timing of course deliveries notwithstanding.

Walsh (2016) argues that dual enrollment and AP courses should be viewed as no substitute for enhanced and challenging college courses after high school graduation, a skeptical viewpoint often expressed by faculty, particularly those faculty who view dual enrollment and AP courses as learning vehicles in competition to traditional general education course delivery. Walsh argues that course offerings in typical dual enrollment or AP formats do not have the depth of experience and learning that is possible with a well-designed honors course. Walsh contends that expedience and family cost-savings are trumping what should be the greater concerns for academic quality. Similar concerns are expressed by university officials in Texas (Mangan, 2016) where dual enrollment has expanded rapidly. Concerns include perceptions that dual enrollment taught on location in high schools are really re-labeled high school courses instead of rigorous high school courses, that pressure will exist to pass students in concurrent general education classes when they have not met learning outcomes, and that teacher preparation to teach dual enrollment courses is not adequate or nonexistent.

Piontek et al. (2016) found in a comprehensive study of dual enrollment programming partnerships in six rural counties that faculty teaching dual enrollment courses, whether employed by a college or university or by the school district, expressed concerns about whether students were actually ready to take general education dual credit courses. The instructors saw the challenges of college readiness as an inhibitor to the expansion of dual enrollment. Conversely and perhaps somewhat ironically, instructional

personnel also felt that participation in dual enrollment enhanced college readiness and would likely eliminate the need for remedial instruction.

Summary

Dual enrollment, which is sometimes alternatively known as concurrent enrollment, dual credit, or in a specific cohort-based format Early College, has grown exponentially over the course of the 21st century. The benefits of dual enrollment to students have been articulated in the research and assessments, and include characterizations of increasing college readiness, access to higher education for underserved populations, and degree attainment. Studies indicate the time needed to complete a degree is shortened, and the cost of college attendance is lessened, both primarily due to the earning and accumulation of college credits prior to high school graduation. The academic performance, academic self-confidence, and ability to identify and use effective academic strategies of dual enrollment students generally outpaces those same characteristics of non-participants.

Given these benefits widely reported in the research, dual enrollment has become part of the national college completion agenda that focuses on increased accountability for educational institutions, identification of strategies that show promise in increasing ultimate degree attainment, and implementation of those strategies. State government entities and officials, secondary and postsecondary educators, and the public are all increasingly interested in expanding dual enrollment opportunities through policy, programs, and demonstrate that interest through investment of state and local funding.

Yet, concerns about the efficacy and appropriateness of dual enrollment persist in corners of academia, particularly among some sectors of higher education personnel.

These criticisms often correlate to the perceived impact upon the critics' professional position and activities. As the average level of prior college credits brought into institutions by students after high school graduation has grown, honors college program administrators and general education faculty have increasingly offered criticisms of dual enrollment, particularly in the form of concurrent enrollment programs. Rationales for the criticisms typically center upon perceptions that academic quality is negatively impacted as dual enrollment in its many forms shift traditional roles in and timing of general education course delivery. As more students have entered full-time college enrollment after high school graduation carrying credits sufficient that many general education course requirements have already been satisfied, the traditional demand for first-year and even second-year general education courses has been altered. Given different perspectives and motivations, differences in the perceptions of various dual enrollment stakeholders may occur. These differences could create both lack of support critical to successful implementation and maintenance of dual enrollment programming and accessor, conversely, could lead to less than rigorous assessment of the efficacy of dual enrollment participation. Lack of critical support and less rigorous assessment could inhibit the initial access to dual enrollment or programmatic improvements that could increase benefits to students, institutions, and society.

This study sought to identify perceptual differences of certain defined stakeholders, ascertain the reason for the differences if they exist, and formulate suggestions to better inform dual enrollment offerings, partnerships, and assessments. There is very little in the research literature that documents perceptions of university

faculty with instructional experience specifically in the context of dual enrollment. Thus,

this study was intended to contribute to filling that void in the research literature.

CHAPTER III

METHODOLOGY

Introduction

This sequential qualitative methods study proposed to determine the perceptions of Columbus State University faculty members with dual enrollment instructional experience. Perceptions sought related to a range of potential benefits to negative impacts accruing to students, instructional personnel, instructional rigor, and the instructional organization from participation in dual enrollment courses, programming, and institutional partnerships. The researcher sought to identify any substantial differences between the perceptions of University faculty and perceptions expressed in the research literature, and to analyze and interpret any such differences for potential implications for assessment and benefits of dual enrollment programming and partnerships upon students and the organizations themselves.

Perceptions of faculty providing instruction to students engaged in dual enrollment were important given that provision of college-level general education courses, or college "core" courses, has shifted in part from post-high school graduation time frame to pre-high school graduation as participation in dual enrollment has risen (Guzy, 2016). In addition to a shift in time frame for the delivery of general education courses, the personnel delivering dual enrollment courses have also to some degree shifted from delivery by college faculty employed directly by the university to increasingly being delivered by high school faculty carrying the academic credentials

necessary to teach college courses (Zinth, 2015). As instructional sourcing has shifted, the efficacy and rigor of such timing and delivery paradigms have been both questioned (Guzy, 2016; Klein, 2007; Mangan, 2016) and promoted (Dare et al., 2017; Ferguson et al., 2015) by stakeholders. As such, some tensions have arisen between stakeholders embracing traditional delivery and timing of general education courses and proponents of expanding dual enrollment offerings and flexible course delivery options.

The existing research provided limited identification, analysis, and understanding of the perceptions of secondary and post-secondary instructional personnel. The researcher sought to identify perceptions of, and any perceptual differences between, Columbus State University faculty members with experience providing dual enrollment instruction. Identification and analysis of perceptions and perceptual differences in this study formed the basis for recommendations regarding the formation of dual enrollment partnerships and assessment of dual enrollment instruction.

<div align="center">Research Questions</div>

Three research questions used to guide the initial phase of this study are as follows:

The research questions to be used to guide the first phase of this study were as follows:

(1) What are the perceptions of university faculty about the rigor and academic quality of dual enrollment instruction, and do those perceptions vary based on whether the instruction is delivered in a traditional postsecondary classroom versus in a concurrent, dual enrollment-only classroom setting within a high school?

(2) What are the perceptions of university faculty regarding impact upon the college readiness, academic performance in the first year beyond high school graduation, and likelihood of eventual degree completion of students participating in dual enrollment?

(3) What are the perceptions of university faculty regarding impacts of the growth in dual enrollment credit delivery upon their own professional situation and upon their educational institution?

The research question used to guide the second qualitative phase of this study was:

(4) What are the perceptions of university faculty of the advantages and disadvantages of the dual enrollment concept?

Research Design

The researcher sought and received approval from the Institutional Review Board of Columbus State University to conduct this study through the university-approved process. Informed consent information was provided as the initial action required in the survey in order for participants to access the survey items. Thus, informed consent for the first phase of data collection was inherent in the data collection survey instrument. At the outset of the second phase of data collection focus group, informed consent documentation was provided and signed by participants attending the focus group.

The researcher employed a sequential qualitative design for the study in order to more fully identify and then understand perceptual differences that existed among instructional personnel regarding dual enrollment participation. The researcher also sought to know whether any differences in perceptual trends were significant in measure and meaning. The blending of two qualitative design approaches allowed for perceptual

data to be collected and analyzed, providing for increased validity of findings and deeper depth of understandings that may be inferred from the findings (Creswell & Clark, 2011).

Perceptual data were initially collected and identified through application of a survey instrument designed by the researcher and utilizing a set of qualitative perceptual-oriented questions that asked the participant to rate the degree of agreement or disagreement on a four-point Likert scale (Nadler, Weston, & Voyles, 2015) the impacts of dual enrollment participation upon students, faculty, and their organization. Formation of the survey items were informed by the research literature and were aligned with the first 3 research questions. Refer to Appendices A and B for survey items and alignment of items with the research questions and literature.

Survey participants were solicited for participation in the second phase of data collection in a qualitative focus group through the final item on the initial phase survey that identified willingness to be contacted for consideration of participation in the focus group. The focus group sought to understand reasons and rationales for perceptions by asking the subjects to share their perceptions of the advantages and disadvantages of the dual enrollment concept.

The research paradigm for this study was pragmatism, as understanding was sought about perceptions of instructional practitioners with regard to the concepts, practice, and outcomes of dual enrollment. Qualitative data were collected in order to first identify the perceptions of faculty and subsequently to gain a better understanding of the reasons for those perceptions.

The researcher utilized a sequential qualitative research design (Creswell & Clark, 2011) through the application of a two-phase qualitative methods approach. Qualitative

data were initially collected through application of a survey instrument given to faculty members identified through a course roster analysis as having taught dual enrollment students between fall semester 2017 and spring semester 2019 at Columbus State University. Qualitative perceptual data were sought in the initial phase of data collection was sought through a series of questions intended to identify perceptions that would provide answers to the first 3 research questions. Qualitative data sought in the second phase of data collection was based on the fourth and final research question through a face-to-face focus group. Both data sets were used to form a discussion at the conclusion of the study. The study carries both descriptive and explanatory aspects because the first phase qualitative data were used to in describe perceptions of faculty that are limited in the research literature, and the qualitative data obtained in the second phase of data collection were used to explain in part the perceptual results(Creswell & Clark, 2011).The study is sequential because there was an order of data collection, with qualitative data being collected in two phases through surveys and then the focus group (Creswell & Clark, 2011). Qualitative results were used for confirming, clarifying, and refuting perceptual themes and trends identified in the literature and during the initial phase of data collection.

Population

Dual enrollment, for the purposes of this study, refers to instances wherein high school students are enrolled in courses for college credit prior to high school graduation. Dual enrollment offerings and programs typically involved cooperation between high schools wherein the dual enrollment students are enrolled and a postsecondary institution that will award the actual college credit if course requirements are met by the student for

credit attainment. In Georgia, numerous postsecondary institutions, which are part of the public University System of Georgia, the public Technical College System of Georgia, or are independent private institutions, participate in dual enrollment by offering postsecondary credits either directly through their own course offerings or through transferring in such credits obtained by students at other institutions. The majority of students participating in dual enrollment in Georgia through public postsecondary institutions have little to no costs associated with that enrollment through the state-sponsored dual enrollment program administratively overseen by the Georgia Student Finance Commission (GSFC). Participating secondary schools and postsecondary institutions, in order for their students to have tuition and fee costs covered under the dual enrollment program, must file a yearly participation agreement with GSFC. Courses eligible for funding coverage must be approved through the Georgia Department of Education.

Due to the high level of coordination required between secondary schools and postsecondary institutions participating in dual enrollment offerings, partnerships are formed between schools and institutions. These dual enrollment partnerships may be informal with each entity working with each other and their students to meet state administrative or accreditation-related requirements, or the partnerships may be formally detailed through memoranda of understanding or other formal devices. Dual enrollment students from a particular high school may enroll in various postsecondary institutions, but typically, and often due to geographic proximity, one or more postsecondary institutions will be the primary partner or partners, either formally or informally, to a particular secondary school.

Faculty members for the purposes of this study were defined as those instructional personnel who meet the standards outlined by appropriate accrediting bodies and state agencies to provide instruction at the postsecondary level who have provided dual enrollment instruction in the specified time frame. Subject populations selected for the initial and subsequent phases of data collection were faculty members employed full-time in instructional or administrative capacities by Columbus State University.

<center>Participants</center>

After receiving permission from the IRB to conduct the study, the researcher contacted the Columbus State University Office of Institutional Research to obtain the names and email addresses of full-time University employees who had provided instruction to at least one dual enrollment student during the period of fall semester 2017 through spring semester 2019. Those instructional personnel so identified were targeted through Qualtrics for receipt via email of a summary of the purpose and methodology of the study, informed consent forms, and the survey instrument. The faculty members were informed that the survey instrument would be open for a period of 5 days. Follow-up reminder emails went to non-completers on the third day and last day of availability.

During the initial survey, participants self-selected for possible participation in the subsequent focus group. Focus Group participants were prompted to discuss their perceptions of the advantages and disadvantages of dual enrollment participation in order to further understand their perceptions of dual enrollment participation related to their students, their organizations, and themselves.

Instrumentation

The purpose of the faculty survey instrument was to answer Research Questions 1, 2, and 3. The instrument included two questions used to identify experiential contexts for the subjects include level of experience and the setting(s) in which the subject were directly involved in instructional delivery for dual enrollment students. The instrument also contains 18 questions designed to, when combined with the experiential questions, reveal perceptions regarding dual enrollment participation and allow for purposive grouping for qualitative sampling purposes. The 18 perceptual-oriented questions were presented in a four-point Likert scale format with available options ranging from *strongly disagre*e to *strongly agree*.

Face validity was established through a "panel of experts" approach. Three individuals credentialed at the master's degree level or above engaged in professional education-related positions were asked to complete the survey and provide comments on the instrument in general and the instrument's individual questions.

Survey validity was established through triangulation of thematic content established during the following qualitative focus group with perceptual responses derived from the survey data. Survey question/item validity was optimized by aligning items in a balanced manner with the first 3 research questions with consideration given to assessing the array of desired perceptual topics. See Appendix B.

Data Collection and Analysis

To begin the study, the researcher solicited participation through university email addresses of Columbus State University faculty identified as having taught dual enrollment students during the time period of fall semester 2017 to spring semester 2019.

The solicitation included a link to the survey that was constructed and administered through Qualtrics software and required informed consent in order to access the body of the survey. The population invited to participate in the survey was comprised of 136 faculty members identified by the Columbus State University Office of Institutional Research, 36 of which completed the survey, thus constituting a 26.47% response rate. The survey instrument entailed a 20-question survey instrument (Appendix A); the intent of which was to reveal qualitative ratings providing insight into the perceptions of participants. The major findings were summarized into tables and organized by their relevance to the various research questions.

Once Phase I data collection was completed, 16 faculty participants who indicated a willingness to discuss participation in the subsequent focus group by providing their email contact information in response to the final item of the survey were invited to participate in the second phase of data collection. Thus, purposeful sampling was the technique used to secure participants for the study. Seven faculty members attended the focus group. Focus group prompts were designed to allow a substantial level of free thought and discussion regarding the advantages and disadvantages of the dual enrollment concept and were designed to illicit data that would deeper inform perceptual data obtained in the initial phase of data collection.

The focus group was held in a multipurpose room within the Center for Online Learning on the second floor of the Schuster Student Success Center on the main campus of Columbus State University. The time of the focus group session was selected based on a review of the instructional schedules of the 16 Phase I survey participants who indicated a willingness to consider focus group participation in order to optimize the

number of participants. After identifying the optimal date and time, emails were sent individually to each of the 16 potential participants.

Seven participants attended and participated in the focus group. The sessions were recorded and transcribed initially by the researcher and an assistant utilizing two instances of the Otter recording and transcription application for iPhone. The two automated transcriptions simultaneously produced by the application were compared for similarity by the researcher and assistant, and, after confirmation of alignment of the automated transcriptions, the application-produced transcription was reviewed and edited by the assistant to reflect the discussions accurately during the focus group based on the recording of the focus group. Once the transcription had been edited by the assistant for accuracy compared to the recording, the researcher coded and analyzed the edited transcript for thematic content. Coding and themes developed from the coding by the researcher were subsequently reviewed independently by the assistant with limited adjustments in coding being deemed necessary after review. Further review of the coding and data analysis was conducted by a committee member, Dr. Gina Sheeks.

<div align="center">Ethical Considerations</div>

The researcher was employed by Columbus State University, from which research subjects were drawn. The research was in a leadership position, which at times, assists with the promotion and execution of dual enrollment partnerships and agreements. Therefore, it is imperative to provide assurance of anonymity to the extent possible to subjects, and not revealing, in any specific way, information, which could be used to infer individual identity. Without such assurances answers provided during the interview process could be influenced by positional and political considerations. Participants could

be reluctant, despite not being specifically named in the study, to espouse positions freely which they may deem as being contrary to expectations of others in the public, in peer groups, and in positions of power over them.

Summary

This study sought to identify and gain understanding of the reasons for perceptions of faculty members regarding the quality, benefits, and consequences of dual enrollment participation for students, institutions, and the faculty members themselves. The researcher utilized a sequential qualitative study utilizing a survey instrument during the first phase of data collection to identify perceptions of the faculty participants regarding dual enrollment and subsequently utilized a focus group to collect data that might explain the perceptions and reasons for the perceptions of the faculty members.

Participants sought were Columbus State faculty and administrators with faculty standing who had provided instruction to dual enrollment students during the period between fall semester 2017 and spring semester 2019. Solicitations for participation were sent to university email addresses to136 potential participants with 34 participants electing to complete the initial phase survey instrument through Qualtrics. Survey items were aligned with the first 3 of four research questions with items intended to identify perceptions of faculty regarding academic quality and rigor associated with dual enrollment instruction, as well as benefits and consequences of dual enrollment accruing to students, the institution, and faculty themselves. Possible responses to survey items were structured utilizing a four-point Likert scale measuring degrees of agreement with survey items. The survey instrument was tested by a panel of experts made up with three administrative personnel employed by Columbus State University with instructional

experience. The members of the panel reported length of time required for survey completion and perceived clarity of survey items. Panelists reported being able to complete the survey within 10 minutes and reported no issues with understanding the intent and clarity of survey items. Results were organized into tables and in order of the research questions with which the items were associated.

Survey participants self-selected for potential participation in the subsequent phase focus group. Seven participants took part in the focus group, which was recorded utilizing a recording and transcription application by the researcher and an assistant. The application produced an initial transcription that was then edited based on the recording and field notes taken by the assistant. The edited transcription was then returned to the researcher for coding and establishing qualitative themes, which were then measured for frequencies associated with the prompts used in the focus group, and compared with perceptual data establish during the initial phase. Results were then compared with perceptual data obtained during the first phase of data collection and the body of the research literature.

CHAPTER IV

RESULTS

Introduction

This sequential qualitative study has been employed to report the perceptions of faculty members with dual enrollment instructional experience with regard to the academic quality, benefits, and consequences accruing to students, instructional personnel, rigor, and the higher education institution from participation in dual enrollment programs and courses. The researcher has also sought identification of trends in the data obtained through the study that infer any significant differences between the perceptions of University faculty when compared to the body of the research literature. The research results have been analyzed and interpreted for potential implications for assessment and benefits of future partnerships between high schools and universities upon students and the organizations themselves. The researcher employed a survey applied during Phase I of the study to faculty of Columbus State University who taught dual enrollment students from fall semester 2017 through fall semester 2019. Following Phase I data collection, the researcher scheduled and conducted a semi-structured qualitative focus group in Phase II with seven faculty members who previously participated in the first phase.

Research Questions

Three research questions were used to guide the initial qualitative phase of this study are as follows:

(1) What are the perceptions of university faculty about the rigor and academic quality of dual enrollment instruction, and do those perceptions vary based on whether the instruction is delivered in a traditional postsecondary classroom versus in a concurrent, dual enrollment-only classroom setting within a high school?

(2) What are the perceptions of university faculty regarding impact upon the college readiness, academic performance in the first year beyond high school graduation, and likelihood of eventual degree completion of students participating in dual enrollment?

(3) What are the perceptions of university faculty regarding impacts of the growth in dual enrollment credit delivery upon their own professional situation and upon their educational institution?

The research question used to guide the subsequent qualitative phase of this study was:

(4) What are the perceptions of university faculty of the advantages and disadvantages of the dual enrollment concept?

Research Design

The researcher employed a sequential qualitative design for this study. Initial perceptual data were collected from a survey of Columbus State University faculty identified through course roster analysis as having taught dual enrollment students on behalf of the University during the time period encompassing fall semester 2017 through spring semester 2019. The final survey item during this initial phase asked whether or not survey participants would be willing to participate in the second phase of data collection, a focus group. The utilization of an initial phase of data collection, followed by another

phase of data collection, made this study a sequential design. The utilization of two qualitative instruments in the study design allowed for perceptual data to be identified and then explained in part, thus providing increased validity of findings and deeper depth of understandings (Creswell & Clark, 2011).

The researcher sought to establish validity by randomizing order of survey items associated with the various research questions and by utilization of reverse wording techniques (De Vaus, 2002; Johnson & Christensen, 2012) in order to diminish potential occurrence of acquiescence response sets.

Participants

All participants were comprised of full-time employees of Columbus State University who were identified through course roster analysis as having instructed dual enrollment students from fall semester 2017 through spring semester 2019. Instructors who were employed part-time as adjunct instructors were not included in the study, but some full-time University employees whose role at the time of data collection may have been administrative were included in the invitation to participate in the study. Invitations to participate in the study were sent to 136 potential participants. The number of surveys started were 40, and the number of completed responses were 36, constituting a 26.47% response rate.

Additional qualitative data were obtained through a focus group administered as Phase II of the data collection following administration of the qualitative data survey administered in Phase I. The final question of the initial phase survey asked if survey participants would agree to be contacted and consider participation in the Phase II data collection focus group. Of the 34 participants completing the question, 16 expressed

willingness to be contacted for possible focus group participation. The number of actual focus group participants was seven.

Demographic information included only two items used to ascertain whether perceptions may have varied based upon them: years of instructional service and whether instruction had been delivered by the respondent only in a traditional, on-campus classroom setting or in a high school, dual enrollment-only classroom setting as well. No other demographic data were collected or reported.

Data Analysis

The researcher perceived that faculty participants in the initial and subsequent phases of data collection for this study were open and honest in reporting a range of perceptions about the quality, benefits, and consequences accruing to students, faculty, and the University stemming from participation in dual enrollment.

Initial phase qualitative results demonstrate that a substantial majority of participants perceived dual enrollment as advantageous for increasing college readiness, academic performance, and degree attainment and did not perceive dual enrollment as impacting academic quality and rigor negatively. Initial results also indicate the majority of participants reported as a positive for the institution's reputation and for the quality of the respondent's professional experiences.

Qualitative results from the focus group conducted during the second phase of data collection from faculty participants confirmed positive perceptions of the academic mindset exhibited by dual enrollment students and enhancements of the instructors' classroom experiences but also demonstrate participants' perceptions that dual enrollment students exhibit a range of academic performance, positive and negative, just as do non-

dual enrollment students. Second phase data collection results also showed some concern of faculty participants for the scheduling demands placed upon dual enrollment students and concern about whether dual enrollment students were adequately scrutinized at the point of admission to the University.

Findings

Findings were organized by survey data and focus group data. Initial qualitative data findings were reported by survey items and ordered by the related research question. Second phase qualitative data findings were organized by the focus group prompts and faculty perceptions advantages versus disadvantages of dual enrollment participation.

Survey Data: Research Question One

Research Question 1 asked the following:

(1) What are the perceptions of university faculty about the rigor and academic quality of dual enrollment instruction, and do those perceptions vary based on whether the instruction is delivered in a traditional postsecondary classroom versus in a concurrent, dual enrollment-only classroom setting within a high school?

Survey items P1, P4, P7, P10, P13, P16, and P18 were designed to collect data related to Research Question 1.

Survey item P1 stated the following: Dual enrollment students would likely be held to higher academic standards in a traditional mixed-age classroom setting on a college campus than they would by taking the same college course in a dual enrollment-only setting in a high school classroom.

Table 1

Academic Standards by Instructional Setting

	Survey Item P1 Responses							Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
4	12.50	5	15.63	17	53.13	6	18.75	32
Combined Disagreement			Combined Agreement					
#		%	#		%			
9		28.13	23		71.88			

Over two-thirds of participants reported some agreement to strong agreement that dual enrollment students would likely be held to higher academic standards when mixed into a typical college classroom setting than in a high school setting (Table 1).

Survey item P4 stated the following: Students would be better served to take a strong set of rigorous high school courses rather than AP or dual enrollment courses while in high school, thus deferring attainment of college credit until after high school graduation.

Table 2

Rigorous High School Courses versus AP or Dual Enrollment

	Survey Item P4 Responses							Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
10	29.41	12	35.29	10	29.41	2	5.88	34
Combined Disagreement			Combined Agreement					
#		%	#		%			
22		64.70	12		35.29			

Almost two-thirds of responding faculty members disagreed to some extent that students would be better served by taking a rigorous high school curriculum rather than

pursuing college credit through AP or dual enrollment credits prior to high school graduation (Table 2).

Survey item P7 stated the following: Instructional quality and student learning outcomes for dual enrollment students would be better achieved when the student is taught by a SACS COC-qualified instructor primarily employed by a university than when taught by a SACS COC-qualified instructor primarily employed by a high school, regardless of whether the course is taught on campus or in a high school.

Table 3

Academic Quality Based on College or High School Employment

Survey Item P7 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
3	9.38	8	25.00	11	34.38	10	31.25	32
Combined Disagreement				Combined Agreement				
#		%		#		%		
11		34.38		21		65.63		

Approximately two-thirds of collegiate faculty report agreement that instructional quality and achievement of learning outcomes would be better achieved through utilization of faculty primarily employed by a university versus faculty primarily employed by a high school (Table 3).

Survey item P10 stated the following: In instances where a dual enrollment course is taught in a high school setting, students would overall be better served by the instructor being a SACS COC-qualified instructor who is primarily employed by the high school than if the course was taught in the same setting by an instructor primarily employed by and visiting from the university awarding the credit.

Table 4

High School-Employed versus University-Employed Instructors

Survey Item P10 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
7	22.58	16	51.61	6	19.35	2	6.45	31
Combined Disagreement				Combined Agreement				
#		%		#		%		
23		74.19		8		25.80		

Almost three-fourths of participants reported disagreement that SACS COC-qualified instructors primarily employed by a high school would serve dual enrollment students better than similarly qualified instructors employed primarily by the University (Table 4).

Survey item P13 stated the following: Measures said to increase college affordability, such as open source texts, dual enrollment participation, and elimination of a number of course-related fees are detrimental to academic rigor and quality of instruction.

Table 5

Impact of Affordability Measures on Rigor and Quality

Survey Item P13 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
6	18.75	21	65.63	4	12.50	1	3.13	32
Combined Disagreement				Combined Agreement				
#		%		#		%		
27		84.38		5		15.63		

Almost 85% of participants reported disagreement that affordability measures, including dual enrollment participation, negatively impacted academic rigor and instructional quality (Table 5).

Survey item P16 stated the following: Dual enrollment participation is growing too fast at my university to ensure academic quality and rigor are maintained.

Table 6

Dual Enrollment Growth Rate and Academic Quality and Rigor

Survey Item P16 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
11	33.33	15	45.45	6	18.18	1	3.03	32
Combined Disagreement				Combined Agreement				
#		%		#		%		
26		78.78		7		19.18		

Over three-fourths of faculty participants reported disagreement with the growth rate of dual enrollment participation as being detrimental to maintaining academic rigor and quality (Table 6).

Survey item P18 stated the following: Overall, I believe the university utilizes a strong process or set of tools to specifically assess the effectiveness of dual enrollment participation for our students and our university.

Table 7

Assessment of Dual Enrollment by the University

Survey Item P18 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
3	10.34	10	34.48	14	48.28	2	6.90	29
Combined Disagreement				Combined Agreement				
#		%		#		%		
13		44.82		16		55.18		

Approximately 55% of participants agreed that the University's approach to the assessment of dual enrollment was of strong quality. Almost half of participants (48.28%) somewhat agreed that the assessment quality was strong, the highest category of response by percentage. The second highest percentage of response at 34.48% reported as somewhat disagreeing that assessment of dual enrollment was strong (Table 7).

Survey Data: Research Question Two

Research Question 2 asked the following:

(2) What are the perceptions of university faculty regarding impact upon the college readiness, academic performance in the first year beyond high school graduation, and likelihood of eventual degree completion of students participating in dual enrollment?

Survey items P2, P5, P8, P11, P14, and P17 were designed to collect data related to Research Question 2.

Survey item P2 stated the following: Dual enrollment is an important part of making attainment of a college degree more affordable.

Table 8

Dual Enrollment and Affordability

	Survey Item P2 Responses							Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
0	0	4	12.12	16	48.48	13	39.39	33
Combined Disagreement				Combined Agreement				
#		%		#		%		
4		12.12		29		87.87		

Almost 88% of participants agreed that dual enrollment contributes in a significant way to increasing degree affordability. Zero participants strongly disagreed that dual enrollment was important for affordability (Table 8).

Survey item P5 stated the following: Students who participated in dual enrollment prior to graduation from high school are more likely to bring a strong academic mindset and performance to their first year of college/university enrollment after high school graduation than students who did not participate in dual enrollment while in high school.

Table 9

Dual Enrollment and Academic Mindset

	Survey Item P5 Responses							Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
1	3.03	1	3.03	18	54.55	13	39.39	33
Combined Disagreement				Combined Agreement				
#		%		#		%		
2		6.06		31		93.94		

Almost 94% of participants agreed that students who participated in dual enrollment were more likely to bring a strong academic mindset to bear after high school graduation. Only two of 33 participants disagreed that former dual enrollment students entered college after high school graduation with a stronger academic mindset (Table 9).

Survey item P8 stated the following: Students who participated in dual enrollment are more likely to attain their college degree than students with equivalent academic ability who did not participate in dual enrollment.

Table 10

Dual Enrollment and Degree Completion

Survey Item P8 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
0	0	3	9.38	26	81.25	3	9.38	32
Combined Disagreement				Combined Agreement				
#		%		#		%		
3		9.38		29		90.62		

Over 90% of participants reported agreement that students who participated in dual enrollment were more likely than their academic peers to attain a college degree eventually. Over nine percent strongly agreed that dual enrollment students were more likely to attain a degree, and zero participants strongly disagreed (Table 10).

Survey item P11 stated the following: Students who participated in dual enrollment prior to graduation from high school are more likely to achieve a higher GPA in their first year of college/university enrollment after high school graduation.

Table 11

Dual Enrollment and First-Year Grade Point Average

	Survey Item P11 Responses							Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
0	0	4	12.90	18	58.06	9	29.03	31
Combined Disagreement				Combined Agreement				
#		%		#		%		
4		12.90		27		87.10		

Over 87% of participants reported agreement that former dual enrollment students would likely achieve a higher first-year grade point average in college after high school graduation (Table 11).

Survey item P14 stated the following: In terms of college readiness, students would be better served by taking AP courses while in high school rather than dual enrollment courses.

Table 12

College Readiness from AP versus Dual Enrollment Participation

	Survey Item P14 Responses							Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
12	37.50	15	46.88	3	9.38	2	6.25	32
Combined Disagreement				Combined Agreement				
#		%		#		%		
27		84.38		5		15.62		

Almost 85% of participants disagreed that AP courses would increase college readiness better than participation in dual enrollment while in high school (Table 12).

Survey item P17 stated the following: Making higher education more affordable is important to increase the numbers of students who attain degrees.

Table 13

Affordability and Degree Attainment

Survey Item P17 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
0	0	2	5.88	9	26.47	23	67.65	34
Combined Disagreement				Combined Agreement				
#		%		#		%		
2		5.88		32		94.12		

Almost 95% of participants agreed that increased affordability is important in increasing the number of students who achieve degree attainment. Over two-thirds of participants strongly agreed that affordability is important to degree attainment (Table 13).

Survey Data: Research Question Three

Research Question 3 asked the following:

(3) What are the perceptions of university faculty regarding impacts of the growth of dual enrollment credit delivery upon their own professional situation and upon their educational institution?

Survey items P3, P6, P9, P12, and P15 were designed to collect data related to research question three.

Survey item P3 stated the following: Participation in dual enrollment enhances the reputation and standing of my university.

Table 14

Dual Enrollment and Institutional Reputation

Survey Item P3 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
2	5.88	8	20.59	16	55.88	7	17.65	33
Combined Disagreement				Combined Agreement				
#		%		#		%		
10		26.47		23		73.53		

Almost three-fourths (73.53%) of participants agreed that dual enrollment

participation enhances the reputation and standing of the University (Table 14).

Survey item P6 stated the following: The presence of dual enrollment students in

my courses contributes positively to the quality of instructional interactions between my

students and me.

Table 15

Dual Enrollment and Quality of Instructional Interactions

Survey Item P6 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
2	6.06	5	15.15	21	63.64	5	15.15	33
Combined Disagreement				Combined Agreement				
#		%		#		%		
7		21.21		26		78.79		

Over three-fourths of participants reported agreement that the presence of dual

enrollment students in a course contributed positively to the quality of interactions

between the students and the instructor (Table 15).

Survey item P9 stated the following: My University is better off financially because of participation in dual enrollment.

Table 16

Dual Enrollment and Financial Health of the University

Survey Item P9 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
1	3.23	9	29.03	16	51.61	5	16.13	31
Combined Disagreement				Combined Agreement				
#		%		#		%		
10		32.36		21		67.64		

Over two-thirds of participants reported agreement that the University was better off financially due to participation in dual enrollment (Table 16).

Survey item P12 stated the following: The investments of time, efforts, and funding for my university stemming from participation in dual enrollment are good investments.

Table 17

Institutional Investments in Dual Enrollment

Survey Item P12 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
1	3.03	3	9.09	17	51.52	12	36.36	33
Combined Disagreement				Combined Agreement				
#		%		#		%		
4		12.12		29		87.88		

Almost 90% of participants reported agreement that institutional investments of time, efforts, and funding required by participating in dual enrollment programs were positive for the University (Table 17).

Survey item P15 stated the following: It would be a positive for my university and me to increase our level of dual enrollment participation.

Table 18

Impact of Further Dual Enrollment Growth

Survey Item P15 Responses								Total Responses
Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		
#	%	#	%	#	%	#	%	
1	3.03	7	21.21	18	54.55	7	21.21	33
Combined Disagreement				Combined Agreement				
#		%		#		%		
8		24.24		25		75.76		

Approximately 75% of participants reported agreement that further growth of dual enrollment would have a positive impact upon the participant and upon the institution (Table 18).

Focus Group Data: Research Question Four

Research Question 4 asked the following question:

(4) What are the perceptions of University faculty of the advantages and disadvantages of the dual enrollment concept?

Focus group prompts included:

1) You have had dual enrollment students in your classes; what were your experiences with those particular students?

2) How do dual enrollment students differ from the typical college students in your class, if at all? Are they different in positive ways, in negative ways?

3) Were dual enrollment students' learning and contributions to your class similar compared to your other students, or were they different in terms of learning and contributions?

4) What were some of the positive and negative impacts of dual enrollment on your department, or your college?

5) Beyond your department or college, can you think of other potential implications for the University in general for participating in dual enrollment? What does it mean for CSU?

6) Do you have any recommendations for this university concerning dual enrollment?

Focus group prompt 1 asked the following: You have had dual enrollment students in your classes; what were your experiences with those particular students?

Table 19

Faculty Experiences with Dual Enrollment

Advantage Code	*n*	Disadvantage Code	*n*	Neutral Code	*n*
Better prepared academically/mindset	4	Range of performance: lower	1	Blend in with other students	2
Positive/better academic performance	3	Need for increased admission scrutiny	3	Range of performance: similar	4
Range of performance: upper	1				
DE student motivation: Prefer to AP	3				
DE access to higher level instruction/materials/facilities	1				

Advantage Code	*n*	Disadvantage Code	*n*	Neutral Code	*n*
Total Advantage Codes	12	Total Disadvantage Codes	4	Total Neutral Codes	6

Participants reported 12 advantageous aspects related to their experiences with dual enrollment instruction, thus comprising a majority of experiential mentions. Participants' comments included comparisons with non-dual enrolled students: "…dual enrolled students seem to be much better prepared than the average of our courses", "…she was always prepared, hands up in the air, willing to participate…", and "Indeed, the [dual enrollment] students are better prepared." Participants cautioned, however, against seeing dual enrollment students as monolithically high-achieving: "…on average, they are doing better than their peers. But if…we divided them in to two halves…I think the upper half….do better than their counterparts. The lower half is not worse than their counterparts."

Focus group prompt 2 asked the following: How do dual enrollment students differ from the typical college students in your class, if at all? Are they different in positive ways, in negative ways?

Table 20

How Dual Enrollment Students Differ

Advantage Code	*n*	Disadvantage Code	*n*	Neutral Code	*n*
Better prepared academically/mindset	6	Range of performance: lower	2	Blend in with other students	1
Positive academic performance	1	Need for increased admission scrutiny	1	Range of performance: similar	2
Range of performance: upper	5	DE student scheduling challenges	3		

Advantage Code	*n*	Disadvantage Code	*n*	Neutral Code	*n*
DE student motivation: Prefer to AP		AP better for selective colleges	3		
DE access to higher level instruction/materials/facilities	2				
Acceleration	1				
Total Advantage Codes	15	Total Disadvantage Codes	9	Total Neutral Codes	3

Participants reported 15 advantageous differences between dual enrollment and other students versus nine disadvantageous differences. The results to some degree contrast with the overall perceptions of college readiness and academic performance reported by participants in the Phase I survey. Again, participants indicated a range of performance by dual enrolled students: "…I mean, when you get one of those good students, they're really, really good. I mean, way better than the rest. And so but yeah, you also get, like every now and then as you get one that really shouldn't be in a…college course."

Focus group prompt 3 asked the following: Were dual enrollment students' learning and contributions to your class similar compared to your other students, or were they different in terms of learning and contributions?

Table 21

Learning and Contributions of Dual Enrollment Students

Advantage Code	*n*	Disadvantage Code	*n*	Neutral Code	*n*
Positive academic performance	2			Blend in with other students	1
Range of performance: upper	1				

Advantage Code	*n*	Disadvantage Code	*n*	Neutral Code	*n*
Total Advantage Codes	3	Total Disadvantage Codes	0	Total Neutral Codes	1

Participants reported three advantageous differences between the contributions of dual enrollment students and other students, zero disadvantageous differences, and one neutral difference. Participants discussed how dual enrollment students could contribute to their classroom endeavors: "…I tried to take advantage of when I have student like them, because, you know, want to push the class to have the highest level…"

Focus group prompt 4 asked the following: What were some of the positive and negative impacts of dual enrollment on your department, or your college?

Table 22

Department and College Impact

Advantage Code	*n*	Disadvantage Code	*n*	Neutral Code	*n*
Recruitment	5	Efficiency of resource allocation	3	Alternative course delivery	1
Restricts campus-carry access	2	Potential K-12 Relationship damage	1		
		Alternative course delivery	1		
		Parental complaints	1		
		Retention: loss to selectives	1		
Total Advantage Codes	7	Total Disadvantage Codes	7	Total Neutral Codes	1

Participants reported an equal number of advantageous and disadvantageous impacts upon their department and college. One participant currently teaching one course on-site at a local high school with which the University maintains a dual enrollment partnership noted one of the inherent challenges of such arrangements: "I know we're

considering cutting one of my dual enrollment courses for this break…because, in particular, because it takes me out of a CSU classroom. And it limits our ability to put me in front of our majors." The participant went on to identify a potential negative impact should the department make the decision to discontinue the on-site instruction in the high school: "…I think it would be damaging for the relationship if they pulled that class right before classes started. So they're thinking about it for the spring. I think, I hope the plan is to give enough warning that we may not carry that class." Other participants noted advantages to the university including recruitment: "I do think that the dual enrollment courses are probably good for recruiting for the university." Another participant questioned whether the recruitment value was muted to some degree by the mobility of high-achieving students: "Do you think it's possible, to be honest, that the better students who are your dual enrollment students are simply going to go somewhere upwardly mobile universities?"

Focus group prompt 5 asked the following: Beyond your department or college, can you think of other potential implications for the University in general for participating in dual enrollment? What does it mean for CSU?

Table 23

Implications of Dual Enrollment Participation for University

Advantage Code	*n*	Disadvantage Code	*n*	Neutral Code	*n*
Recruitment	3	Faculty travel	1		
Town and gown relationship	1	Retention: loss to selectives	1		
K-12 Relationship	1				
Total Advantage Codes	5	Total Disadvantage Codes	2	Total Neutral Codes	0

Participants reported five advantageous implications for the University of dual enrollment participation versus two disadvantageous implications. Participants again discussed advantages and possible limitations of dual enrollment impact upon recruitment. One participant suggested an advantage regarding relationships between the University and the local community: "I think it has some impact, a positive impact on the town and gown relationship that CSU has." The participant went on to say, " …I do think that dual enrollment probably has some positive contribution to the relationship CSU has with the greater Columbus community."

Focus group prompt 6 asked the following: Do you have any recommendations for the University concerning dual enrollment?

Table 24

Recommendations

Advantage Code	*n*	Disadvantage Code	*n*	Neutral Code	*n*
Recruitment	1	Efficiency of resource allocation	1		
Town and gown relationship	1				
Total Advantage Codes	2	Total Disadvantage Codes	1	Total Neutral Codes	0

Participants reported two advantageous recommendations for the University versus one disadvantageous recommendation. One participant suggested concern about competing resource allocations:

But when we sit in on our department meetings, we're not having conversations about whether or not dual enrollment helps us or not, we're always focused on are

we getting our majors, are we retaining enough majors? Are we graduating enough majors? But if we're asking questions about resource allocation, and the degree to which resources are devoted towards dual enrollment, hopefully there will be some recognition to the department.

Summary

The major research findings from the first phase of the study with regard to faculty perceptions about the rigor and academic quality of dual enrollment instruction indicated that the majority of participants perceive that academic standards are better maintained when dual enrollment instruction is received in a traditional college classroom rather than in a high school and when instruction is given by an instructor primarily employed by the University. Furthermore, a substantial majority participants indicated relative benefits to students who pursue college credit through dual enrollment or AP coursework versus completing only a rigorous but traditional high school curriculum. The majority of participants disagreed that measures to increase affordability and the growth rate of dual enrollment were detrimental to maintaining quality and rigor. Responses were more mixed with regard to whether the University employs strong assessment efforts with regard to the effectiveness of dual enrollment, with approximately 55% of participants agreeing that the assessment of dual enrollment effectiveness was strong.

The major research findings regarding to faculty perceptions of dual enrollment impacts on degree completions from the first phase of the study indicate a strong majority of participants reported that affordability is important to degree completion, and dual enrollment is an important contributive factor in increasing affordability. Further, a large

majority of participants indicated that dual enrollment students are more likely than their peers to attain degree completion.

Initial perceptual findings indicated that almost all participants reported that dual enrollment students were more likely to possess a strong academic mindset than their peers, and a strong majority reported that dual enrollment students were likely to achieve higher academic performance in college during their first year after high school graduation than their peers, and that dual enrollment better prepares students for college than does AP coursework.

Regarding impacts upon the growth of dual enrollment upon the responding faculty and the University, survey findings indicated that three-fourths of participants reported a positive impact upon institutional reputation due to participating in dual enrollment credit delivery and that further growth of dual enrollment would be positive for both the University and the respondent. Strong majorities of the participants also indicated that the investments of time and resources in dual enrollment were positives for the University. Additionally, a strong majority of faculty participants reported enhancement of the quality of classroom interactions with students due to the presence of dual enrollment.

Major qualitative data findings from the second phase of data collection included agreement with first phase findings on the advantages of dual enrollment participation with regard to impacts on academic mindset, performance, and classroom experiences. Other advantages cited in results include positive impacts on enrollment recruitment and impact on relationships with stakeholders. Disadvantageous indications in the qualitative findings, but not indicated in survey findings, included the time scheduling challenges

faced by dual enrollment students, a recognition that dual enrollment students exhibited a range of academic performance just as non-dual enrollment students do, and a need for increased applicant scrutiny at the time of admission to the University.

CHAPTER V

DISCUSSION

Summary

The purpose of this study was to ascertain the perceptions of university faculty with regard to the quality, benefits, and consequences of dual enrollment participation accruing to students, faculty, and universities. The research literature suggests many benefits to students stemming from dual enrollment participation but stakeholders, including faculty, sometimes vary in their perceptions of the advantages and disadvantages of dual enrollment participation (Guzy, 2016). This study has sought further clarification of university faculty perceptions, and some results were in contrast with faculty perceptions reported earlier in the research literature.

This sequential qualitative study reported the perceptions of faculty members with dual enrollment instructional experience with regard to the academic quality, benefits, and consequences accruing to students, instructional personnel, rigor, and the higher education institution from participation in dual enrollment programs and courses. The researcher also sought identification of trends in the data obtained through the study, which infer any substantive differences between the perceptions of University faculty when compared to the body of the research literature. The research has analyzed and interpreted any such differences for potential implications for assessment and benefits of future partnerships between high schools and universities upon students and the organizations themselves. The researcher employed a survey applied during Phase I of

the study to faculty of Columbus State University who taught dual enrollment students from fall semester 2017 through fall semester 2019, followed by a semi-structured qualitative focus group in Phase II with seven faculty members who previously participated in Phase I.

Analysis of Research Findings

According to results of this research study, faculty at Columbus State University with recent experience teaching dual enrollment students perceived that academic standards are better maintained when dual enrollment instruction is received in a traditional college classroom rather than in a high school and when instruction is given by an instructor primarily employed by the University. Results indicated that faculty perceptions were not substantially altered if faculty had delivered instruction in a high school setting in addition to on-campus, nor did the results substantially vary based years of instructional service.

A substantial majority participants reported benefits to students who pursue college credit prior to graduation from high school through dual enrollment or AP coursework. Further, participants reported perceptions that dual enrollment was superior to AP in terms of increasing college readiness and post-high school academic performance, but that dual enrollment was preferable to AP for enhancing college readiness. The majority of participants reported perceptions that measures designed to increase college affordability, such as dual enrollment, were not detrimental to maintaining quality and rigor, that affordability was important to increasing degree completions, and dual enrollment was an important contributive factor in increasing affordability.

In terms of college readiness, the results of the study indicated that almost all participants reported dual enrollment students as more likely to possess a strong academic mindset and more likely to achieve higher academic performance in college during their first year after high school graduation than their fellow students who did not participate in dual enrollment. Further, a large majority of participants indicated that dual enrollment students are more likely than their peers to attain degree completion. Participants also reported enhancement of their classroom interactions due to the presence of dual enrollment students.

Results indicated that participants perceived positive impacts upon institutional reputation due to participating in dual enrollment delivery and that further growth of dual enrollment would be positive for both the University and the respondent. Strong majorities of the participants indicated through the perceptual data obtained through the survey that the investments of time and resources in dual enrollment were positives for the University, but results obtained in the second phase indicated some concerns about competition for departmental resources and competing instructional assignments.

Advantages cited in results included increased student recruitment and improved relationships with stakeholders, such as local communities and school districts. Conversely, some concern was expressed in the results that decisions to alter or discontinue course offerings in the high school due to budget or instructional allocations could be disadvantageous for relationships on-site with partnering high schools.

Participants were less confident that the University employed adequate assessment efforts to evaluate the effectiveness of dual enrollment, with a small majority agreeing that the assessment of dual enrollment effectiveness was strong. Participants

noted some challenges faced by dual enrollment students and exhibited a recognition that dual enrollment students present a range of academic performance just as non-dual enrollment students do. Subsequently, participants indicated a concern about whether increased applicant scrutiny at the time of admission to the University was advisable.

<div align="center">Discussion of Research Findings</div>

Research literature shows a variety of perceptions of the quality, benefits, and consequences experienced by students, faculty, and institutions of higher education that participate in dual enrollment. Some of the findings of this study indicated agreement with the body of research literature on dual enrollment, while other findings were in disagreement.

The results of this research study indicated that participants, faculty at Columbus State University with recent experience teaching dual enrollment students, perceived that a physical context for instruction comprised of a classroom on a college campus leads to maintenance of higher academic standards compared to dual enrollment delivered in a high school, a perception echoed in the research literature by Vargas et al. (2017). In contrast, the premise that dual enrollment is best delivered in a college campus classroom was termed a reach by Hofmann and Voloch (2012), and Arnold et al. (2017) made a case that learning outcomes for dual enrollment students are best achieved in a high school setting. Participants also reported perceptions that standards are optimal when instruction is given by an instructor primarily employed by the University. Vargas et al. noted that research is mixed with regard to whether location and primary employment of the instructor by a high school or higher education institution is most advantageous, and Ferguson et al. (2015) also reported that primary employment of the faculty and location

of instruction are not perceived as important to academic outcomes by high school or community college faculty.

A substantial majority of participants in this study reported perceptions of benefits accruing to students who pursue college credit prior to graduation from high school through dual enrollment or AP coursework, and these perceptions were in agreement with studies by Kim (2014) and Huerta and Watt (2015). However, Guzy (2016) and Walsh (2016) contend that dual enrollment, AP, or other forms of accelerated, pre-high school graduation vehicles to attain college credit are as effective as enhanced general education courses, such as honors courses taken after high school graduation. Participants in this study further indicated that dual enrollment was preferable for enhancing college readiness when compared with AP courses, a contention that corresponds to the perceptions of students as reported in a study by NSSE (2016). The majority of participants reported perceptions that measures designed to increase college affordability such as dual enrollment were not detrimental to maintaining quality and rigor, that affordability was important to increasing degree completions, and dual enrollment was an important contributive factor in increasing affordability, perceptions that agree with Lukes (2014).

The results of the study indicated that almost all participants reported dual enrollment students as more likely to possess aspects of enhanced college readiness, an assessment that agrees with the research of An and Taylor (2015). While there is substantial debate in the research literature about what constitutes college readiness (ACT, Inc., 2014), and some disagreement has been noted between perceptions of secondary versus post-secondary faculty of the degree of college readiness (Holles,

2016), certain aspects are generally accepted. One such aspect is possessing a strong academic mindset (An &Taylor, 2015), and possessing cognitive (Conley, 2012) and non-cognitive (Karp, 2012) skills and factors, which contribute to educational success. Findings also included faculty perceptions that former dual enrollment students were more likely to achieve higher academic performance in college during their first year after high school graduation than their fellow students who did not participate in dual enrollment. These perceptions reported in the results of the study are in agreement with numerous studies, including studies by An (2011), Allen and Dagar (2012), Kinnick (2012), Ganzert (2012), and Foster (2010). Study participants by a large majority also indicated that dual enrollment students are more likely than their peers to complete a college degree, perceptions that are borne out in research by Adelman (1999), Hofmann (2012), Grubb et al. (2017), and Zinth (2014b).

Participants reported perceptions of positive impacts upon institutional reputation due to participating in dual enrollment delivery. Reviewed research literature was largely silent with regard to such perceptions existing among other postsecondary faculty, but positive reputational benefits were perceived by secondary instructional, administrative, and support personnel (Hanson et al., 2015). Study participants also reported perceptions that further growth of dual enrollment would be positive for both the University and the respondent, perceptions that are at odds with research by Hofmann and Voloch (2012) and Guzy (2016).

Strong majorities of the participants indicated investments of time and resources in dual enrollment were positives for the University, but results obtained in the qualitative phase indicated concerns regarding allocation of departmental resources. Concerns about

competition for resources stemming from the requirements associated with dual enrollment are mirrored in the research literature by Hofmann and Voloch (2012) and Mangan (2016).

Advantages to the institution cited in the qualitative results of the study include enhanced student recruitment, an aspect discussed in the literature by Kinnick (2012) and Lukes (2014). Lukes further cited improved relationships with local communities and school districts, and Howley et al. (2013) posited that dual enrollment partnerships could deepen cooperative and assessment efforts, findings that concur with perceptual data expressed in this study by faculty.

Participants were less sure that the University employed assessment efforts adequate for evaluation of the efficacy of dual enrollment. Less than transparent efforts to assess dual enrollment would be in contrast to strong assessment efforts cited in literature by Taylor et al. (2015) and in agreement with a study by Light (2016). Participants noted some challenges faced by dual enrollment students with regard to time management and scheduling, challenges that are noted in the literature by Piontek et al. (2016), but also noted a strong level of intentionality among dual enrollment students. Such perceptions align with perceptions of former dual enrollment students expressed through the 2016 NSSE . Former dual enrollment students acknowledged such challenges in their NSSE responses but also indicated that dual enrollment participation had provided them more realistic expectations about demands on time they faced upon enrollment in college post-high school graduation.

Participants in this study during the qualitative phase communicated perceptions that dual enrollment students present a range of academic performance just as non-dual

enrollment students do, and as such tempered earlier positive generalizations made by participants in the initial phase concerning the academic performance of dual enrollment students. Participants questioned whether adequate applicant scrutiny at the time of admission to the University is advisable, perceptions and questions that aligned with concerns expressed by Mangan (2016).

Conclusions

The purpose of this study was to answer the following research questions:

(1) What are the perceptions of university faculty about the rigor and academic quality of dual enrollment instruction, and do those perceptions vary based on whether the instruction is delivered in a traditional postsecondary classroom versus in a concurrent, dual enrollment-only classroom setting within a high school?

(2) What are the perceptions of university faculty regarding impact upon the college readiness, academic performance in the first year beyond high school graduation, and likelihood of eventual degree completion of students participating in dual enrollment?

(3) What are the perceptions of university faculty regarding impacts of the growth in dual enrollment credit delivery upon their own professional situation and upon their educational institution?

(4) What are the perceptions of university faculty of the advantages and disadvantages of the dual enrollment concept?

Based on the data collected, several conclusions can be reached. With regard to the first part of Research Question 1 that sought the perceptions of university faculty with

regard to the impact of dual enrollment upon rigor and quality of instruction, university faculty at Columbus State University perceived that academic quality and rigor are best maintained by blending dual enrollment students into typical classroom environments on a university campus and with instruction provided by instructors primarily employed by a university regardless of setting. This perception is relevant given that nationally dual enrollment is often taught as concurrent enrollment courses taught in a high school setting by instructors primarily employed by a high school. Further, in one partnership with a local K-12 school system, the University offers dual enrollment-only courses on-site in a high school setting taught in some instances by instructors primarily employed by the University and in several other instances by instructors primarily employed by the high school who meet SACSCOC standards to provide postsecondary instruction. Therefore, perceptions among the University's faculty that instruction delivered by instructors other than those instructors primarily employed by the University may be lesser in quality and rigor carries potentially serious challenges to faculty support for such partnerships. Faculty participants also expressed only by a slight majority perceptions that the University employs a strong set of assessment tools and practices to evaluate the efficacy of participating in dual enrollment. Coupled with an implied lack of confidence that rigor and quality would be maintained by faculty, other than those instructors primarily employed by the University, lack of strong confidence in assessment of program quality and outcomes may further erode support for current partnerships or expansion of dual enrollment partnerships to other schools.

Yet, faculty participants reported perceptions that rigor and quality may be maintained despite high rates of growth of dual enrollment participants and that

affordability measures including dual enrollment and open source texts are not detrimental to rigor and quality. Both of these conclusions on the surface are at odds with what some of the research literature reports at the perceptions of university faculty and administrators, but largely when those faculty are employed at more highly selective universities or are in positions whose traditional roles in delivering general education credits to high ability students have been displaced or altered to some extent by the growth of dual enrollment (Hofmann & Voloch, 2012; Mangan, 2016).

Another set of conclusions that may be reached by reviewing the perceptions of faculty participants to this study is that students are better served who pursue attainment of college credit prior to high school graduation rather than a traditional but rigorous high school curriculum, but, from perceptions reported based on another survey item, faculty participants believe dual enrollment is preferable to AP courses as a vehicle for improving college readiness.

Regarding conclusions based on Research Question 2, which sought faculty perceptions of the impact of dual enrollment upon college readiness, first-year academic performance after high school graduation, and eventual degree completion, the researcher reached several conclusions. First, in some contrast to some of the past observations within the University by the researcher, faculty participants in the study recognize that increasing affordability is an important contributing factor for increasing the number of college degrees awarded and that dual enrollment is an important affordability measure. The affordability discussion echoes a number of research studies including Lukes (2014), Cowan and Goldhabor (2015), and Zinth (2016). Furthermore, participants saw dual

enrollment as a positive factor in improving academic mindset, first-year grade point average, and likelihood of eventual graduation.

With regard to the third research question that sought perceptions of faculty participants with regard to the impact of the growth of dual enrollment upon the University and their own professional situation, conclusions may be reached that faculty believe that dual enrollment is positive for both, and continued growth would be of benefit to the faculty member and the University. Faculty participants reported perceptions that dual enrollment participation enhances the institution's reputation and financial health. Furthermore, faculty see the presence of dual enrollment students as improving interactions between the faculty member and students within the classroom. In this part of the study, participants reported perceptions that the investments of time, funds, and efforts were good investments. This perception of the value of investments in dual enrollment is an important conclusion because it contrasts to some degree concerns reported in the Phase II focus group about dual enrollment possibly leading to increased competition for scarce departmental resources.

With regard to the fourth and final research question used to guide the qualitative focus group, which sought the perceptions of participants with regard to the advantages and disadvantages of dual enrollment participation, the research reached several conclusions. First, faculty reported strong perceptions that dual enrollment helped better prepare students for academic success, dual enrollment students compared very favorably to other students, and were on average more intentional in their approach to courses. Further, faculty participants saw dual enrollment as having a positive influence on recruitment of not only dual enrollment students into degree programs after high school

graduation but also of their friends who may or may not participate in dual enrollment. These perceptions were very aligned and consistent with perceptions reported through the results of the initial data collection through the survey and much of the research literature, including studies by An (2011), Allen and Dagar (2012), and Kinnick (2012) among others.

However, in contrast to perceptions reported in the initial phase of data collection that investments of funding and other resources by the University in dual enrollment are well spent, faculty participants indicated some concern about dual enrollment increasing competition for limited departmental resources. Also in contrast to much of the research literature including Ganzert (2012) and Foster (2010), which cited positive academic performance by dual enrollment students, faculty participants also reported during focus group perceptions that dual enrollment students exhibit a range of academic performance in much the same way other students do. Faculty concluded that dual enrollment students' academic attributes and performance are not monolithic, and therefore there is an inference that a multidimensional approach to academic support is required for dual enrollment students as well as for other students. Faculty participants also indicated that increased scrutiny of dual enrollment applicants is advisable at the time of admissions.

<div align="center">Relationship to Research</div>

This study drew comparisons and contrasts with the body of research literature related to the quality, benefits, and consequences of participating in dual enrollment. First, the results of this study of faculty perceptions of the rigor and quality of dual enrollment instruction imply some level of disagreement with research literature that suggests that students benefit academically from receiving dual enrollment instruction by

qualified high school instructors on-site in high schools (Ferguson et al., 2015; Hofmann & Voloch, 2012) as well as on college campuses and instructed by university faculty. Second, faculty participants in this study reported perceptions of the positive impacts of dual enrollment upon academic mindset, academic performance, and degree completion of students. These perceptions are very much aligned with the body of research literature on the subject including studies by An (2011), Allen and Dagar (2012), Kinnick (2012), Ganzert (2012), and Foster (2010). Next, faculty participants in this study recognize the importance of affordability for increasing degree completions and recognize the role of dual enrollment in increasing affordability. These recognitions aligns with findings in numerous studies, including findings by Lukes (2014), Cowan and Goldhabor (2015), and Zinth (2016). Faculty participants also reported affordability measures, such as dual enrollment and open source texts, as compatible with rigor and quality. The perception that affordability measures are compatible with rigor and quality offer some contrast to studies by Hofmann and Voloch (2012) and Mangan (2016), which related faculty and administrative concerns that the growth of dual enrollment negatively impacted educational integrity and quality.

Implications

There are implications in the reported faculty perceptions for current and future dual enrollment partnerships between institutions of higher education and K-12 school systems. Faculty participants, all of whom were employed by Columbus State University, perceived as a group that university-employed faculty are better positioned and located to maintain academic quality and rigor in dual enrollment course offerings than would similarly qualified faculty primarily employed by a high school. Additionally, faculty

reported perceptions that dual enrollment students would be best served by being blended into traditional on-campus classrooms rather than by receiving instruction in dual enrollment-only classrooms on-site in a high school. While the professional self-confidence of faculty in this regard is less than surprising, when combined with some degree of under-confidence that the University employs a strong assessment protocol to ascertain the efficacy of dual enrollment programming, these perceptions could lessen faculty support for current and future University-K12 partnerships. Thus, educational leaders and researchers in both university and K-12 settings interested in the benefits of dual enrollment partnerships and course offerings should ponder the underlying causes of these perceptions and consider how best to address them. One roadmap to address disparate perceptions between K-12 and higher education partners could be extrapolated from the research of Howley et al. (2013) in which the researchers introduced a concept called "border crossers". The term referred to individuals within K-12/higher education partnerships that engaged on a regular basis in evaluative partnership discussions with their counterparts, thus leading to bipartisan approaches to assessment and improvement. Additionally, educational leaders may find value in assessment frameworks promoted by the NACEP.

The study results also infer caution about viewing dual enrollment students monolithically as high-performing. Based on the research literature that documents an array of academic benefits, which accrue to students and instruction from dual enrollment participation, and awareness that dual enrollment students often are required to meet higher admission standards to participate, it is tempting to assume that dual enrollment students have few needs for academic support. Faculty participants during the qualitative

focus group spoke several times of high achieving, positive outliers among dual enrollment students but also spoke of dual enrollment students who performed at a lower, sometimes concerning level. Thus, there are implications here that may make a case to educational leaders that support is needed for intensive advising and even academic coaching of dual enrollment students from the onset. This recognition of a wide range of academic performance by dual enrollment students also serves as a caution to government officials and parents who may wish to mandate dual enrollment participation for all students.

Last, during the qualitative data collection through a focus group with faculty participants, there was a brief, but striking, conversation about resource allocation within departments with regard to faculty assignments in teaching in off-campus, on-site partnerships, and some level of concern about dual enrollment contributing to increased competition for limited resources. This concern was in some respects a contrast to the majority of responses in the survey item, which indicated faculty supported the statement that University investments in dual enrollment were good investments. The conversation within the focus group was essentially a pondering of the relative value of tasking a full-time faculty member to provide instruction to an established partnership within a high school in a course with relatively low enrollment, particularly in the face of the need to serve instructional demand in higher enrollment course sections on-campus. The conversation articulated in short order the push and pull of commitment to off-site, in-school partnership models as the participants considered that decisions made through instructional and seat-demand lenses might lead to one particular and pragmatic decision, but when viewed through the lens of partnership-relationship would lead to another

contrasting decision. The implications for leadership personnel are the need for firmly established and transparent agreements between K-12 and higher education partners that anticipate conditions and enrollments that may change over time and for outlining organizational responsibilities and responses from each partner that ensures crucial curricular sequences are maintained to the benefit of students. In this era of multimodal instructional delivery, options can be developed at the onset of an agreement and reviewed during regular assessments of partnerships.

Recommendations

The findings reported in the study and the conclusions reached by the researcher suggest a number of recommendations be made for implementing the results and for further research. Though this study focused on the perceptions of faculty regarding their perceptions on the quality, benefits, and consequences of dual enrollment, ultimately the impacts of dual enrollment participation and partnerships fall most importantly upon students. The consequences of dual enrollment participation are potentially immense, and either acceleration or deceleration of progress toward a high school diploma and college degree is quite possible depending upon academic performance. Faculty in the study were largely supportive of the potential benefits of dual enrollment for students but also cautioned that academic performance by dual enrollment students was not always positive. Faculty in the study questioned whether admission standards were adequate and, in some cases, stated that some dual enrollment students were underprepared to do well. Therefore, it is recommended that parents and students, prior to a decision to participate in dual enrollment, assess not only the cost-saving benefits, but also the rigor, time, and academic demands that accompany dual enrollment.

Faculty perceptions of the assessment of dual enrollment outcomes were mixed, and the mixed perceptions may be due to lack of knowledge about the assessment measures taken by the institution. Faculty are in the optimal position to add richness and depth to assessment efforts related to dual enrollment given their extensive experience instructing dual enrollment students. It is recommended that faculty interested in the outcomes of dual enrollment offer to participate in the assessment efforts connected to the same, thereby improving the efforts and increasing their own direct knowledge of what works in instructing and advising dual enrollment students.

This study was limited to the perceptions of faculty at Columbus State University who had recently taught dual enrollment students either on-campus or off-site in high schools. As the pool was limited with regard to the number of those faculty members who had taught dual enrollment courses in high school settings, it was impossible for the researcher to draw any strong inferences of contrasts between the views of faculty who had and had not taught dual enrollment students in multiple settings. Questions remain as to whether important distinctions remain between the perceptions of those faculty members who have taught dual enrollment in college and high school settings and those faculty members who have only taught in only on-campus settings. Therefore, further research, possibly in the form of qualitative, semi-structured interviews allowing researchers to probe more deeply the perceptions of those faculty members with multi-setting dual enrollment instructional experience is recommended.

Given the limitations imposed by the relatively narrow pool of participants, and considering that the University engages in two dual enrollment partnerships with high schools currently, there is a strong need to ascertain and compare the perceptions of

faculty, staff, and administration from both sides of such partnerships. Results may reveal important contrasts that could strengthen assessment and efficacy of future partnerships. There is limited research that may infer contrasts in perceptions of high school and university faculty, but the literature is bereft of direct comparisons within actual partnerships. Considering the growth of these types of partnerships within the University System of Georgia and beyond on a national level, such studies may have important value to practitioners and leaders in secondary and postsecondary education and would help fill an important gap in the literature.

A number of studies suggest relatively high impact of dual enrollment participation upon underserved populations, such as minorities and socioeconomically disadvantaged students (Adelman, 1999; An, 2011; Huerta & Watt, 2015; Lauen et al., 2017; Pretlow & Wathington, 2014; Roach et al., 2015). These studies raise the inference that dual enrollment is an important part of the equity and access equation, thus illustrating the importance for educational leaders to ensure that equity and access are properly assessed on a localized and institutional level. Therefore, it is recommended that leaders consider commissioning institutional research that will assess the impact their own investments in dual enrollment have on equity and access.

Lastly, it is recommended that research be conducted within institutions and across the University System of Georgia, which compares the qualitative perceptions of dual enrollment students regarding the value placed upon dual enrollment prior to high school graduation and subsequent to completion of their high school degree. There exists in the literature some efforts to ascertain such perceptions (NSSE, 2016), but further study of their perceptions at various stages of secondary and postsecondary education

may reveal important information for practitioners and other dual enrollment

stakeholders. Similarly, research that compares those perceptions and actual academic

outcomes may well be of value.

Dissemination

The results of this study may be of interest to the Office of the Provost of

Columbus State University. The Provost is responsible for a number of key academic

functions of the University. The Provost's staff coordinates the decisions regarding dual

enrollment partnerships between the University and two local high schools and would be

a key part of the decision-making and implementation of any future partnerships. The

Provost also provides leadership for the institution's assessment efforts and implications

have been noted in this study for assessment of dual enrollment programmatic outcomes.

The study results may also be of interest to the membership of the NACEP.

NACEP hosts an annual meeting each October, and the researcher intends to submit a

proposal for a presentation which would discuss findings in this study. Further, the

researcher intends to submit proposals for research journals, such as the *Journal of*

Higher Education, *Research in Higher Education*, or *Current Issues in Higher Education*.

Research Framework

The research framework for this study entailed studying university faculty

perceptions three categories of importance through the prism of dual enrollment:

academic quality and rigor, academic performance and degree attainment, and

professional and institutional benefits and consequences. The researcher sought to

understand the values faculty members who have taught dual enrollment placed upon

each category and to understand whether those values were largely positive, negative, or

neutral. Perceptual values illustrated prior to the data collection and analysis in the conceptual framework (see Figure 1) were only inferred by the research literature and the researcher's professional experiences. Based on results of this study, the researcher would contend that the faculty perceptions of these categories are largely positive and are in a high degree of alignment with the body of the research literature with regard to the quality, benefits, and consequences of dual enrollment participation. Figure 2 illustrates the alignment of the faculty perceptions of the quality, benefits, and consequences of dual enrollment participation with the body of the research literature. However, while the faculty perceptions documented in this study are generally aligned with findings in the literature about benefits and consequences for students, it should be noted that faculty perceptions themselves, particularly at the university level, remain largely undocumented in the research literature.
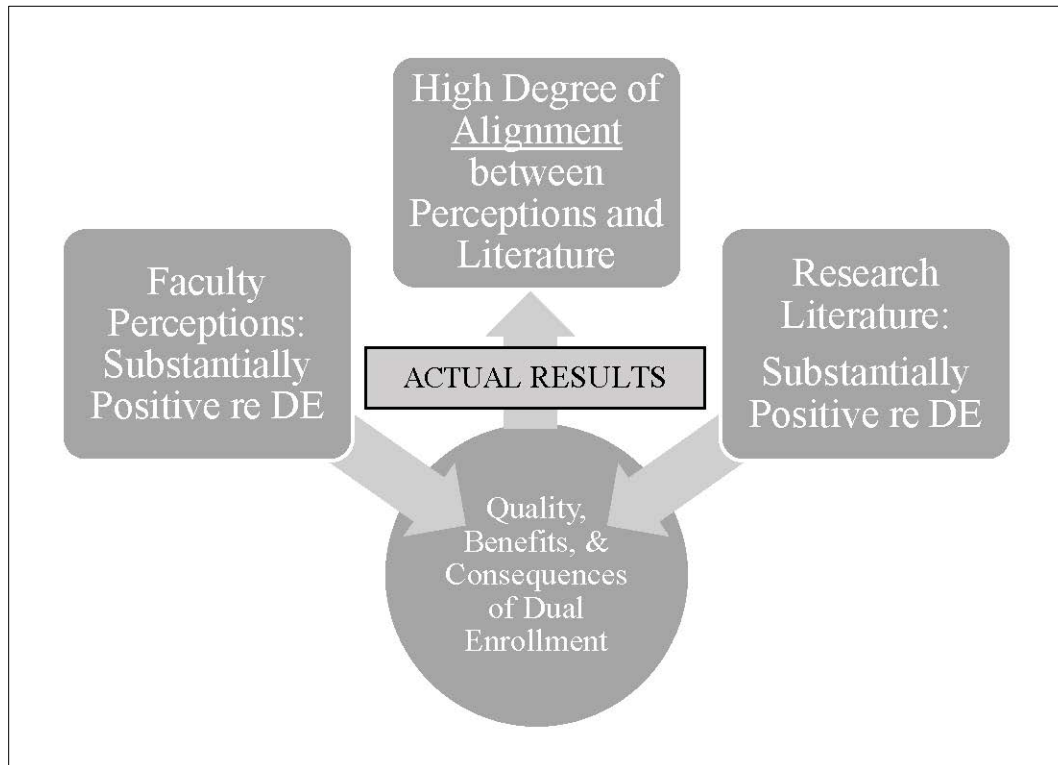
Figure 2. Research Framework Diagram.

Concluding Thoughts

Prior to the study, this researcher was under the impression that Columbus State University faculty perceptions would be somewhat mixed for dual enrollment. To some degree that impression was fueled by concerns expressed by members of the faculty at the time the researcher worked as the chief enrollment officer of the University and while the researcher was actively assisting in the formation and administration of the two dual enrollment partnerships currently held with local high schools. Some concerns the researcher recalls were also expressed or implied in the results of the study, namely doubts about whether SACSCOC-qualified high school faculty could effectively teach dual enrollment in a high school setting, and concerns about competition for resources.

However, other concerns previously heard during that time period were in fact not widely confirmed as current faculty perceptions reported in this study. Those concerns included whether or not dual enrollment participation was an academically and socially effective way for a student to move forward in higher education, that growth of dual enrollment was too fast to maintain quality and rigor, and displacement of traditional general education instructional roles were threats to quality. Frankly, the researcher expected less support, and more questioning of whether the institution was right to push for more dual enrollment growth. The degree to which University faculty, often in large majority of responses, supported dual enrollment as an effective academic quality and college completion factor, was somewhat surprising. Both the prior concerns confirmed and those refuted by the results of this study carry great implications for future dual enrollment partnerships.

In closing, the researcher feels a strong sense of gratitude for the participation and openness of the faculty of Columbus State University who through this study expressed their perceptions of dual enrollment. Having now a better understanding of how they view the quality, benefits, and consequences of dual enrollment participation, I am even more interested in contrasting those perceptions with perceptions of high school faculty who teach dual enrollment courses on behalf of the University. It was extremely unfortunate that permission could not be obtained to survey those high school faculty, and it is hoped that one day such access may be granted. The researcher believes strongly that comparisons of university and high school faculty involved in the delivery of dual enrollment may be informative for current and future dual enrollment partnerships.

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APPENDICES

Appendix A

Data Collection Instruments/Survey

SURVEY INSTRUMENT

Experiences and Employment

E1: My total, cumulative years of service in an instructional position employed by Columbus State University:

___ 0-4___ 5-9___ 10-14   ___ 15-19   ___ 20 or more

E2: I have taught courses for college/university credit to dual enrollment students in the following settings (select all that apply):
___ Within a college/university classroom setting containing both dual enrollment and non-dual enrollment students.
___ Within a high school or other off-site classroom setting containing only students enrolled in a dual enrollment course.

Perceptions
Please choose the answer which most closely aligns with your degree of agreement or disagreement with the following statements:

P1: Dual enrollment students would likely be held to higher academic standards in a traditional mixed-age classroom setting on a college campus than they would by taking the same college course in a dual enrollment-only setting in a high school classroom.
___Strongly Disagree   ___Somewhat Disagree   ___ Somewhat Agree   ___Strongly Agree

P2: Dual enrollment is an important part of making attainment of a college degree more affordable.
___Strongly Disagree   ___ Somewhat Disagree   ___ Somewhat Agree   ___Strongly Agree

P3: Participation in dual enrollment enhances the reputation and standing of my university.
___Strongly Disagree   ___ Somewhat Disagree   ___ Somewhat Agree   ___Strongly Agree

P4: Students would be better served to take a strong set of rigorous high school courses rather than AP or dual enrollment courses while in high school, thus deferring attainment of college credit until after high school graduation.
___Strongly Disagree   ___ Somewhat Disagree   ___ Somewhat Agree   ___Strongly Agree

P5: Students who participated in dual enrollment prior to graduation from high school are more likely to bring a strong academic mindset and performance to their first year of college/university enrollment after high school graduation than students who did not participate in dual enrollment while in high school.
___Strongly Disagree   ___ Somewhat Disagree   ___ Somewhat Agree   ___Strongly Agree

P6: The presence of dual enrollment students in my courses contributes positively to the quality of instructional interactions between my students and me.
___Strongly Disagree   ___ Somewhat Disagree   ___ Somewhat Agree   ___Strongly Agree

P7: Instructional quality and student learning outcomes for dual enrollment students would be better achieved when the student is taught by a SACS COC-qualified instructor primarily employed by a university than when taught by a SACS COC-qualified instructor primarily employed by a high school, regardless of whether the course is taught on campus or in a high school.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P8: Students who participated in dual enrollment are more likely to attain their college degree than students with equivalent academic ability who did not participate in dual enrollment.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P9: My university is better off financially because of participation in dual enrollment.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P10: In instances where a dual enrollment course is taught in a high school setting, students would overall be better served by the instructor being a SACS COC-qualified instructor who is primarily employed by the high school than if the course was taught in the same setting by an instructor primarily employed by and visiting from the university awarding the credit.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P11: Students who participated in dual enrollment prior to graduation from high school are more likely to achieve a higher GPA in their first year of college/university enrollment after high school graduation.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P12: The investments of time, efforts, and funding for my university stemming from participation in dual enrollment are good investments.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P13: Measures said to increase college affordability, such as open source texts, dual enrollment participation, and elimination of a number of course-related fees are detrimental to academic rigor and quality of instruction.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P14: In terms of college readiness, students would be better served by taking AP courses while in high school rather than dual enrollment courses.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P15: It would be a positive for my university and me to increase our level of dual enrollment participation.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P16: Dual enrollment participation is growing too fast at my university to ensure academic quality and rigor are maintained.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P17: Making higher education more affordable is important to increase the numbers of students who attain degrees.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

P18: Overall, I believe the university utilizes a strong process or set of tools to specifically assess the effectiveness of dual enrollment participation for our students and our university.

   ___Strongly Disagree ___ Somewhat Disagree ___ Somewhat Agree ___Strongly Agree

Phase Two of the Research Study

Please check the following box if you are willing to be contacted to ascertain your willingness to participate in a brief focus group which will be scheduled after analysis of survey data. Participation will take place on site at Columbus State University at an agreed-upon time and location, and will entail an on-site time commitment for participants of no more than one hour. Focus group participants will complete relevant informed consent documentation on location and prior to the focus group.

_____ *I am willing to be contacted to discuss my possible participation in a focus group during Phase Two of the research study.*

Appendix B

Research Questions – Survey Item Alignments

	Research Questions – Survey Item Alignments		
Research Question	*Related Literature*	*Survey Item*	*Perceptual Targets*
1) What are the perceptions of university faculty about the rigor and academic quality of dual enrollment instruction, and do those perceptions vary based on whether the instruction is delivered in a traditional postsecondary classroom versus in a concurrent, dual enrollment-only classroom setting within a high school?	Mangan, 2016	*P1*	*Academic Quality*
	Walsh, 2016	*P4*	*Relative Academic Rigor*
	Mangan, 2016	*P7*	*Academic quality tied to instructor's employer type*
	Ferguson, Baker, & Burnett, 2016; Hebert, 2001	*P10*	*Academic quality tied to instructor's employer type and location of course*
	Guzy, 2016; Lukes, 2014	*P13*	*Affordability & quality*
	Guzy, 2016	*P16*	*Academic quality and rigor*
	Kim, 2012; Taylor, Borden, & Park, 2015	*P18*	*Assessment of Quality*
2) What are the perceptions of university faculty regarding impact upon the college readiness, academic performance in the first year beyond high school graduation, and likelihood of eventual degree completion of students participating in dual enrollment?	Foster, 2010	*P2*	*Degree attainment and affordability*
	Hofmann & Voloch, 2012	*P5*	*College readiness, academic performance*
	Blankenberger et al., 2017	*P8*	*Degree attainment*
	An, 2011	*P11*	*Academic performance*
	Hughes & Edwards, 2012	*P14*	*College readiness*
	Lukes, 2014	*P17*	*Degree attainment and affordability*
3) What are the perceptions of university faculty regarding impacts of the growth in dual enrollment credit delivery upon their own professional situation and upon their educational institution?	Kinnick, 2012	*P3*	*Institutional reputation*
	Karp, 2015	*P6*	*Instructor professional life and development*
	Kinnick, 2012	*P9*	*Institutional financial impact*
	Karp, 2015	*P12*	*Institutional time, effort, costs investments*
	Kinnick, 2012	*P15*	*Instructor valuation of participation*

Appendix C

Institutional Review Board Approval Letter

COLUMBUS STATE UNIVERSITY

John McElveen <mcelveen_john@columbusstate.edu>

Protocol 19-086 Exempt Approval
2 messages

CSU IRB <irb@columbusstate.edu>   Fri, Jun 21, 2019 at 10:07 AM
To: John McElveen <mcelveen_john@columbusstate.edu>, Michael Richardson <richardson_michael5@columbusstate.edu>
Cc: CSU IRB <irb@columbusstate.edu>, Institutional Review Board <instituional_review@columbusstate.edu>

Institutional Review Board
Columbus State University

Date: 06/21/2019
Protocol Number: 19-086
Protocol Title: Perceptions of Higher Education Faculty of the Quality, Benefits, and Consequences of Dual Enrollment
Participation
Principal Investigator: John McElveen
Co-Principal Investigator: Michael Richardson

Dear John McElveen,

The Columbus State University Institutional Review Board or representative(s) has reviewed your research proposal
identified above. It has been determined that the project is classified as exempt under 45 CFR 46.101(b) of the federal
regulations and has been approved. You may begin your research project immediately.

Please note any changes to the protocol must be submitted in writing to the IRB before implementing the change(s).
Any adverse events, unexpected problems, and/or incidents that involve risks to participants and/or others must be
reported to the Institutional Review Board at irb@columbusstate.edu or (706) 507-8634.

If you have further questions, please feel free to contact the IRB.

Sincerely,

Manasa Mamidi, Graduate Assistant.

Institutional Review Board
Columbus State University

*** Please note that the IRB is closed during holidays, breaks, or other times when the IRB faculty or staff
are not available. Visit the **IRB Scheduled Meetings** page on the IRB website for a list of upcoming
closures. ***

Appendix D

Web-Based Informed Consent for Survey Instrument

COLUMBUS STATE
UNIVERSITY

INSTITUTIONAL REVIEW BOARD
Informed Consent Form

You are being asked to participate in a research project conducted by John Philip McElveen, a student in the Ed.D. degree program within the College of Education and Health Professions at Columbus State University. The study is being supervised by Dr. Michael Richardson, a faculty member in the College of Education and Health Professions of Columbus State University.

I. Purpose:

The purpose of this project is to identify and understand the reasons for the perceptions of higher education faculty with regard to the benefits, challenges and impacts of dual enrollment participation in various settings upon students, their educational institution and themselves. The ultimate goal of the study is to provide conclusions and data which may be helpful in optimizing the assessment and effectiveness of dual enrollment credit delivery.

II. Procedures:

You have been identified by the Columbus State Office of Institutional Research and Effectiveness as having taught dual enrollment students by virtue of class roster analysis. In order to partipate in the first phase of data collection, you will be required to complete and submit this informed consent form prior to proceeding to the online survey instrument. The instrument is a quantitative survey seeking your perceptions related to dual enrollment as stated in the purpose of the study. Completion of the survey should require approximately 10-20 minutes of individual participant's time. As a participant, you will be asked to complete the survey in a one-week timeframe, but the time to complete the survey may be extended as deemed necessary by the Principal and Co-Principal Investigators to ensure adequate participation levels for data validity. Within the survey, you will be asked whether you will agree to be contacted for possible participation in the second phase of data collection, which entails participation in a focus group at an agreed upon location and time on the premises of Columbus State University. Focus group participation will entail a time commitment of approximately 30-60 minutes on-site and separate informed consent documentation will be obtained on-site prior to the beginning of the focus group.

There is a possibility that aggregated, non-personally identifiable data collected in this study, and conclusions reached in this study, may be used to inform or be cited in future studies.

III. Possible Risks or Discomforts:

The Principal Researcher, Co-Principal Researcher, and all potential participants are employees of Columbus State University, and therefore may know, have worked, or will work with each other during discharge of professional duties. This could conceivably create some reluctance on the part of participants to share their perceptions. However, data collected and associated with participant identities will be stored in a secure,

Revised 10/01/2017

password-protected file accessible only the Principal and Co-Investigators. Data presented within the study will not be associated with any individual participant, and will not be presented in a way that would make likely identification of individual participants.

IV. Potential Benefits:

Conclusions and data included in the study may be helpful in ultimately optimizing the assessment and effectiveness of dual enrollment credit delivery. Further, the study may assist in the identification of future research topics associated with dual enrollment and higher education.

V. Costs and Compensation:

There is no cost to or compensation for participants.

VI. Confidentiality:

Data obtained and associated with participants' identities will be stored in a secure, password-protected file on the CSU server, and which are accessible only to the Principal and Co-Principal Investigators. All data will be stored electronically for 5 years after dissertation publication. Files will then be deleted from the servers of Columbus State University. Should the Principal Investigator leave employment of Columbus State University during the five year period, all data will be transferred to a secure location and/or device accessible only to the Principal Investigator.

VII. Withdrawal:

Your participation in this research study is voluntary. You may withdraw from the study at any time, and your withdrawal will not involve penalty or loss of benefits.

For additional information about this research project, you may contact the Principal Investigator, John Philip McElveen at ▮▮▮▮▮▮▮ or mcelveen_john@columbusstate.edu. If you have questions about your rights as a research participant, you may contact Columbus State University Institutional Review Board at irb@columbusstate.edu.

I have read this informed consent form. If I had any questions, they have been answered. By selecting the *I agree* radial and *Submit*, I agree to participate in this research project.

         ○ I agree.   ○ I do not agree.

Submit

Revised 10/01/2017

Appendix E

Informed Consent for Focus Group

COLUMBUS STATE UNIVERSITY

INSTITUTIONAL REVIEW BOARD
Informed Consent Form

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I. Purpose:

The purpose of this project is to identify and understand the reasons for the perceptions of higher education faculty with regard to the benefits, challenges and impacts of dual enrollment participation in various settings upon students, their educational institution and themselves. The ultimate goal of the study is to provide conclusions and data which may be helpful in optimizing the assessment and effectiveness of dual enrollment credit delivery.

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Revised 10/01/2017

password-protected file accessible only the Principal and Co-Investigators. Data presented within the study will not be associated with any individual participant, and will not be presented in a way that would make likely identification of individual participants.

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Conclusions and data included in the study may be helpful in ultimately optimizing the assessment and effectiveness of dual enrollment credit delivery. Further, the study may assist in the identification of future research topics associated with dual enrollment and higher education.

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For additional information about this research project, you may contact the Principal Investigator, John Philip McElveen at ███████ or mcelveen_john@columbusstate.edu. If you have questions about your rights as a research participant, you may contact Columbus State University Institutional Review Board at irb@columbusstate.edu.

I have read this informed consent form. If I had any questions, they have been answered. By selecting the *I agree* radial and *Submit*, I agree to participate in this research project.

    ○ I agree.   ○ I do not agree.

        Submit

Revised 10/01/2017