

ABSTRACT

GUIDO, DEANA LYNN. North Carolina Community College Faculty Perceptions of Dual Enrollment Students (Under the direction of Dr. Mattie Fleener).

The purpose of this study was to gauge North Carolina community college faculty perceptions of teaching dual enrollment courses. The increase in dual enrollment means that community college faculty are now being asked to teach rising numbers of young students in their classroom without having adequate information or preparation. This study answered the following research questions using Q-Methodology:

1. How do community college faculty who teach dual enrollment classes differ with regard to teaching dual enrollment students?
2. How can differing perspectives be characterized?
3. What are the common beliefs community college faculty have about teaching dual enrollment students?

Findings indicated four factors or ways of categorizing faculty perceptions. The factors identify distinguishing traits and are named Idealists, Traditionalists, Pragmatists, and Transitionists. Generally, faculty agreed that teaching dual enrollment students was a positive experience. Faculty differed with regard to which students the Career and College Promise program should target (college transfer vs. Career and Technical Education (CTE), and high-achieving vs. a wider range academically).

Implications provide additional areas of exploration related to practice, policy and theory. In practice, faculty expressed inconsistencies in maintaining the same rigor and student learning outcomes (SLOs) for traditional and dual enrollment classes. This is an area for future exploration with implications for both practice and policy. Findings show that faculty would benefit from regular updates on federal, regional, and state policy such as FERPA,

accrediting body policy statements, as well as changes to eligibility in North Carolina. Lastly, an understanding of nascent generations could help faculty in today's diverse multigenerational classroom.

Keywords: dual enrollment, Career and College Promise, community college faculty, multigenerational classroom, Q-Methodology

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North Carolina Community College Faculty Perceptions of Dual Enrollment Students

by
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DEDICATION

This dissertation is dedicated to my grandparents, Dr. Rocco Dominick Guido (1903-1949) and Helen Place Powell (1920-2016). Though I never met him, my grandfather served as an inspiration. The child of immigrants, his siblings worked collaboratively to ensure that he had funding to complete medical school. He was the first Dr. Guido. My grandmother, Helen Powell, ensured that my sisters and I always had books of our own to read. She challenged me to read classics and other high-quality books. My grandmother contributed to my education in countless ways and I know she would be proud of me.

BIOGRAPHY

Deana Guido was born and raised in Binghamton, New York. Following high school, she attended the State University of New York at Geneseo graduating with a Bachelors of Arts in Music History and Theory and a minor in American History. Subsequently, she matriculated to The Catholic University of America in Washington, DC, earning a Master's of Science in Library Science (M.S.L.S.). Deana also earned a graduate certificate in Counselor Education from North Carolina State University. In 2016 she was presented with the Thomas R. and Dorothy E. Koballa Fellowship in the Adult, Workforce, and Continuing Professional Education Program.

After graduate school, Deana's first professional position was Media Coordinator for Edgecombe County Schools. It is there she developed an appreciation for the barriers faced by rural and undocumented students. After working in a middle school, Deana transitioned to the public library setting as a Young Adult and Reference Librarian. In this position, she gained experience in developing literacy skills while serving preschool-aged children, teens, and adults. Opportunity again presented itself in her next position as the Nash Community College Librarian. Deana currently serves as Associate Vice President of Transfer Initiatives specializing in Early College and dual enrollment students.

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CHAPTER 1: INTRODUCTION

Community colleges are often the only option for underserved populations to access higher education, and they are increasingly expected to deliver instruction in conjunction with secondary partners. Comprehensive community colleges are also asked to prepare the workforce to support local economies (Palmadessa, 2017). In 2009, President Obama challenged the nation to increase college graduation rates from 40% to 60% by 2020, and in 2016, he declared that a high school education is no longer adequate to equip a skilled workforce in today's economy (Strauss, 2016). According to Brian An (2015), "Individuals' future well-being increasingly depends on postsecondary participation" (p. 99). Given the complexities of shifting enrollment patterns and increased expectations for successful completion, community colleges are poised to provide postsecondary education to an even more diverse population of students.

Faculty are particularly affected as colleges are challenged to prepare students for shifting career requirements. Changes in the economy and workforce impact higher education and affect the teaching and learning environments (Padron, 2009). High schools alone cannot provide the array of courses required to prepare students for careers in the knowledge-based economy. Many high schools, especially in poor districts, lack the resources (e.g., human, equipment, and facilities) to adequately supply the workforce needs.

In order to make the transition to higher education and post-secondary training more seamless for students, K-12 and community partnerships have formed to support and expand dual enrollment programs. Dual enrollment programs allow high school students to earn high school and college credits simultaneously. High schools often partner with community colleges, although some baccalaureate institutions participate as well. The expansion of dual

enrollment programs is increasingly becoming the norm as states seek to increase access to populations traditionally underserved by higher education and meet demands for higher education participation and completion. In addition, dual enrollment programs partially offset the declining enrollments community colleges began facing during the recession beginning in 2008. Dual enrollment programs fill a need for increasing student enrollments in community colleges struggling to maintain pre-2008 matriculation levels. The expansion of dual enrollment programs helps community colleges maintain their budgets, which is especially important for North Carolina colleges funded by a complicated full-time enrollment (FTE) formula.

State and federal legislatures established goals for the number of Americans who hold higher education degrees and credentials. By 2020, there is an expectation that 60 percent of adults aged 25-34 will have some higher education credential at either the community college or four-year college level (Fry, 2017). Easing access is only the beginning of addressing students' needs for advanced learning opportunities, community college completion, and/or transfer matriculation. National data show that only 30% of full-time community college students complete a degree or credential within three years. This number increases to 40% when including students who transfer before completing an associate's degree. The percentage of community college students who complete a degree or credential is lower than the graduation rate from four-year institutions, which is between 55 and 60% (Wyner, 2016).

Community college faculty experience little pedagogical training in graduate school programs (Twombly & Townsend, 2008). The literature does, however, describe varying levels of subject-specific faculty professional development (Twombly & Townsend, 2008). Professional development for dual enrollment instructors, however, is often informal and led

by other community college faculty. Changing classroom demographics and inconsistent formal instructional preparation combined with “hit or miss” professional development may affect faculty’s beliefs about teaching dual enrolled high school students and may ultimately impact classroom effectiveness. Bishop-Clark and Lynch (1995) note that “only by becoming aware of our attitudes and our treatment of both groups of students [traditional and adults] can we begin to incorporate strategies and techniques that will benefit our students’ learning environment” (p. 760). The identification of faculty perceptions—either positive or negative—of teaching dual enrollment students can affect future professional development needs and affirm the continuing need to support classroom instruction.

Problem Statement

The increase in dual enrollment students necessitates an examination of teaching and training practices to meet this population’s needs. According to McWain (2018), “The shift dual enrollment has wrought in the college teaching population cannot be underestimated” (p. 406). A similar enrollment shift occurred in the 1990s when adults returned to colleges in record numbers resulting in a mixed-age classroom. Bishop-Clark and Lynch (1995) conducted studies on faculty perceptions of the mixed-age classroom. The same principles apply to today’s changing demographic:

With the number of nontraditional students on college campuses continuing to increase, college educators need to become aware of issues regarding the mixed-age classroom. Part of this awareness should be an understanding of how faculty perceive different-aged students and their mixed-age classroom experiences. (p.749)

According to Bishop-Clark and Lynch (1995), the increasing number of non-traditional students at community and junior colleges will continue:

If this prediction is correct, many faculty will be faced with a learning environment with which they have little or no experience. They will be expected to teach students with more diverse levels of experience, skills, learning styles and motivations. It is therefore essential to investigate how to develop teaching styles and strategies that will enhance the learning environment for these two groups of learners. Our first step toward this goal was to develop an understanding of how faculty perceive this new classroom situation. (p. 549)

Rationale for the Study

The increased number of dual enrollment students taking advantage of opportunities to earn college credits creates a demand for qualified faculty. Faculty are often the only community college personnel with whom dual enrollment students interact, yet targeted professional development is missing from program implementation. Faculty beliefs about how the presence of dual enrollment students impacts instructional choices and affects the quality of instruction influence student success are not well understood. Existing research has failed to systematically assess community college instructors' perceptions and how those impact their teaching dual enrollment classes.

Dual Enrollment in North Carolina

Career and College Promise (CCP), North Carolina's dual enrollment program, was established by the Governor Beverly Purdie Administration in 2012 and signaled a policy shift from one that supported students enrolling in college classes for enrichment one that supports a completion agenda that is more focused on students earning certificates aimed at building stackable credentials along prescribed pathways. The rising number of CCP students (depicted in Table 1.1) has implications for college-level instruction. One North Carolina

community college reported that the average student age dropped by three years and that high school students make up 35% of the total number of students. The rapidly-changing millennial student demographic poses a challenge for community college faculty and administration.

In 2017, 60.7% of graduating high school students earned college credit prior to graduating from high school (Eads, 2018). Table 1.1 depicts the demographic shift by age group in North Carolina community colleges between 2011 and 2017. Enrollment in students under 18 (a proxy for dual enrollment students) grew by 18,897 students, an increase of 95.4%. Over the same period, the total enrollment declined by 28,944 students or 11.57%. The percentage of dual enrollment students has shifted from 9.6% in 2011 to 17.5% in 2017. These statistics represent total enrollment data; however, the trends are felt most acutely in entry-level general education classes (e.g., English, Math, Biology, History, Spanish) and in Career and Technical Education (CTE) pathways (e.g. Criminology, Welding, Cosmetology) (Eads, 2016).

Table 1.1.

North Carolina Community College Enrollment by Age Groups, 2011-2017

Age Groups	Fall 2011	Fall 2013	Fall 2015	Fall 2017
Under 18	19,809	20,818	28,474	38,706
19-24	115,110	113,012	108,894	108,366
25-49	101,091	91,754	74,594	66,436
50+	13,281	13,720	9094	7,561
Unknown	969	926	1610	247
Total	250,260	240,230	222,666	221,316
% Under 18	7.9%	8.7%	12.8%	17.5%

Source: IPEDS Data

Figure 1.1 depicts the three pathways encompassed within the Career and College Promise legislation established by Session Law 2011-145. The College Transfer Pathway (CTP) allows students to complete coursework toward the first year of an Associate in Arts, Associate in Science, Associate in Fine Arts, Associate in Engineering, or Associate Degree in Nursing. Students in Career and Technical Education (CTE) pathways earn credits toward certificates and diplomas aligned with high school career clusters. The Workforce Continuing Education Pathway (WCEP), a subdivision of the CTE pathway, allows students to earn state or industry credentials in alignment with high school career clusters. Cooperative Innovative High School Programs (CIHSP), best known as middle and early college high schools, are usually co-located on college campuses and provide opportunities for students to earn a high school diploma and associate degree in five years (North Carolina Community College System, 2017).

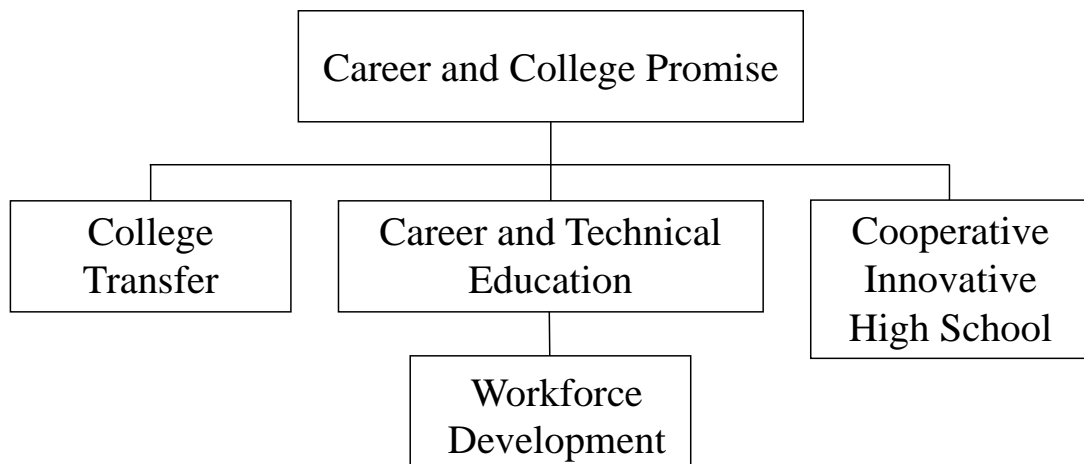


Figure 1.1. Career and College Promise Pathways

The community college classroom now includes the dually enrolled students adding to an increasingly diverse student population. For example, a psychology faculty member may encounter a class roster with an age range from 16 to 60 years of age. A Welding instructor may be expected to teach two sections of high school students in one setting, and then return to the college campus for a “traditional” schedule. Today’s instructors are expected to compose lesson plans for a multigenerational classroom. Understanding faculty perceptions of dual enrollment students can help configure professional development and identify instructional methodologies necessary to effectively retain students.

Ideally, instructors would use a combination of structured professional development and self-reflection to modify instructional strategies that align with shifting student demographics. However, faculty may be resistant to the challenges of teaching dual enrolled high school students at the college level. Individual faculty perceptions of strategies and abilities to teach a shifting demographic may also impact their approach to teaching a wide age of range of students. Any perceived pedagogical deficiency on the instructor’s part when serving high school students could result in less than optimal performance. Understanding faculty members’ perceptions of dually enrolled high school students taking postsecondary courses can help identify gaps in training and preparedness for a new generation of learners in multigenerational classes.

Research Questions

The research questions’ purpose is to uncover perceptions—both positive and negative—related to dual enrollment students. Faculty have the greatest amount of daily contact with students and therefore have a significant influence on student success. Understanding faculty’s perceptions aids in community colleges’ creating appropriate

professional development for faculty to understand policies and procedures associated with dual enrollment.

The overarching questions guiding this study are:

1. How do community college faculty who teach dual enrollment classes differ with regard to teaching dual enrollment students?
2. How can the differing perspectives be characterized?
3. What are the common beliefs community college faculty have about teaching dual enrollment students?

To take advantage of the nature of Q-Methodology, research questions were intentionally created to be process-oriented in order to elicit “how” participants form perceptions versus “what” those perceptions are.

Methods

Q-Methodology provides a unique way to model individual viewpoints (McKeown & Thomas, 1988) in which subjectivity is involved (McKeown & Thomas, 2013). Subjectivity is the sum of behavioral activity (Watts & Stenner, 2012) that communicates a particular point of view (Zabala & Pascual, 2016). Q-Methodology “helps identify the similarities and differences in subjective perceptions across a sample group and describe a variety of subjective viewpoints” (Bartlett & DeWeese, 2015, p. 73). The first step in Q-Methodology is developing a *concourse*, a comprehensive set of statements about the topic. These statements are then reduced to a final set of statements called the *Q-Set*. The *P-Set*, known in other methodologies as the sample or participants, performs the Q-Sort, the process of sorting the Q-Set. Next, the data are analyzed through factor interpretation.

This study used Q-Methodology to investigate faculty perspectives of dual enrollment students in the classroom. Q-Methodology is particularly suited for this topic in order to understand the various viewpoints of diverse faculty. The literature provides some guidance on challenges facing community college faculty teaching dual enrollment courses, suggesting areas of potential concern for faculty. In order to explore faculty attitudes about teaching dual enrollment classes, a research methodology needs to frame the subject's insights in ways that provide useful information for professional development, examination of policies and procedures, or other adjustments to ensure the success of all students.

Data were collected during the Fall 2018 semester via online data collection. Participants included 33 faculty who teach dual enrollment students from five North Carolina community colleges. Faculty sorted 48 statements according to the *condition of instruction*, which provides sorting guidelines. Participants first organized statements into three categories based on how strongly the statements applied to them: agree, disagree, and neutral. Next, participants arranged the statements into a forced template (Figure 1.3.) ranging from +5 (most agreement) to -5 (most disagreement). The final step in the data collection process was a post-sort questionnaire. Participants were asked to comment on the statements, suggest additional items, and clarify responses. The post-sort questionnaire allowed for inclusion of qualitative data to enhance the factor analysis (Shinebourne, 2009).

-5	-4	-3	-2	-1	0	1	2	3	4	5
(2)										(2)
	(3)								(3)	
		(4)						(4)		
			(5)				(5)			
				(6)		(6)				
					(8)					

Figure 1.3. Blank Q-Sort Table

Theoretical Framework

This study contributes to the literature by adding research on dual enrollment faculty's perceptions, specifically those teaching in North Carolina. This study used Mannheim's Theory of Generations (1952) and Strauss-Howe's Generational Theory (1991) lenses to examine faculty perceptions of teaching dual enrollment students. Generational Theory, as explored by Strauss and Howe, suggests different generations have different learning needs, expectations, and visions for their futures. Patterns of generational commonalities suggest potential conflict of purposes, requirements, demands and desires may occur in diverse generational classrooms. Most faculty who teach dual enrollment classes teach a combination of age groups. While some may teach an entire class of high school students, many dual enrollment classes are comprised of traditional and adult students

as well as high school students. Effective teaching requires acknowledging and adapting to the diverse needs of different generations of students.

Honoring diversity among age groups brings benefits and challenges. One concern addressed in the literature is dual enrollment students' perceived immaturity. This issue, may, in fact, be a reflection of generational differences as well as age. According to Sanner-Stiehr and Vandermause (2017), "Life experiences, in addition to personal predispositions, shape values and attitudes that translate to the work environment" (p. 104). This is true of the classroom as well as the workplace. Billings and Kowalski (2004) explain that nurses are being recruited from multiple age groups, including high school students. According to Billings and Kowalski (2004), "Learners are defined by their life experiences, and beliefs and values shape how and what one learns" (p. 104). This suggests the challenges of including high school students in classes with older students goes beyond the challenges of the age or maturity of the students, but includes the generational attributes that define students from different generations.

Mannheim's Theory of Generations situates individuals within a socio-historical paradigm. The generation is created by an interplay between age (bounded by place in time, birth and death dates) and social stratification. According to Mannheim's (1952) theory, "Individual and collective consciousness and experiences as a generation are impacted by societal events" (p. 105). Classroom teachers often ask a question around a defining societal event that took place within the student's societal consciousness from, "Where were you when President Kennedy was shot?" to "Where were you on 9/11?" The range in ages, and therefore generations, in today's classroom necessitates a different approach. Hahn's Generational Self-Discovery Discussion Guide (2011) was created for nurses who interact

with patients of many ages in the workplace. The guide prompts individuals to reflect on questions such as: “(1) When were you born and what do you think is your generational cohort? (2) What was your favorite movie or television show as a child? (3) What world events of your youth do you remember?” (p. 124) in order to establish generational ties.

Strauss and Howe’s (1991) Generational Theory, also known as Fourth Turning, presents a corresponding generational view. Strauss and Howe (1991) identify four cycles of generational attitudes characterized by values and behaviors that repeat over a 400-year period. The four cycles are *High*, *Awakening*, *Unraveling*, and *Crisis*. Strauss and Howe’s (1991) model marks generations, not as a biological function of birth year, but as defined by important social events called “social moments” (Sanner-Stiehl & Vandermause, 2017). Each generational prototype is shaped by societal events which, in turn, impact the next generational cycle. Examining Mannheim’s Theory in combination with Strauss-Howe’s theory provides an underpinning for understanding that the high school students in the multigenerational classroom are defined by the “social moment.” The emergent themes that the current dual enrollment environment reflect are *Supporting Diverse Learner Needs* and *Faculty Beliefs*, both of which suggest the need for stakeholders to understand the varying components interwoven into today’s community college classrooms.

Conceptual Framework

Figure 1.2 provides a visual representation of the conceptual framework for this research. Q-Methodology considers participants’ experiences, in this case teaching dual enrollment students, coupled with demographic factors to measure faculty perceptions of dual enrollment students in the classroom. Existing literature provides the filters through which dual enrollment faculty perceptions are examined. The listed topics are represented in

a structured Q-Set, a group of 48 statements participants sorted as part of the data collection process.

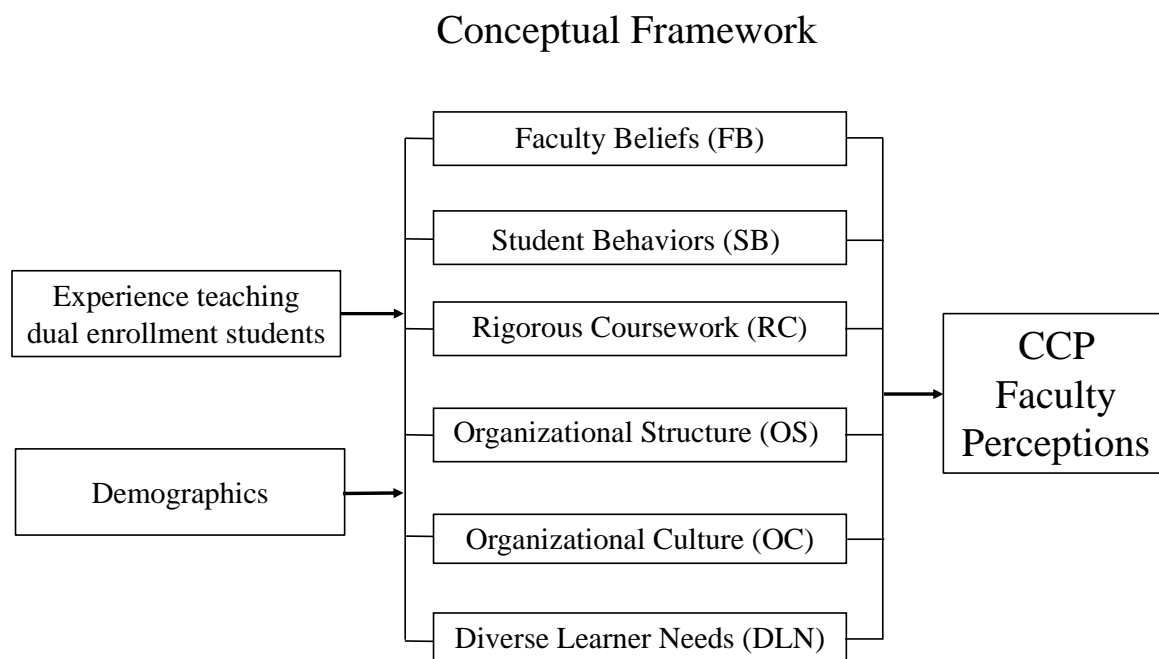


Figure 1.2. Conceptual Framework

Purpose

The purpose of this research is to add to the body of knowledge regarding faculty perceptions of teaching dual enrollment students. Community college faculty are critical to student success. According to Bensimon (2007) (cited in Lundberg, 2014), faculty help build student confidence levels, develop students' academic skills, and educate students about the transfer process. Dual enrollment students may only take one or two classes on campus and have limited opportunities for interactions with other campus personnel (e.g., tutors and advisors). Faculty may be the sole community college personnel with whom students interact (Lundberg, 2014). Understanding faculty's perceptions about working with dual enrolled

students can identify the pros and cons of participation. Pros and cons of participation may help improve instructional techniques for community college dual enrollment faculty.

Significance of the Study

The findings of this study contribute to the emerging body of literature on dual enrollment faculty and their preparation for addressing the needs of a diverse student population that spans a larger age range and experience levels than they had taught in the past. The greater demand for members of society to earn a credential beyond high school justifies the importance of intentionally-planned and designed instruction by faculty to assist this growing college population. The results of this study will inform faculty and administrators of faculty perceptions about teaching dual enrolled students, providing possible insights into their training or restructuring needs. For researchers, the study uncovers critical areas in the educational process that have not yet been explored pertaining to faculty perceptions and biases teaching dual enrolled high school students.

Limitations and Bias

Limitations refer to characteristics of design or methodology that may have affected the analysis or findings of the study as well as how the researcher attempted to control for the limitations. This study utilized North Carolina community college faculty to capitalize on the researcher's knowledge of dual enrollment practices and contacts within the North Carolina Community College System. A purposeful sampling of five community colleges was selected based on size, geographic location, and percentage of Career and College Promise students. The researcher's home institution was excluded from the survey in an effort to avoid bias.

Data were collected via online survey during the Fall 2018 semester. The sample

population was comprised of faculty members who teach college transfer and career and technical education dual enrollment students at the selection sites. Being knowledgeable about the topic is a key element of inclusion for the sample population (Q-Set) in Q-Methodology. The Workforce area was added in 2017, and as such, faculty in this area would have limited experience working with Career and College Promise students, and were therefore excluded from the survey population.

One limitation of the study is that the researcher was not on site to answer questions or to clarify instructions for study participants. Some of the colleges initially reported that the original link was broken perhaps leading some faculty to ignore the invitation to participate even after the link was corrected. This may have impacted the number of participants. One participant also noted that the survey was time consuming. The software required to complete the survey in one sitting and incomplete attempts were not recorded. The amount of time recorded ranged from 10 minutes to 64 minutes with a median of 19 minutes.

Every effort was made to create a comprehensive concourse, and subsequently, a 48-statement Q-Set for participants to sort; however, researcher bias is a factor. The ultimate selection of the statements, condition of instruction, factor rotation analysis, and factor analysis necessitated the researcher's influence. The researcher attempted to mitigate this effect by field testing concourse statements with dual enrollment faculty outside of the participating community colleges and field testing the directions and the online sorting process with technology and faculty experts. The participants were also invited to suggest additional statements that were not included in the Q-Set as a way to expand the comprehensive coverage of the topic.

Summary

This chapter introduced the importance of investigating dual enrollment faculty's perceptions regarding dual enrollment students in the college classroom, specifically in North Carolina. Current and emerging dual enrollment literature concentrates on student outcomes in light of the rapid expansion as well as state-by-state policy changes. Few researchers have addressed on or dual enrollment faculty perceptions. This is despite faculty having daily contact with students and oftentimes serving as the face of the college for these students, thereby influencing progression and retention. Q-Methodology was selected to examine faculty perceptions and identify various viewpoints. Chapter 2 presents an overview of the literature on dual enrollment student characteristics and behaviors, the success of dual enrollment programs, the structure of dual enrollment programs, as well as gaps in the literature.

Definition of Terms

Achievement gap. Term used to denote differences in student success between different racial and/or socioeconomic groups.

Career and College Promise (CCP). The designation given to North Carolina's dual enrollment program.

Certificate. Certificates vary between 12 and 18 credits and are the first level in a stackable credential. CCP CTE students are considered completers upon completion of a certificate.

College Knowledge. A term coined by Conley (2012) to encompass the key elements in transitioning from high school to college.

Completion. The metric signaling completion varies in the community college from certificate to diploma to degree depending on program requirements.

Comprehensive community college. Two-year higher education institution that offers technical and college transfer program degree options.

Concourse. A set of statements derived from scholarly and popular literature in addition to interviews with experts in the field.

Concurrent enrollment. Qualified high school students taking approved college classes.

Condition of instruction. Sorting instructions provided to members of the Q-Sort explaining how to sort concourse statements.

Cooperative Innovative High School (CIHS). Part of the North Carolina CCP legislation that targets students who are at risk of dropping out of high school, first-generation college students, and/or students who would benefit from accelerated learning opportunities.

Dual credit. “Students receive both high school and college credit for a college-level class successfully completed” (Andrews, 2004, p. 416)

Dual enrollment. An umbrella term for students enrolled in high school and community college simultaneously. “Students are concurrently enrolled and taking classes in high school and college (Andrews, 2004, p. 416).

Early college. Students are exposed to a rigorous high school curriculum with the opportunity to graduate from high school and earn an associate degree.

Factors. “Small numbers of sets of sorted statements which are different from one another and summarize the perspectives existing among the respondents” (Watts & Stenner, 2012, p. 163).

Junior college. Historical term for two-year institution focusing on college transfer curriculum.

Local Education Agency (LEA). Commonly used acronym for the local public-school district.

Middle college. Middle colleges are partnerships between high schools and community colleges allowing students to take a combination of high school and community college classes to fulfill high school graduation requirements. College credits can be applied to future career endeavors or transfer to a postsecondary institution.

Pathway. College transfer CCP students choose between the Associate of Arts, Associate of Science, Associate of Fine Arts, and Associate of Engineering pathways. The pathways include a pick list of courses designed to complete the first year of a college transfer curriculum.

P-Set. The term in Q-Methodology that refers to the sample participants.

Q-Set. A set of 40-60 statements to which study participants assign value as part of the q-methodology data collection process.

Skills gap. The skills gap represents the difference in job skills possessed by members of the potential job pool versus what the employers wants. The skills gap is often defined in terms of basic reading, writing, math, and communication skills.

Stackable credentials. A series of educational certificates, diplomas, and degree that prepare students for advancement in the workplace.

CHAPTER 2: LITERATURE REVIEW

This chapter provides an overview of the literature supporting the problem statement presented in Chapter 1. The literature review was a crucial element in developing the *concourse statements* used to collect data on faculty perceptions. Scholarly articles on dual and concurrent enrollment comprise the majority of the literature review. The chapter presents information about the history of dual enrollment programs with a focus on North Carolina. Next, community faculty preparation, beliefs, and challenges are discussed.

History of Dual Enrollment Programs

The ability for students to earn college credit while still in high school has existed in the United States since the establishment of Advanced Placement (AP) in the 1950s (Troutman, Hendrix-Soto, Creusere, & Mayer, 2018). The Carnegie Commission (1971) recommended changes in post-secondary curricula to eliminate duplication between the final year of high school and college (Herbert, 2001). Dual enrollment programs emerged in the following decade to assist students with the transition between high school and college (Herbert, 2001), to develop vocational readiness, and reduce time-to-degree (Chumbley, 2015). Dual enrollment programs also foster relationships between high schools and colleges, increase access to a rigorous curriculum for high school students, and reduce remediation needs upon postsecondary matriculation (Chumbley, 2015; Herbert, 2001). Early programs initially targeted academically-advanced students deemed ready for accelerated course offerings.

Today's programs are part of a strategy for promoting college access to a wider range of students (Cassidy, Keating, & Young, 2010) and to help meet national postsecondary completion goals (Karp, 2015). Dual enrollment programs have shifted their focus from

preparing students to enter four-year institutions to a focus on workforce development (D'Amico, Morgan, Robertson, & Rivers, 2013). Increased demand suggests that dual enrollment programs are an important and enduring part of the community college landscape.

Expansion of Dual Enrollment Programs

Dual enrollment programs began and have expanded for three main reasons. One was to recognize and pursue the open-door community college mission. According to D'Amico et al. (2013), the comprehensive nature of the community college mission includes technical and workforce training, college transfer, and continuing education with an emphasis on meeting local community needs. Dual enrollment programs are a natural extension of the college mission of providing access to local students and are particularly important for rural high schools. Participation allows districts to supplement academic offerings in smaller schools. Moreover, D'Amico et al. (2013) emphasize the importance of workforce development for rural areas where many families experience higher levels of economic distress. The economic shift from agricultural and manufacturing economies to service sectors has moved job growth from rural to metro areas creating a need for targeted programming (D'Amico et al., 2013).

A second reason for expanding dual enrollment programs resulted from public demands for supporting students' early matriculation to college classes. Demands for early matriculation to college credit-bearing courses were based on three assumptions. First, dual enrollment programs addressed the challenges of equality of access to higher education. Secondly, students receiving college credits while still in high school have reduced higher education costs and are more likely to pursue higher educational opportunities. Finally, students with advanced credits are more likely to graduate from an institution of higher

education. Because of these important outcomes, policies have allowed students to participate in dual enrollment programs at no cost.

A third reason for the expansion of dual enrollment programs is to prepare graduates to enter the workforce. Dual enrollment pathways, developed to meet local industry needs, help meet the community's economic and workforce needs (D'Amico et al., 2013). Mokher and McLendon (2009) attribute the long-term benefits of expanding dual enrollment programs to the development of a more educated workforce. The expansion of dual enrollment programs encompasses career and technical education programs and increases students' access to careers as well as streamlined workforce development.

Types of Dual Enrollment Programs

While dual enrollment programs share similar origins and objectives, these programs take many forms. Cassidy, Keating, and Young (2010) categorized dual enrollment programs as: *singleton*, *comprehensive*, and *enhanced comprehensive*. The singleton model allows students to enroll in a single class per semester. This model is applicable for students who have completed high school requirements and are seeking opportunities to earn college credit. Comprehensive programs are more structured in nature and are generally accessed during students' junior and senior year. Career and technical academies generally fall in this category. Lastly, early colleges are examples of an enhanced comprehensive model (Cassidy, Keating, & Young, 2010). Early colleges blend high school and college curricula with additional supports such as dedicated advising, counseling, and tutoring. Early colleges have become a popular expansion of the dual enrollment concept.

Dual enrollment programs include similar elements; however, there can be a great deal of variability (e.g., tuition, eligibility requirements, instructors, location, student mix,

and intensity) (Zinth, 2014). The responsibility for tuition ranges from an obligation by the students to being reimbursed by the state. Other forms of dual enrollment include classes that are either taught on the college campus, online, or in area high schools with classes that may be comprised of all high school students or a mix of high school and traditional community college students. Eligibility ranges from very few restrictions to extensive requirements comprised of GPA and college readiness as demonstrated by placement exams and standardized tests such as SAT and ACT. Instructors may be full or part-time community college employees or qualified high school teachers. In order to qualify to teach college-level transferrable courses, faculty typically must have a Master's degree or 18 graduate hours in the teaching subject area (Hooker, 2018). However, qualifications to teach college courses vary depending on the regional accrediting body and possibly the individual community college.

Evolution of North Carolina Dual Enrollment Programs

The North Carolina Community College System began offering dual enrollment programs in 1983 with the enactment of Session Law (S.L.) 1983-596 [House Bill (HB) 1044]. Representative Joseph P. Huskins introduced the legislation and the program was thereby known as Huskins. The primary purpose was to provide advanced high school students with an accelerated curriculum. Huskins enrollment grew in the first seven years of the 21st century from 13,622 unduplicated students in 2001 to 17,365 students in 2007 (Briggs & Wilson, 2010). Legislation expanded eligibility to individual students who were at least 16 years old. These students could enroll in certificate, diploma, and Associate's degree programs. This population also experienced a substantial increase in enrollment between 2001 and 2007 (Briggs & Wilson, 2010).

Governor Mike Easley expanded dual enrollment programs by establishing the Learn and Earn initiative in 2004. In 2005, five community colleges were selected to initiate the 5-year blended curriculum program. The Learn and Earn initiative established middle and early college high schools in conjunction with the local educational agency (LEA). This also created the opportunity for dual enrolled students to earn a high school diploma and associate's degree at the end of the fourth or fifth year of high school. Learn and Earn expanded in 2007 to Learn and Earn Online (LEO) and "allowed course delivery exclusively via the internet without regard to college service area" (Briggs & Wilson, 2010, p. 3).

In 2011, Governor Beverly Purdue pushed legislation to combine the four existing joint high school partnership programs (Huskins, Concurrent Enrollment, Cooperative Innovative High Schools, and Learn and Earn Online) into the Career and College Promise (CCP) program: "The purpose of Career and College Promise is to offer structured opportunities for qualified high school students to dually enroll in community college courses that provide pathways that lead to a certificate, diploma, or degree as well as provide entry-level job skills – tuition-free (Section 7.1A of S.L. 2011-0145)" (Coltrane & Eads, 2016). The Career and College Promise (CCP) program initially included the College Transfer pathway (CTP), Career and Technical Education pathway (CTE), and Cooperative Innovative High School (CIHS). CCP expanded in 2017 to include a provision for high school students to enroll in Workforce Continuing Education pathway "leading to a state or industry recognized credential aligned with a high school career cluster" (CCP Operating Procedures, 2017).

The literature notes that dual enrollment students are unprepared for the rigors of college; however, Career and College Promise students outperformed traditional students in

Fall 2017. As shown in Figure 2.1, CCP students completed 86% of their credit-level courses with a grade of C or better compared to 74% course success in the general population. The fall term grade average for Pathways students was 3.20 (NCCCS, 2018). Figure 2.2 compares percentages of success rates in the general population and overall pathways as measured by grades of A, B, and C (NCCCS, 2018).

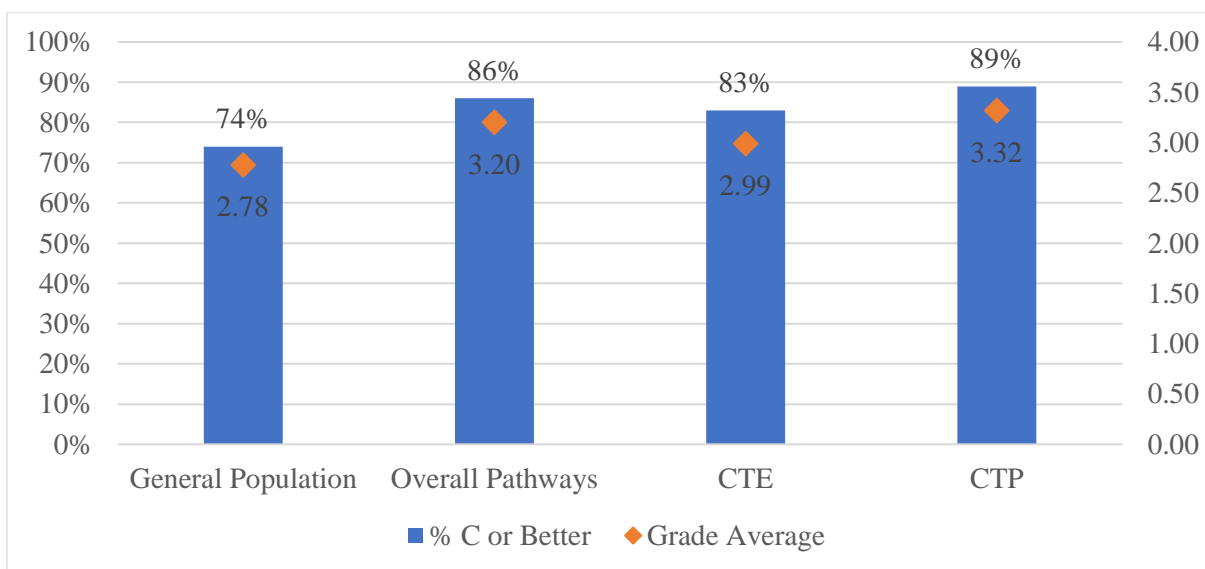


Figure 2.1. Fall 2017 Pathways Course Success Rates and Grade Average by Program.

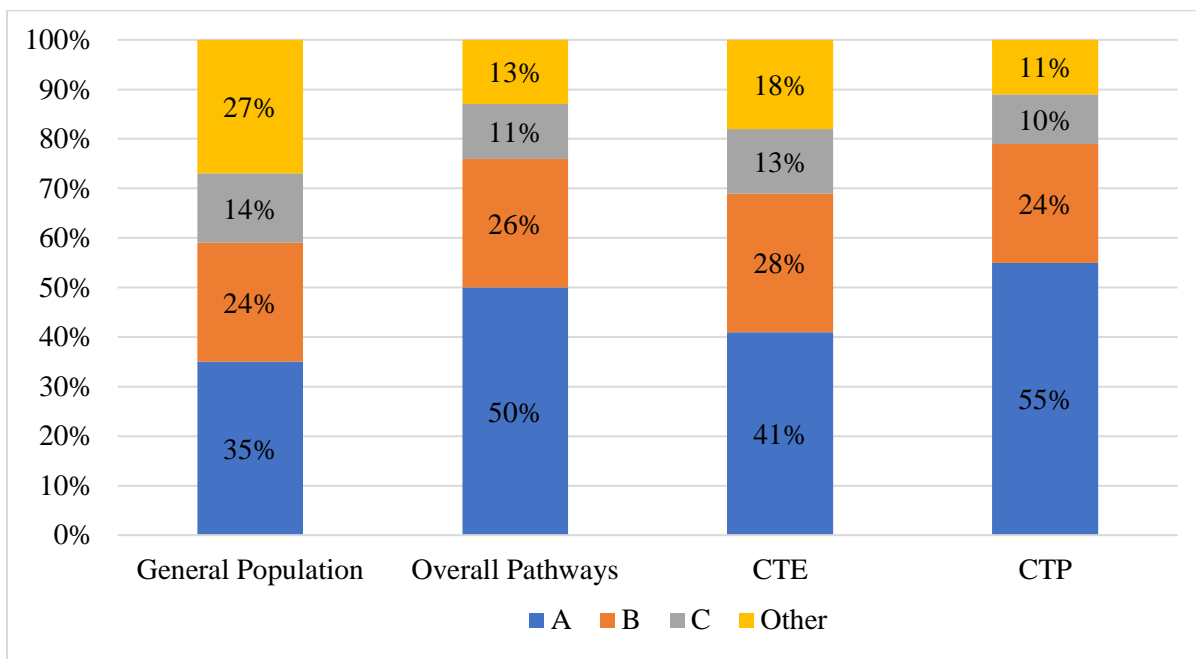


Figure 2.2. Fall 2017 Pathways Course Grades by Program.

Policy Research

Closing the achievement gap. Increasing access to postsecondary opportunities for underrepresented groups addresses disparities in academic and social preparedness (Adams, Blumfeld, Castaneda, Hackman, Peters, & Zuniga, 2013; Kallison & Stader, 2012; Sablan, 2014; Slade, 2015). According to Cox and Lee (2007), the achievement gap between ethnic minority and low-incomes students compared with white and middle-class peers continues to widen in the United States. Cox and Lee (2007) assert that the existence of the achievement gap is “a major issue of social justice for everyone concerned about the future of American society and the academic and social development of its youth” (p. 3). An (2013) notes that students of a high socioeconomic status (SES) are more likely to attain a college degree than low-SES students. Specifically, “Approximately 26% of college students from the bottom quartile of the income distribution attained a degree by age 25 as compared to 59% of college

students from the top quartile” (An, 2013, p. 59). Cox and Lee (2007) identify three reasons for the achievement gap in American education: “differential standards and expectations, variation in teacher quality, and unequal allocation of educational resources” (p. 4). Griffin and Steen (2001) found that students of color and students from low socioeconomic backgrounds continue to be marginalized.

Additionally, high school students living in rural areas may have transportation and/or internet shortfalls hampering access to educational opportunities. According to Haag (2015), “Distances, transportation difficulties, scheduling conflicts, fear of the unknown, and uncertain plans about college often prevent [Career and Technical Education] CTE students from taking classes on college campuses” (p. 54). Lukes (2014) found that transportation issues and student scheduling issues were likely to reduce enrollment in a science class if held on the college campus. Science and CTE courses are similar in terms of the number of hours required, the specialized equipment needs, and the necessary lab space not always found in high schools.

Given these barriers, it is often difficult for students to participate in educational opportunities such as dual enrollment programs. In many North Carolina counties, community college textbook costs are the student’s responsibility for college transfer classes such as Pre-calculus Algebra and Biology (L. Eads, personal communication). Students without the means to pay for required materials may be relegated to only CTE classes; however, the LEA often subsidizes transportation and textbooks.

Workforce development. Morrison (2008) identifies four reasons acceleration programs such as dual enrollment are essential in ameliorating shortfalls in America’s workforce. The most pressing reasons are workforce shortages, educational attainment

necessary to fill roles currently held by “Baby Boomers” on the verge of retirement, the need to remain competitive in the global economy, and rapidly-changing technical job requirements. D’Amico et al. (2013) explained that dual enrollment has played a role in advancing economic competitiveness as identified by South Carolina Technical College System’s strategic agenda. Ganzert (2014) echoes that dual enrollment’s role in creating a college-ready student population prepared for employment in the 21st century is crucial in maintaining the economic welfare of the country. Lyons and Akroyd (2014) explain:

Increased reliance on community colleges is driven by the current economic downturn, rising costs of higher education, and changing expectations for today’s workforce requiring advanced skill sets. Community colleges offer more affordable options for broader spectrums of students including traditional and nontraditional college students and dual-enrolled high school students. (p. 194)

Lyons and Akroyd (2014) affirm the importance of dual enrollment at community colleges to building a skilled workforce.

Dual Enrollment Benefits

Dual enrollment participation yields benefits for students. Participation leads to increased persistence which, in turn, leads to higher course completion and college graduation rates. Intentional advising leads to course selection with high transfer rates facilitating reduced time to degree. The transfer of credits also leads to affordability as students do not need to pay tuition to repeat coursework once they enter college after high school.

Increased persistence. Allen and Dadgar (2012) evaluated the City University of New York’s (CUNY) College Now program using data from the NYC Department of

Education and CUNY's Institutional Research Database, and College Now program databases. The authors examined outcomes for students enrolled in the College Now program using regression analysis and found that completing one or more College Now dual enrollment courses was positively associated with a student's earning more credits during the first semester of college and having a higher college GPA (Allen & Dadgar, 2012). A limitation of Allen and Dadgar's (2012) study was that the students sample attended only CUNY colleges. D'Amico et al. (2013) conducted a similar study in South Carolina using data from 2,607 students enrolled in the South Carolina dual enrollment program during the three academic years from 2005-2008 that continued at a South Carolina Technical College following high school graduation. Logical regression analysis found that a statistically significant number of students persisted from their first year to second year of postsecondary education ($\chi^2=45.89, p<.001$) (D'Amico et al., 2013, p. 775). Hunter and Wilson (2019) also found that students with dual enrollment experience were retained at a 20.5% higher level compared to non-dual enrollment participants in Tennessee community colleges. Hunter, Ludwig, and Todaro (2017) attribute the increased retention to greater student support resources and the gradual introduction of students to college programs. Increased persistence has a positive effect on faculty in terms of relationship building and deeper classroom engagement.

Graduation rates/completion. College graduation rates in the United States lag behind other countries and impede America's competitiveness in the 21st century global marketplace (Douglas & Attewell, 2014; Kallison & Stader, 2012; Perna, 2013). North Iowa Area Community College (NIACC) completed seventeen studies comparing educational outcomes of accelerated high school students with traditional students. Accelerated students'

graduation rates were 61% higher than those of traditional students across students in all socioeconomic quartiles, helping close the educational achievement gap (Morrison, 2008). Ganzert (2014) found dual enrollment and Huskins Bill students in North Carolina graduated at a statistically higher rate (33.7% for dual enrollment and 28.3% for Huskins Bill) than non-dual enrollment participants (22.5%).

In his research, An (2013) treated dual enrollment as a “dosage” units with cut scores at three credits (e.g., one course), six credits (e.g., two courses), and more than six credits. Little evidence exists that one course leads to significantly greater outcomes than non-participation; however, differences were attributed at the six-credit level. For example, these students are 12 percentage points more likely to attain a bachelor’s degree than nonparticipants (An, 2013, p. 67). Additionally, removing students who took Advanced Placement (AP) courses yielded a finding that students completing three dual enrollment credits were nine percentage points more likely to complete a bachelor’s degree than non-accelerators (p. 69). An (2013) also studied completion rates for dual enrollment students and found, “An important factor that influences college completion is sufficient credit accumulation in the first year of college” (p. 59). Students who earn college credits while they are in high school do not have to carry a heavy course load to be successful according to these findings.

Earned transfer credit. The ability for students to transfer credits to senior institutions is another benefit of dual enrollment participation. According to Kilgore and Wagner (2017) who cite an AACRAO study, private colleges are less likely than public institutions to accept dual enrollment credits for transfer. However, “86% of institutions in the overall sample accept [dual enrollment] credit with few restrictions” (Kilgore & Wagner,

2017, p. 61). North Carolina's Comprehensive Articulation Agreement (CAA) ensures that Universal General Education Transfer Component (UGETC) courses in the Career and College Promise transfer pathways are recognized as transfer credit by all 16 University of North Carolina System institutions and the majority of private four-year institutions.

According to Lisa Eads, Ed.D., of the North Carolina Community College System, "Because of this transfer agreement, the state is saving money by not funding courses that will only earn students elective credit at another public postsecondary institution in the state" (Zinth, 2015, p. 6). Wang, Chan, Phelps, and Washbon (2015) analyzed data from 15,449 students enrolled in the Wisconsin Technical College System (WTCS) and found that the accumulation of college credits prior to high school graduation was positively correlated with retention and completion at postsecondary institutions. According to Troutman et al. (2018), 61% of first-year University of Texas resident students transferred in college credit (p. 4).

Reduced time-to-degree. The literature highlighted the nation's low graduation rates and length of time for graduation from a four-year institution (Fink, Jenkins, & Yanagiura, 2017) for dual enrollment students. Allen and Dadgar (2012) found that dual enrollment participation reduced time-to-degree and increased students' academic performance as measured by GPA in the College Now program in the City University of New York (CUNY) in New York City. Johnson and Brophy (2006) noted that students enrolled in Washington State's Running Start dual enrollment program completed a bachelor's degree more quickly than those who did not participate in the program. Additionally, 41% of participants in the University of Washington's Running Start dual enrollment program graduated at the end of four years as opposed to 31% of traditional students (Johnson & Brophy, 2006). The grade point average of Running Start students was

3.42 compared to regular freshmen students with a 3.14 grade point average (Andrews, 2004). This translates into an improved transition between Washington State high school and community college as well as community college to four-year institutions.

Decreased cost of tuition. The opportunity for high school students to earn college credit, often for free or at a reduced rate, decreases the financial barrier to higher education. Increased access to education has the ability to lower the overall higher education student cost (Charlier & Duggan, 2009; Lukes, 2014). Hanson, Pruska, and Iverson (2015) interviewed teachers, counselors, and administrators and noted the significance of financial savings afforded to students that take college credits in high school. A principal stated a benefit of concurrent enrollment was “saving family money on college tuition expenses,” and a counselor echoed, “Students earn college credit they don’t have to pay for later” (Hanson, Pruska, & Iverson, 2015, p.77). Andrews (2010) found that the Running Start program in Washington state saved taxpayers and parents \$37.12 million dollars (\$12.5 million in tuition and \$24.6 million to the taxpayers (p. 421). Morrison (2008) cites economists Harvey Siegleman and Dan Otto’s findings that earning early college credits while in high school saved Iowa \$21.7 million annually in general aid to more costly institutions. Moreover, Siegelman and Otto’s research found that acceleration saved students and parents \$30.7 million in future college-related expenses while community colleges realized a 535 percent return on investment (Morrison, 2008). The lowered cost decreases financial barriers and increases access for a diverse group of students.

Affordability. The increasing cost of tuition enhances the attractiveness of cost reduction strategies such as dual enrollment programs (Hamrick & Klein, 2015; Loveland, 2017). Dual enrollment programs also address the issue of rising tuition costs by offered free

tuition in many states (Young, Joyner, & Slate, 2013). North Carolina is among the states that provide tuition waivers for students in the Career and College Program. The tuition waiver remains a point of contention in terms of program expansion.

Community College Faculty

Faculty are an integral component of dual enrollment programs; however, community college faculty are not prepared to teach the increasing number of high school students present in today's classroom. Many community college faculty arrive in the classroom with greater levels of technical knowledge than pedagogical or andragogical training. The organizational culture and perceptions inherent in K-12/higher education partnerships impact faculty perceptions. This section explores the background of community college faculty and the factors that influence beliefs about teaching dual enrollment students.

Teaching is the primary role of faculty members in community colleges (Braxton & Lyken-Segosebe, 2015; Cohen, Brawer, & Kisker, 2014; Latz & Rediger, 2015; Lyons & Akroyd, 2014). Responding to increased demands for qualified instructors, community college faculty members are often hired from business and industry without training in instructional pedagogy and best practices (Twombly & Townsend, 2008). Barcinas, Kachur, Akroyd, McCann, and Zheng (2016) found that faculty are already working too hard and students seek to maximize faculty interaction. According to Day, Lovato, Tull and Ross-Gordon (2011), faculty are not familiar with andragogy or pedagogy and are instead hired for technical expertise. Twombly and Townsend (2008) also note the diversity of the community college classroom through inclusion of dual enrollment students:

In addition to teaching students whose first higher education experience is in the community college, community college faculty members also teach many students

who start at 4-year colleges or students who are still in high school. Increasingly, high school students are exposed to community college faculty through dual-credit or dual-enrollment courses. (p. 5)

Students' goals vary and often include taking general education courses for transfer. Some students wish to earn a certificate in a technical trade increasing career opportunities, while others aspire to complete requirements for a high school diploma through dual enrollment programs.

Community college faculty are subject matter experts and trained practitioners who demonstrate interpersonal and affective characteristics (Alexander, Karvonen, Ulrich, Davis, & Wade, 2012); however, becoming a community college faculty member may not be an individual's initial career goal (Twombly & Townsend, 2008). According to Cohen, Brawer, and Kisker (2014), new faculty may be nonplussed that the focus in community colleges is on meeting the instructional needs of all students rather than prioritizing dedication to academic achievement (p. 80). Jensen and Ely (2017) note that community colleges "serve the largest proportion of first-generation students, the largest number of minority students, and the largest number of students who come from lower socioeconomic backgrounds" (pp. 250-1). Nevertheless, the need for qualified community college faculty continues.

Accrediting bodies, such as Southern Association of Colleges and Schools Commission on Colleges (SACSCOC), suggest minimum requirements for being accredited faculty. It is a widely accepted practice that faculty teaching transferable courses possess a Master's degree with a minimum of 18 hours in the field of study. Grubb (1999) notes that "most community college faculty have master's degrees in content areas with no formal preparation in the many skills needed to teach" (cited in Alexander et al., 2012, p. 850). Grubb found that community

college faculty “tends to discount the study of pedagogy” and that “many emphasize mastery of content as the only prerequisite for good teaching” (cited in Alexander et al., 2012, p. 850). Community college faculty tend to model instructional strategies from personal experience (Jensen & Ely, 2017). Teachers unconsciously replicate generation-specific teaching methods (e.g., lectures only) by teaching how they were taught.

The literature review suggested six topics that warrant further exploration regarding faculty perceptions regarding dual enrollment students in the classroom. A key part of Q-Methodology involves culling topics for inclusion in the concourse from extant literature. These topics are arranged in the Conceptual Framework introduced in Chapter 1 and shown in Figure 2.3.

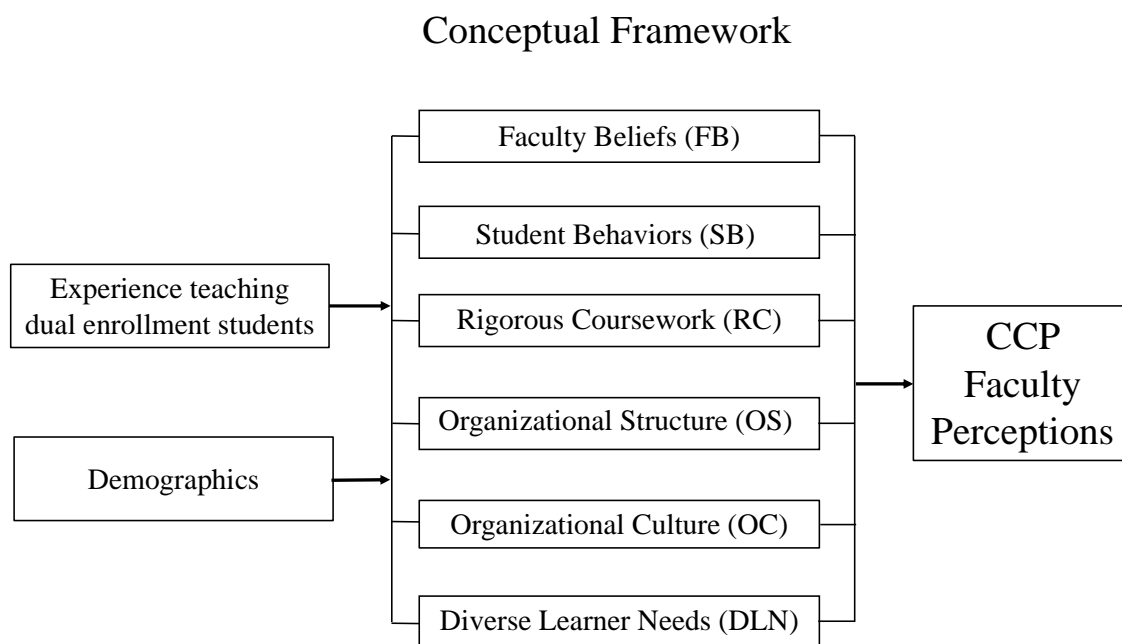


Figure 2.3. Conceptual Framework

Faculty Beliefs

Faculty beliefs are tantamount to effective classroom instruction. Donavant, Daniel, and MacKewn (2013) note that many faculty lack understanding about adult learners' needs, arguing, "A generational perspective and appreciation of classroom dynamics accepts the idea that students of different generations bring their personal values, attitudes, culture and lifestyle preferences with them, and that adults learn differently from traditional-age students" (p. 133). Bishop-Clark and Lynch (1998) found that faculty were more apt to accept excuses from older students as truthful as compared to traditional students. Faculty and traditional students (perhaps coming from similar generations) may experience a more peer-like relationship (Bishop-Clark & Lynch, 1998; Day, Lovato, Tull, & Ross-Gordon, 2011). According to Bishop-Clark and Lynch (1998), "If professors hold somewhat negatives perceptions of younger students, then differential treatment of nontraditional and traditional students can be a consequence" (p. 29).

Faculty beliefs toward dual enrollment range from being a supporter to being a critic. According to Cassidy, Keating, and Young (2010), educators believe that students taking courses on college campuses benefit by learning to navigate the college campus, interact with college instructors and students, and role play being a college student. Additionally, faculty are more apt to buy in to teaching dual enrollment classes when they are included in the planning and/or are oriented about the implementation or expansion of dual enrollment programs (Cassidy, Keating, & Young, 2010). On the other hand, Helmer (2017) points to the faculty concern that high school students are not prepared for college-level classes. According to Kinnick (2012), faculty members may perceive that dual enrollment students

displace seats which should be allotted to traditional curriculum students, a perception that may impact faculty's commitment to the concept.

Herbert (2001) hypothesized that outcomes for dual enrollment students taught by high school teachers versus those taught by college faculty would differ. Herbert's (2001) quasi-experimental study found that students who had high school teachers for dual enrollment mathematics courses had significantly higher grades ($p < .01$) compared to students taught by college instructors. Secondly, students taught by high school teachers and college faculty had no significantly different grades in subsequent math courses post-high school graduation (Herbert, 2001). Herbert concluded that learning outcomes for classes taught by high school instructors were superior to courses taught by college faculty (who traveled to the high schools to teach classes), attributing these results to the following influences: (1) a greater amount of seat time in classes taught by high school teachers following a high school schedule was more beneficial to students as compared to college faculty following a college schedule; (2) high school teachers were more accustomed to nuances of the high school environment such as announcements and interruptions; and (3) high school teachers were more motivated to teach dual enrollment courses as a prestigious opportunity while community college faculty perceived teaching dual enrollment as a deterrent (Herbert, 2001).

Challenges to Teaching Dual Enrollment Courses

Despite the benefits afforded to students and institutions, there are challenges to teaching dual enrollment courses. First, according to Cassidy, Keating, and Young (2010), soliciting faculty buy-in is difficult, especially at four-year colleges. Faculty express concerns about teaching high school students, fearing that they may need to decrease rigor to accommodate younger students' lack of preparation or immature behavior. Critics argue that

high school students are ill-prepared for the challenges of college-level work and that the potential exists for declining overall quality of coursework on campus (Andrews, 2000; Mokher & McLendon, 2009). Troutman et al. (2018) found that University of Texas faculty perceived that “those students who experience the greatest difficulty with writing and critical thinking assignments are most often students who took the balance of their core curriculum classes in high school within dual enrollment programs” (p. 8). English instructors Kara Taczak and William H. Thelin (2014) described a situation in which 14-year-olds were placed in a college-level, accelerated pace summer English class without the knowledge of the faculty member. As expected, the students were unsuccessful in the course (McCrimmon, 2014). Dodge (2012) cited news briefs that questioned the quality of online courses, disparity in location, the capability of high school teachers delivering dual enrollment courses, and professors’ concerns that high school students are unprepared for the academic rigor.

Faculty feelings about teaching dual enrollment students. Very few examples of literature relating to faculty perceptions of dual enrollment courses are on record (Hanson, Prusha, & Iverson, 2015). This is disconcerting because dual enrollment programs are growing and faculty are the front-line staff charged with teaching qualified students. According to Ferguson, Baker, and Burnett (2015), a persistent concern is that dual enrollment classes taught by high school instructors lack the rigor of courses taught on campus. Classes may be taught on the high school campus by qualified high school instructors depending on structure between the community college and the LEA. The lack of rigor implies that dual enrollment students could still be unprepared for true college level work despite earning college credits. Carol Duggan (2005), community college faculty member, dean, and vice president, stated that:

Rarely did [high-school-age students] work approach the quality or reveal the level of understanding that I expected of my students. It seemed to me that students with little life experience and maturity dragged down the level of discourse in my college classes...faculty members told me of their struggle to maintain quality and integrity in their dual enrollment classes. (cited in Ferguson, Baker, & Burnett, 2015, p. 83)

These concerns underscore the need to inform faculty about the unique classroom dynamics the dual enrolled students are accustomed to. Faculty perceptions and input should be examined for types of dual enrollment programs. Ferguson, Baker, and Burnett (2015) concluded the following: (1) dual enrollment general education courses were at least as rigorous as community college classes; (2) faculty assessed the academic ability of dual enrolled in an accelerated subset of dual enrollment as generally higher than standard students; and (3) faculty perceived dual enrollment students to be less mature than traditional community college students despite academic qualifications. This study demonstrates the importance of evaluating dual enrollment delivery methods for consistency, rigor, and quality (Ferguson, Baker, & Burnett, 2015). All college functions, including instruction, are continually examined for ways to ensure continuous improvement when addressing the varied needs of all community college students. D'Amico et al. (2013) interviewed faculty in Georgia who acknowledged that often, high school lab facilities were not equipped to teach all dual enrollment courses and students would benefit from attending on the college campus. Faculty also felt that students could be exposed to the benefits of college life by taking classes on the campus.

Kanny (2015) interviewed dual enrolled students in a charter school located in Los Angeles, California. Participants perceived that faculty disliked teaching dual enrollment

students. Gloria, one of the students who participated in the study, explained, “The professors didn’t like us. They thought we were immature. They even said things like, ‘I came to teach college students. If I wanted to teach high school students, I’d be teaching at a high school’” (Kanny, 2015, p. 66). A second student in Kanny’s study felt uncomfortable approaching college instructors that openly expressed negative remarks toward dual enrollment students. On the other hand, Kanny (2015) also found that students appreciated exposure to the college classroom. Students reported an increase in self-confidence and sense of achievement from mastering college-level skills such as writing a paper twice the length of a high school level paper and succeeding in the classroom alongside high school graduates.

Teaching in the multi-age classroom. In the late 1990s, the literature reflected the creation of a multi-age classroom caused by an influx of adult learners returning to college (Bishop-Clark & Lynch, 1995, 1998). The setting of the multi-year studies was an open admission mid-western university serving students at multiple branches. The branches offered the first two years of a bachelor’s degree as well as varying associate’s degrees. The similarity of the settings and investigation of student and faculty perceptions of multi-age classrooms are relevant to this study. Bishop-Clark & Lynch (1995) cite studies written in the 1980s and 90s (e.g., Hughes, 1983; Jacobowitz & Shannon, 1982; Ross-Gordon, 1991) contrasting similarities and differences between traditional and adult learners.

Bishop-Clark and Lynch (1995) studied faculty attitudes toward teaching in a mixed-age college classroom including attitudes toward student-professor relationships, attitudes toward the mixed-age classroom, and attitudes toward younger and older students. Similar to a Q-Methodology study, Bishop-Clark and Lynch’s (1995) survey instrument included Likert-type questions ranging from *strongly agree* to *strongly disagree* as well as open-ended

questions. The authors found that 95% of faculty surveyed enjoyed teaching in multi-age classrooms. Even though 54% of faculty found teaching in the multi-age classroom to be more challenging, faculty perceived that students benefited by seeing different perspectives and being motivated by other students (Bishop-Clark & Lynch, 1995, p. 755). Faculty in Bishop-Clark and Lynch's (1995) study acknowledged challenges to teaching in the multi-age classroom but did not express changing teaching styles to ameliorate the challenges. Donavent, Daniel, and MacKewn (2013) also found that faculty did not recognize the need to adapt teaching strategies to acclimate to the changing classroom demographic. Their study examined not only faculty perceptions toward adult undergraduate students and the intergenerational undergraduate classroom, but also how the perceptions impacted the teaching-learning process (Donavent, Daniel, & MacKewn, 2013, p. 133).

The faculty in Bishop-Clark and Lynch's (1995) study had a more positive attitude toward the older student than the traditional student. For example, 67% of faculty agreed (12% disagreed, 21% mixed) that *Older students work harder on their studies than younger students* (p. 757). Bishop-Clark and Lynch (1998) concluded that instructors can overcome challenges of the multi-age classroom by sharing the benefits of teaching in that environment, facilitating mixed age groupings during collaborative work, and being cognizant not to favor any age group over another. Hahn (2011) cites Hahn's (2009) Five Strategies for interacting with multigenerational staff:

1. Self-assessment of one's own managerial style and generational cohort
2. Educating oneself about the generational characteristics and core values of each generation represented on the staff
3. Embracing commonalities

4. Creating and maintaining a culture of respect
5. Bridging the generational gap. (p. 121)

Student perceptions of faculty. The faculty (traditional age) in Bishop-Clark and Lynch's (1995) study perceived that adult students treated the faculty with an air of friendship given the similarity in ages. An implication for the multi-age classroom is that faculty are conscious of the relationships—real and perceived—generated by differences in ages. Faculty need to guard against younger students feeling less valued in the classroom. Faculty also perceived that younger students were more disruptive.

The challenges of a multigenerational environment extend beyond the classroom. Hahn (2011) writes about the importance of managing a multigenerational nursing atmosphere by bringing together different generations for staff retention and creating a cohesive team, which first requires breaking down generational differences. The same can be said for faculty building a multigenerational classroom comprised of dual enrollment, traditional, and adult learners.

Ageism, the oppression of people at the extreme ends of the age spectrum, can effectively prevent students from participating in accelerated programs without adult intervention due to high school students' age and positionality within the system. McCord and Roberts (2014) state, "Chronological age and cognitive development in high school students are often mentioned in the arguments against high school students taking college courses or earning credit while still of traditional high school age" (p. 401); however, the authors found that motivation and readiness are key factors in student success regardless of age.

Student behaviors. The literature cites concerns from faculty that high school students lack the necessary maturity to perform on the college level. Bishop-Clark and Lynch (1998) surveyed both faculty and students in a study on the mixed-age college classroom and found that faculty expressed frustration with the younger student who “misses class,” “does not take learning seriously,” “is disruptive”, and “submits work late” (p. 27). Williams and Southers (2010) interviewed early college faculty who reported that adults complained about early college student behaviors. The instructor explained, “It feels like high school; we (instructors) go over everything at least twice and watch other students roll just their eyes...The adult students were clearly embarrassed by the young students’ behavior” (Williams & Southers, 2010, p. 28). Another study by Bishop-Clark and Lynch (1995) found that faculty believed that younger students were less serious about coursework and contributed to classroom discussions less often than adult learners. On the other hand, McCord and Roberts (2014) attribute students’ academic challenges to external factors including poverty, lack of transportation, and working too many hours over chronological age.

College readiness. Ideally, recent high school graduates would enter postsecondary institutions socially and academically equipped for the rigors of college. Optimal preparation and advising students increase the likelihood of degree completion within a standard Integrated Postsecondary Education Data System (IPEDS) six-year framework. An (2013a) states that “approximately 56% of high school graduates are highly qualified for admission at a 4-year institution...while 28% of entering freshmen enrolled in at least one remedial course in reading, writing or math” (p. 58). Grubb, Scott, and Good (2017) studied the effect of dual enrollment on college readiness (as measured by the need for remediation) and on-time

community college completion. The authors found that “community college students participating in dual enrollment were (a) 9% or nearly 3.4 times less likely to take remediation, (b) 26% or nearly 2.5 times more likely to graduate in 2 years, and (c) 28% or nearly 1.5 times more likely to graduate in 3 years” (Grubb, Scott, & Good, 2017, p. 79). Cassidy, Keating, and Young (2010) reported that college instructors estimated that 42% of students were not adequately prepared. This lost time represents opportunity costs to the student and institution.

Kilgore and Wagner (2017) found that higher education and K-12 administrators agreed that dual enrollment participation is correlated with high college readiness (76% for higher education and 52% for K-12). Higher education administrators were more likely than high school administrators to be more skeptical of high school students taking college-level classes. Hanson, Prushka, and Iverson (2015) compared teacher and administrative personnel and found that teachers considered participants in the concurrent enrollment program to be more prepared for college. Moreover, teachers noted that students developed time management and study skills, additionally increasing college readiness (Hanson, Prushka, & Iverson, 2015).

In another example of developing college readiness through dual enrollment, students in the Eastern Michigan University Early College Alliance (ECA) transition to college-level work through a hybrid high school/college program. In addition to academic acumen measured by grades in ECA courses, students also demonstrated college readiness through soft skills such as participating in class discussion, seeking out professors during office hours, communicating with professors effectively via email, and engaging in tutoring services as needed (McCord & Roberts, 2015). The presence and development of college

readiness increases the student's ability to adjust to increased academic rigor. According to students in the 2018 University of Texas study, a motivating factor for enrolling in DE courses was to complete certain course requirements early to allow students to complete preparation for a more rigorous curriculum (Troutman et al, 2018).

Increased rigor during senior year. Adelman (2006) found that a rigorous high school curriculum mitigated generally perceived barriers to academic success including gender, race, socioeconomic status, and family structure (Grubb, Scott, & Good, 2017). According to Andrews (2010), students often disengage from academics in the senior year because they believe colleges evaluate the academic record through the junior year. McCord and Roberts (2015) point out that students enrolled in a dual enrollment program in Eastern Michigan sought program opportunities not available in today's "large, resource strapped, one-size-fits-all curriculum" high schools (p. 402). McCord and Roberts (2015) note that, while cost savings is a benefit, the primary motivation is to be in an environment focused on learning that provides a challenge.

Research affirms that the opportunity for students to enroll in college-level course work while still in high school increases their marketable technical or vocational skills through means not offered by the secondary school (Andrews, 2004; Dare & Nowicki, 2015; Hughes & Edwards, 2012; Kim, 2014). Teachers in one study reflected on the students' exposure to higher-level math skills that were unavailable in many high schools (Hansen, Prushka, & Iverson, 2015).

Organizational culture. Dual enrollment programs inherently require the development of partnerships between K-12 and higher education institutions. The blending of cultures affects faculty as well as students. Personnel from both institutions coordinate

structural elements such as scheduling as well as cultural components like differing expectations between high school and college personnel.

The development of dual enrollment programs encourage high schools and colleges to align programs creating more transparent pathways between secondary and postsecondary education (Karp, 2015). High schools and colleges collaborate on curriculum, delivery method, and expectations in an effort to facilitate high school and college completion (Karp, 2015). The Eastern New Mexico University dual enrollment program is an online/in-class hybrid model with university faculty administering online content and assessments and high school CTE teachers overseeing lab activities (Chumbley, 2015). The success of this model is a result of the agreement regarding courses offered and delivery method between key stakeholders including school administrators, university faculty and high school teachers (Chumbley, 2015).

Kinnick (2012) studied Kennesaw State University's (KSU) dual enrollment program and found that KSU's assessments recognized the benefits of dual enrollment to the institution through recruitment of high-achieving students, enhancement of the classroom environment, and by developing the image of the university as a school of choice. This demonstrates the value of dual enrollment to all parties as important even while state budgets for higher education decreases. Likewise, college administrators recognized the benefit of dual enrollment as a strategy to increase the diversity of their student bodies, but they expressed concerns about their ability to ensure the quality of courses taught at and by high school faculty (Kinnick, 2012). Respondents to a survey in Iowa agreed that concurrent enrollment programs had a positive effect on the high schools, with 85% agreeing with the decision to offer prerequisite classes that prepare students for college classes (Hanson,

Prushka, & Iverson, 2015). Chumbley (2015) noted that secondary teachers participating in the Eastern New Mexico University (ENMU) dual enrollment program listed a strong community reputation as a benefit of the program.

Challenges arise from delivering content in essentially two different structural environments. Tinberg and Nadeau (2011) studied differences between high school and dual enrollment composition classes. The authors note such cultural differences as cancelling high school classes due to a sporting event or assembly. Additionally, high school teachers are required to allow make-up work while college instructors are not. Lastly, high school students cannot drop a class with poor academic performance whereas college students have the freedom to do so. One critic suggested that dual enrollment students' lack of life experience makes them unsuited for college-level education (Tinberg & Nadeau, 2011).

Dual enrollment operates in a liminal space where lines are not entirely clear. McWain (2018) found that dual enrollment instructors encounter tension among educational stakeholder groups. The Family Educational Rights and Privacy Act (FERPA) is a policy that impacts dual enrollment instructors' interaction with parents. FERPA allows parents access to a student's educational records maintained by the school. Rights transfer to the student at the age of 18 or if the student attends a school beyond the high school level (U.S. Department of Education). This means that college instructors, unlike high school teachers, are legally bound not to release information about student's grades or performance to parents. This is a departure from the high school structure for parents (McWain, 2018). Training is required to empower faculty with tools to address these issues, just as educating students and parents about rights is needed.

Organizational structure. Dual enrollment programs require a high level of organizational structure to comply with federal, state and accrediting agencies' policies. Structural components relate to hiring qualified faculty and handling student records.

An analysis of state dual enrollment policies indicates four approaches to course content and instructor quality for dual enrollment courses (Zinth, 2015). The first approach is local control with the postsecondary institution as the determinant for instructor qualifications. This approach may help create buy-in among postsecondary faculty, but it also allows secondary partners to seek partnerships with less stringent instructor requirements (Zinth, 2015). The second approach is moderated local control whereby K-12 and postsecondary institutions establish an agreement on course and instructor requirements. This approach allows for buy-in from both partner institutions, but statewide consistency is compromised with agreements forged at the local level. The third approach is the adoption of National Alliance of Concurrent Enrollment Partnerships (NACEP) or state-mandated qualifications. The NACEP standards focus on college faculty ownership and academic oversight with rigorous expectations that may be a deterrent to some districts (Zinth, 2015).

The National Alliance of Concurrent Enrollment Partnerships (NACEP) is an accrediting body that maintains a set of standards to provide a consistent implementation of concurrent enrollment among member institutions: "NACEP defines concurrent enrollment as college-credit bearing courses taught to high school students by college-approved high school teachers." The standards, adopted in May 2017, address benchmarks relating to partnerships, faculty, assessment, curriculum, students, and program evaluation. The faculty standards include four sub-standards:

F1. All concurrent enrollment instructors are approved by the appropriate college/university academic leadership and must meet the minimum qualifications for instructors teaching the course on campus.

F2. Faculty liaisons at the college/university provide all new concurrent enrollment instructors with course-specific training in course philosophy, curriculum, pedagogy, and assessment prior to the instructor teaching the course.

F3. Concurrent enrollment instructors participate in college/university provided annual discipline-specific professional development and ongoing collegial interaction to further enhance instructors' pedagogy and breadth of knowledge in the discipline.

F4. The concurrent enrollment program ensures instructors are informed of and adhere to program policies and procedures.

These standards ensure that courses taught in the high school and those taught on college campuses reflect the same rigor and standards. The National Alliance of Concurrent Enrollment Partnerships (NACEP) requires high school instructors at accredited schools to receive both initial and ongoing professional development to teach dual enrollment courses (Helmer, 2017). Colleges may also certify high school teachers to teach, though high school teachers must have the same credentials as college instructors. NCAEP suggests classroom management and instructional planning training for all faculty as teaching essentials.

Regardless of whether the instructor of record is a certified high school teacher or a community college instructor, college syllabi must be outlined, agreed on, and used as the communication tool between the institutions in order to maintain the rigor required at the college level. McCrimmon (2014) points to standards issued by the National Alliance of Concurrent Enrollment Partnerships (NACEP) and standards for teaching English

composition published by the Two-Year College English Association (TYCA) and the Conference on College Composition and Communication (CCCC) for direction on how to effectively teach dual enrollment students. McCrimmon (2014) states, “[Dual enrollment] is a permanent part of the secondary and postsecondary landscape, and as such, we are all envired by it” (p. 398).

Hughes and Edwards (2012) emphasize that dual enrollment instructors maintain the same standards, texts, and assessment measures of the sponsoring college. Dual enrollment instructors serve a variety of students—even high school and college students in the same classroom—but must still maintain rigor and provide instruction. Needless to say, perceived barriers regarding dual enrollment instructors persist. Kilgore and Wagner (2017) found that more than half of K-12 administrators indicated a perceived lack of credentials instructors is a barrier to offering dual enrollment programs while only 5% of higher education administrators identified finding credentialed instructors as a barrier. Likewise, the structure and administration of dual enrollment classes must be similar to traditional classes with regard to content, syllabus, textbooks, students learning outcomes, teaching methodologies, and assessment strategies (D’Amico et al., 2013).

Summary

The literature emphasizes benefits of student participation in dual enrollment programs. Many studies on dual enrollment concentrate on student benefits for participants such as higher GPA following high school graduation (An, 2012; Troutman et al., 2018); shorter time to degree (Allen & Dadgar, 2012); and increased rigor in the senior year (McCord & Roberts, 2015, Troutman et al., 2018). The literature regarding dual enrollment faculty is often focused on faculty qualifications, most often for high school teachers serving

as adjunct faculty members at community colleges. In other words, the literature focuses on benefits for students and faculty qualifications, but there was a shortage of literature that tied faculty beliefs about the impact of dual enrollment students to the quality of instruction. This study seeks to contribute the literature regarding faculty perceptions of dual enrollment and implications for the classroom.

Chapter 3 provides an overview of Q-Methodology and describes the data collection and analysis methods.

CHAPTER 3: METHODS

Q-Methodology, used in this study, is a research method for studying the subjective viewpoints or beliefs of participants (Bartlett & DeWeese, 2015; McKeown & Thomas, 1988). According to Wheeler and Montgomery (2009), there is growing interest from educational psychologists and educators in how epistemological beliefs influence students' response to instruction. This study explores North Carolina community college faculty perceptions of Career and College Promise (CCP)/dual enrollment students in the classroom. The increasing number of dual enrollment students adds complexity to the college classroom by expanding the range of ages and often necessitates modifications to the instructional approach. The research questions were designed so CCP faculty could express their beliefs concerning the implications of high school students in college classes. The study sought to answer the following research questions:

1. How do community college faculty who teach dual enrollment classes differ with regard to teaching dual enrollment students?
2. How can the differing perspectives be characterized?
3. What are the common beliefs community college faculty have about teaching dual enrollment students?

This chapter begins with an overview of Q-Methodology followed by a description of the concourse development, data collection, and data analysis processes. The first step in Q-Methodology is developing a *concourse*, a comprehensive set of statements about the topic. These statements are then reduced to a final set of statements called the *Q-Set*. The *P-Set*, known in other methodologies as the sample or participants, performs the Q-Sort, the process of sorting the Q-Set. Next, the data are analyzed through factor interpretation.

Research Design and Participant Selection

The research sites and the participants at each site were selected by *purposeful sampling*. Purposeful sampling includes selecting information-rich cases (Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, 2015). All 58 North Carolina community colleges participate in the Career and College Promise program, though the extent varies among colleges. Five colleges were selected based on geographic diversity, college size, and percentage of CCP students. Table 3.1 provides a comparison of the colleges.

Table 3.1.

Participating Community College Comparison

College	Size	Geographical Location	% of CCP Students (Fall 2017)
College A	Medium	East	30%
College B	Small	East	64%
College C	Large	Central	9%
College D	Medium	West	34%
College E	Large	West	24%

Individual inclusion for the study was dependent upon the participant being a North Carolina community college faculty member who teaches CCP students at one of the five sites. The final Q-Set consisted of 48 statements equaling the number of slots in the 11-point forced grid depicted in Figure 3.1. The sample size was determined by Q-Methodology, which says that the sample should be less than the number of statements in the Q sort (i.e., fewer than 48 statements) (Watts & Stenner, 2012).

Overview of Q-Methodology

Psychologist William Stephenson introduced Q-Methodology in 1935 as an adaptation of Charles Spearman's factor analysis (Watts & Stenner, 2012). Q-Methodology is used in fields such as psychology, sociology, and marketing (Thomas & Watson, 2002), and is increasingly used to identify different perspectives or attitudes toward topics of public concern (Zabala, 2014). Q-Methodology provides a unique way to model individual viewpoints in which subjectivity is involved (McKeown & Thomas, 2013). Subjectivity is the sum of behavioral activity (Watts & Stenner, 2012) that communicates a particular point of view (Zabala & Pascual, 2016). Q-Methodology "helps identify the similarities and differences in subjective perceptions across a sample group and describe a variety of subjective viewpoints" (Bartlett & DeWeese, 2015, p. 73). Q-Methodology "explores the distinct perspectives, discourses, or decision-making styles within a group in order to address practical matters such as acceptance of new policies and technology or increasing public participation" (Zabala, 2014, p. 163). The rapid growth of dual enrollment nationally means that empirical research is nascent and emerging.

Conducting a Q-Study

Brown (1980) developed a widely-recognized five-step procedure to carry out a Q-Study. The components include: (1) creating a concourse through a literature review and discourse with field experts; (2) developing the Q-Set derived from the concourse; (3) selecting participants, also known as the P-Set; (4) Sorting the concourse statements (Q-sort); and (5) analyzing and interpreting the data.

Concourse and Q-Set Development

A distinct aspect of Q-Methodology is concourse development. The concourse is a collection of statements representing a whole set of possible expressions on a topic (Watts & Stenner, 2012; Zabala, 2014). The whole collection is reduced to a final representative selection of between 40 and 80 statements (Watts & Stenner, 2012). The concourse is created through a review of the literature and discourse with field experts. Stephenson (1988, 1989) notes that “a concourse is likely to be shared and defined by ‘a collection of self-referable statements spoken by the participants’” (cited in Watts and Stenner, 2012, p. 34). The concourse is typically a collection of statements; however, images (Bartlett & DeWeese, 2015) or objects (Watts & Stenner, 2012) can also be used. Watts and Stenner (2012) explain that “concourse is merely a name for the overall population of statements from which the final Q set is sampled. In other words, concourse is to Q set what population is to person sample or P set” (p. 45). Ultimately, the concourse is defined by the research questions to be answered (Watts & Stenner, 2012).

The concourse information can be gathered through “participant observations, cultural experiences of the researchers, literature reviews, interviews, popular media, and opinions” (Bartlett & DeWeese, 2015, p. 74). Watts and Stenner (2012) recommend formal or informal interviews with individuals familiar with the topic who may or may not be part of the P-Set. This study utilized various semi-structured informal interviews with dual enrollment faculty and community college administrators in addition to a literature review and reviews of online news stories to create the concourse.

Literature searches. The first step in building the literature review was conducting a keyword search in the university’s online library catalog. A federated search (searching

multiple databases simultaneously) using the platform Summon was performed. The initial keyword term was *dual enrollment*, both with and without quotation marks (the quotation marks signal the library catalog to search as a phrase “*dual enrollment*” as opposed to a Boolean search “dual AND enrollment”). The words *dual* and *enrollment* yielded over 50,000 hits. Searching as phrase decreased the number of hits to approximately 2500 results. The results were limited further by adding a date range of the past five years (2012 to 2017). These dates coincided with the legislative creation of the Career and College Promise program. The number of hits was further refined to 994. Saturation was reached after reviewing approximately 100 articles. After this point, the articles’ subject matter turned to dual enrollment in Medicare, dual enrollment in foreign countries, and announcements about new dual enrollment programs. All were outside the parameters of the present study. The initial discourse was developed through a review of the literature including scholarly resources located in Summon and Google scholar and articles in popular sources (e.g., *Inside Higher Ed*, *Newsweek*, etc.).

The literature review and faculty interviews (discussed below) revealed a gap in the dual enrollment literature, specifically related to the topic of faculty perceptions, and, more generally, faculty perceptions about students in dual enrollment programs. A targeted search in the library databases included the key phrases “dual enrollment faculty perceptions.” This search yielded zero results. The key phrase was subsequently split into two parts: “dual enrollment” AND “faculty perceptions.” This search generated ten results. Only one of those ten results addressed the current research topic. In order to ensure the topic was covered exhaustively, another search was performed to identify general information about community college faculty resulting in over 2000 hits. Refining the topic to “community college faculty

perceptions” contracted the number of results to nine. The researcher added searches of dissertations in an attempt to fill gaps in the literature.

A third prong of the literature review included reading and researching on the intergenerational learner and multigenerational classroom. The advent of early colleges in the early 2000s brought similar scrutiny and skepticism among faculty currently seen with the rise of dual enrollment numbers. This literature supports the importance of positionality and self-scrutiny among faculty.

Expert input. To supplement the literature with real-life examples, CCP faculty were interviewed informally and asked to talk about their perceptions of dual enrollment students in the classroom. Statements related to the topic were transcribed verbatim and included in the concourse. In the event that the statement was already present in the concourse as identified through the literature review, the interviewee’s initials were listed as a source. The additional source added credence to those statements in the final Q-Sort formation. Likewise, attendees at a Career and Technical Education (CTE) Conference hosted by the North Carolina Community College System Office in February 2018 were asked to provide statements as an exit ticket at the conclusion of the conference. Similarly, those statements were recorded as written and notated on the concourse source as *CTE*. Statements were provided anonymously and without attribution to a particular community college. Adding statements from CCP instructors served to extend the concourse statement as well as to provide a level of triangulation verifying the statements’ validity.

Following the literature review, interviews with CCP faculty, and the input from the CTE Workshop participants, 85 statements were included in the initial concourse. Watts and Stenner (2012) recommend generating a large number of statements that can be refined and

reduced through piloting. Concourse statements were added to a spreadsheet and grouped thematically. The categories were: *faculty beliefs*, *support of diverse learner needs*, *rigorous coursework*, *flexibility in assignments*, and *meeting institutional goals*. Finally, concourse statements were narrowed to the final Q-Set of 48 statements, equal to the number of boxes in the forced grid.

A select group of CCP faculty were asked to pilot the concourse statements. The group consisted of six faculty: three males and three females, three of whom were from College Transfer and three of whom were from CTE. All six members of the pilot group have taught CCP students for more than five years. First, statements were typed onto slips of paper and provided to faculty members. Faculty reviewed the statements and made suggestions about combining similar statements. For example, of the three concourse statements (1) *CCP faculty should be compensated at a higher rate than non-CCP faculty*; (2) *CCP faculty should be awarded by more points on evaluations for teaching high school students*; and (3) *CCP faculty should be incentivized for teaching CCP classes*, the first two were eliminated in favor of the third in the final Q-Set. Other statements were eliminated because faculty did not have knowledge in that area. For instance, *CCP students should pay for textbooks* was eliminated because faculty in the pilot group did not have strong opinions about this statement. Faculty were also invited to add statements that might have been missing. This process continued until the list of statements reached the target of 48.

Q-Set

Themes. The statement themes were reanalyzed once the Q-Set was created from the concourse statements. Table 3.2 depicts six themes derived from the Q-Set statements. Figure 3.1 recalls the Conceptual Framework based on these topics introduced in Chapter 1. The

theme *faculty beliefs* required a judgement call based on experience and a professional opinion. For example, *Statement 14: CCP students do not feel the need to work hard for good grades*. The use of the word “feel” asked for speculation versus an observation. By contrast, the statements in the *CCP Student Behaviors* category were visible. *Statement 11: CCP students take notes in class less frequently than traditional students* can be witnessed. Likewise, *Organizational Culture* included statements such as *Statement 3: CCP participation eases the transition from high school to college*. An example of *Organizational Structure* is *Statement 7: Faculty should be incentivized to teach CCP classes*. The number of statements is virtually balanced among topics.

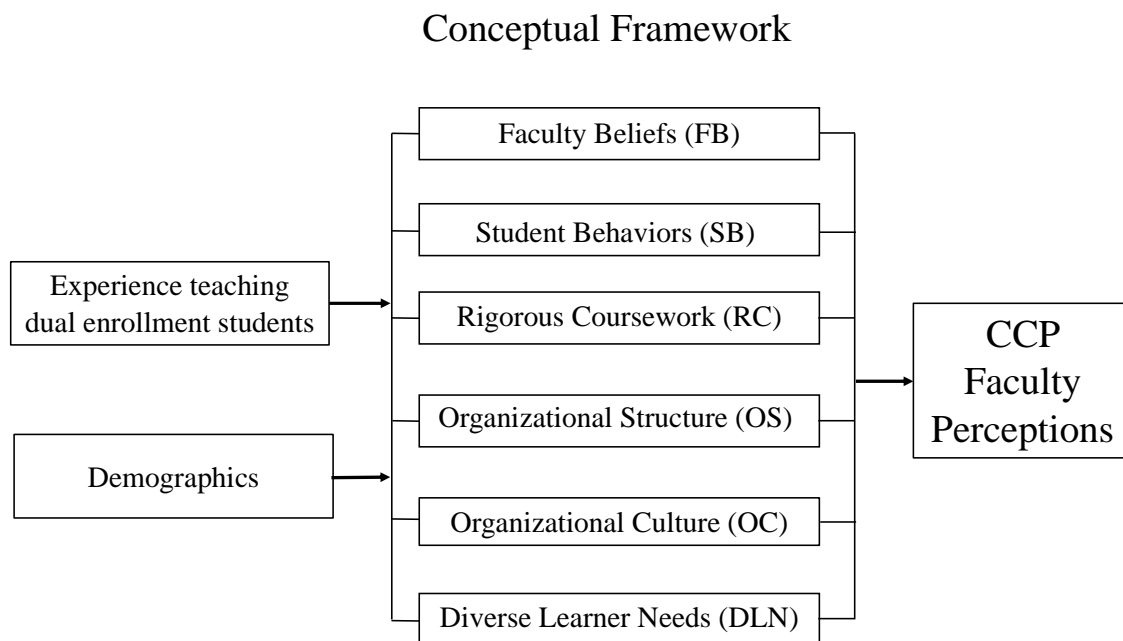


Figure 3.1. Conceptual Framework

Table 3.2.

Q-Set Topics

Topic	Number of Statements	Statements
Faculty Beliefs	8	1, 13, 14, 20, 29, 30, 37, 40
CCP Student Behaviors	9	8, 9, 10, 11, 15, 25, 27, 35, 39
Support of Diverse Learner Needs	9	5, 12, 17, 23, 24, 28, 46, 47, 48
Rigorous Coursework	8	4, 6, 26, 31, 32, 33, 34, 44
Organizational Structure	7	2, 7, 18, 19, 38, 41, 42
Organizational Culture	7	3, 16, 21, 22, 36, 43, 45
Total	48	

Q-Set statements. The Q-Set is the final grouping of statements derived from the concourse. The goal of the Q-Set design is to provide both coverage and balance of the topic (Watts & Stenner, 2012). A Q-Set can either be *structured* or *unstructured*. The structured Q-Set begins with identifying themes and then selecting X number of statements to cover that idea. Table 3.2 shows a structured Q-Set. The list of Q-Set statements is shown in Table 3.3.

Table 3.3.

Q-Set Statements

Card	Statement	Source
1	CCP students are not academically prepared for college-level classes.	Helmer, p. 35; Bishop-Clark & Johnson (1998), p. 29
2	CCP classes should only be taught by full-time college faculty versus adjunct faculty.	Helmer, p. 38 and field experience
3	CCP participation eases the transition from high school to college.	Dare, Dare, & Nowicki, p. 208
4	CCP classes should only be available for high-achieving students.	Dare, Dare, & Nowicki, p. 208; Hofmann & Voloch, p. 102
5	Adult students prefer not to take classes with CCP students.	Bishop-Clark & Lynch (1995), p. 754
6	CCP classes should be for College Transfer students only.	Haag, p. 54
7	Faculty should be incentivized to teach CCP classes.	Cassidy, p. 8; Hooker, p. 30
8	CCP students are more interested in grades than content as opposed to traditional students.	Instructor; Bishop-Clark & Lynch (1998), p. 29; Wilson & Gerber, p. 36
9	CCP students exhibit less initiative than traditional students.	Instructor; Bishop-Clark & Lynch (1995), p. 756
10	CCP students lack time management skills.	Instructor; CTE
11	CCP students take notes in class less frequently than traditional students.	Instructor
12	I can distinguish CCP students from traditional students.	Instructor
13	CCP students understand the importance of doing well in college classes.	CTE
14	CCP students do not feel the need to work hard for good grades.	CTE

- 15 CCP students are immature. Bishop-Clark & Lynch (1995), p. 756; CTE; Williams & Southers, p. 28

Table 3.3 continued

- 16 High schools do not adequately prepare students for college expectations. Helmer; CTE
- 17 Former high school teachers have an advantage teaching CCP students. CTE
- 18 Providing CCP students with adequate supports (library, counseling, tutoring) increases the likelihood of passing the class. Helmer, p. 36
- 19 I dislike aligning my course schedule to the public school's academic calendar. Williams & Southers, p. 28; Instructor
- 20 Participation in CCP classes increases student motivation to enroll in college. Andrews, p. 421
- 21 Participation in CCP classes helps prepare students for the expectations of college. Andrews, p. 421
- 22 CCP pushes students to perform at a higher level. Johnson & Brophy, p. 28
- 23 CCP students benefit from taking classes with mature and productive students (traditional students). Johnson & Brophy, p. 28
- 24 CCP students require more support from me than traditional students. Bishop-Clark & Lynch, p. 757
- 25 CCP students are less likely than traditional students to ask for help outside the classroom. Instructor
- 26 CCP students require more repetition than adult students. Instructor; Williams & Southers, p. 28
- 27 CCP students are more dependent on peers than traditional students. Instructor
- 28 I enjoy teaching in an intergenerational classroom (CCP and traditional students in the same class). CTE; Clark-Bishop & Johnson, p. 755
- 29 CCP students are eager to learn. CTE
- 30 CCP students do not strive to improve. CTE
- 31 CCP classes maintain the same rigor as traditional classes at the college. CTE

- 32 CCP classes have the same rigor as classes taught at the high school. CTE
- 33 Academic rigor suffers when high school instructors teach CCP classes. Helmer, p. 38

Table 3.3 continued

- 34 SLOs are the same for CCP and traditional courses. Haag, p. 52
- 35 CCP students disrupt class more often than traditional students. CTE; Bishop-Clark & Lynch, p. 756
- 36 CCP students have more stringent deadlines than traditional students. Instructor; Tensen, p. 17
- 37 CCP students' problems are less important to me than traditional students' issues (e.g. ballgame versus sick child). Instructor; Bishop-Clark & Lynch, p. 760
- 38 CCP students are more motivated than adult students to adhere to deadlines. CTE
- 39 CCP students complete assignments less often than traditional students. CTE
- 40 CCP students are not prepared for college-level classes. CTE
- 41 CCP saps increasingly limited resources (e.g. seats in high demand classes). Kinnick, p. 39
- 42 CCP classes are an effective component toward facilitating on-time graduation (2 year or 4 year). Dare, Dare, Nowicki, p. 208
- 43 CCP is an effective recruitment tool for programs. Haag, p. 52; Lukes, p. 19
- 44 CTE students should have access to entry level English and Math classes. Haag, p. 52
- 45 My college values CCP students. Williams & Southers, p. 28
- 46 Traveling to the high school to teach would be a burden on me. Instructor
- 47 Community college faculty are not trained to educate high school students. CTE; Williams & Southers, p. 28
- 48 CCP and adult learners should be in separate classrooms. Bishop-Clark & Lynch, p. 754
-

Note: CTE denotes a response from a participant at the Career and Technical Education Conference held in February 2018.

Participant Selection: P-Set

The P-Set, or set of participants in Q Methodology, should represent a targeted group with knowledge of the topic as a viewpoint that matters (Watts & Stenner, 2012). Q-Methodology emphasizes the authority of the participants rather than a large sample size (Watts & Stenner, 2012). In fact, the sample size can range from 10 to 50 and still hold for generalizations (Danielson, 2009).

In order to solicit the P-Set, the researcher first sought permission to survey faculty from the community college president. Five community colleges were selected representing a range of sizes, geographical locations, and percentages of CCP students. Two colleges are located in the western part of the state, two in the eastern part of the state, one in the central part of the state. The colleges selected also represent a variety of sizes as measured by full-time equivalency (FTE). The percentage of CCP students in the Fall 2017 term ranged from 9% at the largest institution to 64% at the smallest.

Each president was sent a recruitment letter as shown in Appendix C. Presidents identified a contact at the college to serve as a liaison between the college and the researcher. The liaison position avoided perceptions of a power dynamic between the president and potential participants. The researcher emailed the liaison a recruitment email containing a link to the survey. The software collected an email address; however, participants were encouraged to use a dummy email to maintain anonymity and confidentiality.

Surveys were distributed by the liaisons identified by presidents. One of the surveys was eliminated because the same email was listed on two entries. The survey with complete answers in the post-sort questionnaire was retained and the other deleted. Three additional Q-sorts were removed from the dataset because the participants' teaching area was Workforce/Continuing Education, a group that was not part of the dataset because this area was added to Career and College Promise legislation in 2017. Thus, those faculty members would have limited experience with CCP students in the classroom. The reduced number of sorts still met the acceptable minimum number of participants of "less than the number of items in your Q set" (Watts & Stenner, 2012, p. 73). The demographic background of participants is listed in Appendix F.

Data Collection

Data were collected following the protocol approved by the North Carolina State University Institutional Review Board (IRB). The full protocol can be viewed in Appendix A. In summary, community college presidents selected by purposeful sampling (Palinkas et al., 2015) appointed a contact person to serve as the liaison between the college and the researcher. The researcher coordinated distribution of a link to the survey to faculty members who teach CCP students. Participants' consent was obtained when the participant clicked on the survey link. The survey was distributed through QSortWare. Participants that elected to complete the survey were provided with the *condition of instruction*:

Sort each statement into the Disagree, Neutral, or Agree piles. There is not a limit for how many cards can be sorted into each pile and you can move statements around.

There are 48 statements. The way you sort each statement is based on your

perceptions of having Career and College Promise (dual enrollment) students in your classroom.

The Q-sort was a three-step process. First, faculty sorted 48 Q-Set statements into three categories: agree, neutral, and disagree. Next, faculty sorted the same statements into a forced grid as depicted in Figure 3.1. The grid ranged from +5 (most agree) to -5 (most disagree). Lastly, faculty answered open-ended and demographic questions in a post-sort questionnaire (Appendix B). Information in the post-sort questionnaire provided clarity on the reasons participants sorted statements in the extreme ends of the grid. Participants also had the opportunity to recommend additional statements. The information collected in the post-sort questionnaire added a qualitative data element. The QSortWare software required participants to enter an email address; however, faculty were encouraged to use a dummy email address in the opening instructions to ensure anonymity and confidentiality. For this reason, it was impossible to determine the breakdown of participants from specific community colleges.

Q-Sort

Data gathering occurs when members of the P-Set sort the Q-Set statements into a forced grid. In other words, participants ranked statements based on the *condition of instruction*, directions provided by the researcher to the P-Set. The Q-Sort can be performed either face-to-face using a paper and card design or electronically. Data for this study were collected using an online platform.

The survey was administered online for a number of reasons. First, providing an online option allowed faculty to take the survey away from the place of employment to ensure anonymity and confidentiality. Secondly, online administration provided flexibility

for faculty to complete the survey privately and at the participant's convenience. Lastly, the data collection occurred at the beginning of the semester and online administration allowed faculty to concentrate on serving students instead of meeting at a specified time.

Instrumentation. QSortWare, an online platform available at www.qsortware.net, was utilized to collect data for this study. Data collection for Q Methodology is divided into quantitative and qualitative sections. QSortWare allowed the Q-Sort components to be built separately. First, a splash screen provided participants with a consent statement and instructions for completing the survey. Secondly, participants were provided with instructions and asked to sort the 48 Q-Sample statements into disagree, neutral, and agree categories based on the individual's knowledge of CCP students in the classroom. Participants dragged and dropped the statements into one of three columns. Q-Sort members were not limited as to how many statements were placed into each category. Thirdly, participants sorted the same statements into a forced grid format concentrating on the statements at the extremes of the bell curve (+5 most agree and -5 most disagree). A blank sample chart is shown in Figure 3.2. Figure 3.3 shows a completed sample Q-Sort.

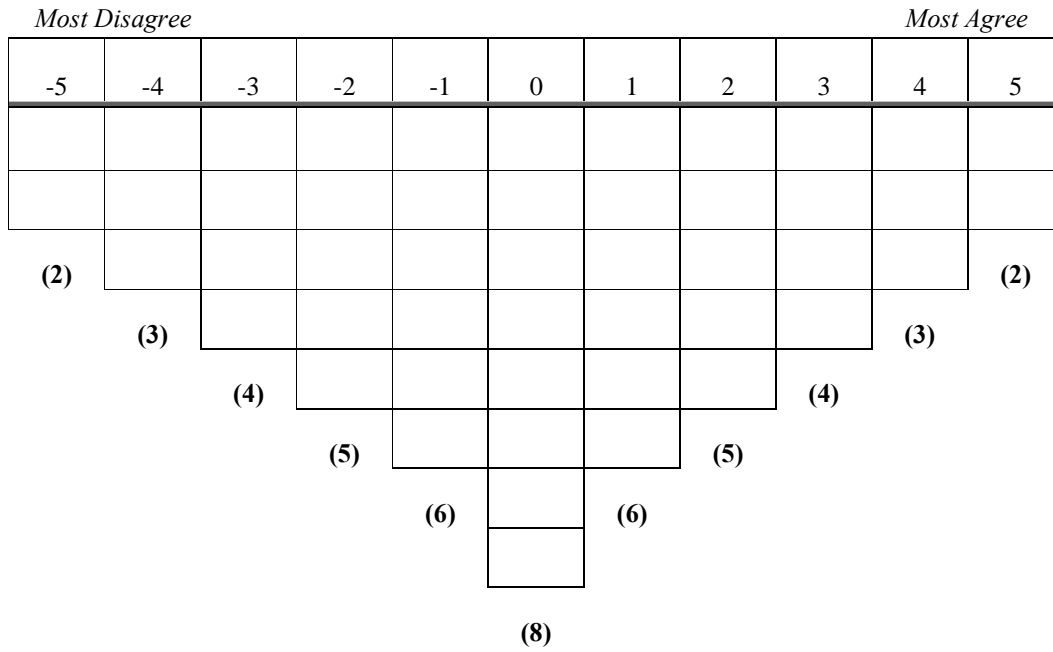


Figure 3.2. A Quasi-normal Distribution with an 11-point Scale

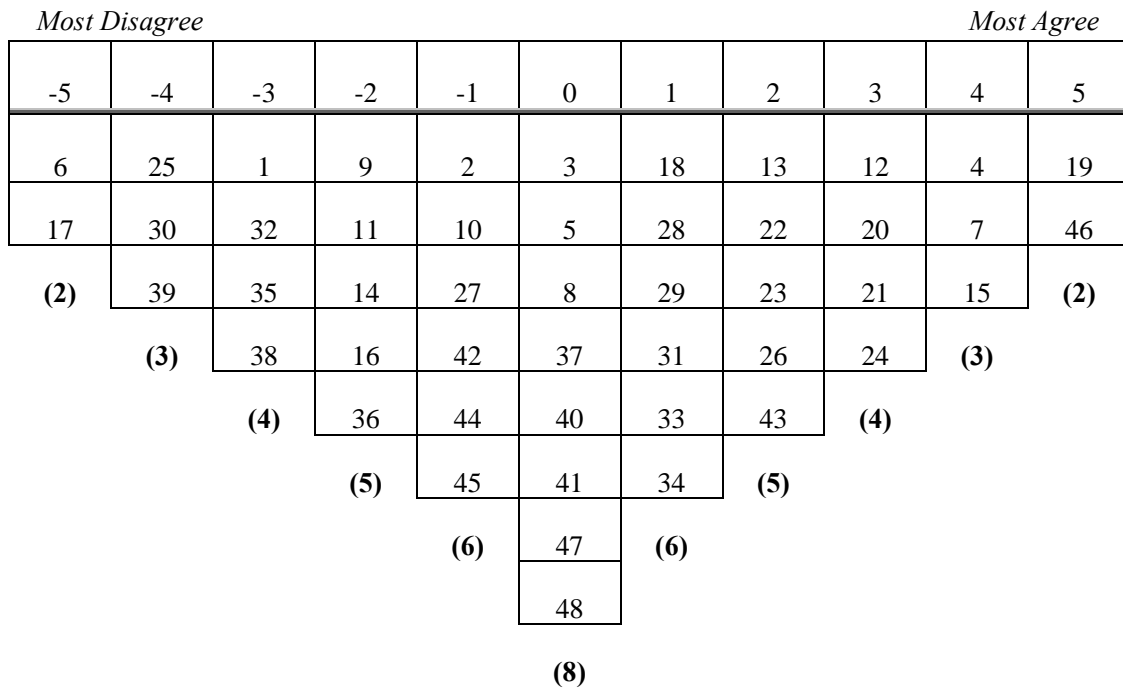


Figure 3.3. Completed Q-Sort Grid

Q-set statements can be sorted into a forced distribution grid as seen in Figure 3.1 or in free distribution. Free distribution allows the P-Set to sort any number of statements into any ranking position (Watts & Stenner, 2005).

Post-sort questionnaire. Lastly, participants completed a post-sort questionnaire. The questionnaire collected demographic information as well as answers to open-ended questions. Appendix B shows the questionnaire. The open-ended questions allowed the P-Set to reflect on the Q-Sort experience. Respondents could elaborate on which statements were both easiest and most difficult to sort as well as provide statements that were not included in the Q-Set. The answers to open-ended questions yield rich insights used to enhance the final narrative (Bartlett & DeWeese, 2015; Townsend, 2017; Watts & Stenner, 2012).

Data Analysis

The fifth and final step in Q-Methodology is analyzing and interpreting the data. Data is compiled in correlation matrices and the matrices are analyzed through factor analysis (Wheeler & Montgomery, 2009). The final results consist of *factors*, a small number of sets that differ from one another and summarize perspectives gathered from participants (Zabala, 2014). In addition, participants were asked follow up questions to collect additional information regarding the participants' rationale for sorting statements into the extreme categories (e.g. most agree, most disagree). Factor analysis is the data reduction tool that measures attitudinal patterns (Bartlett & DeWeese, 2015). This study used Stata for data analysis. The Stata command for Q-Method analysis was developed by Dr. Noori Akhtar-Danesh of McMaster University (Akhtar-Danesh, 2018).

Factor Analysis. Factor analysis compares data collected from a sample of n persons who completed m tests. Q factor analysis provides information about participants rather than tests taken by participants (Bartlett & DeWeese, 2015). The results matrix shows each person's scores relative to the test results (variables). Per Watts and Stenner (2012), "Factor analysis is less concerned with any single test or variable than with revealing patterns of association between all the variables in a given data matrix" (p. 8). Differences in variables are scored on a scale ranging from +1.00 to -1.00. High positive correlations (for example +.70) signify similarity between the two individuals. On the other hand, high negative correlations (-.70) indicate low association between the individuals. Watts and Stenner (2012) explain, "A correlation of zero indicates there is no association between the two variables. Factor analysis begins with the calculation of such correlations relative to all the variables in the data matrix" (p. 8).

The second step in data analysis is *factor rotation* and *factor score calculation*. Correlations between pairs do not necessarily compare like items and therefore must be standardized for any meaningful comparisons to be made. Correlations are standardized by calculating the *z-score*, "a mathematical expression of the distance between a particular absolute score and the mean average of the measured sample. This distance is expressed proportionately in terms of a number of standard deviations" (Watts & Stenner, 2012, p. 9). A common example where *z scores* are useful is in comparing whether one is tall or overweight as compared to the general population. Composite profiles are compiled to create an analysis of similar characteristics and perceptions among survey participants. Performing factor analysis assists in the process of identifying similarities between Q-Set participants (Bartlett & DeWeese, 2015).

Factor arrays indicate which statements are positively or negatively correlated with each factor. The researcher develops themes based on the factor arrays. The factor array is a composite of the individuals who belong to each factor. Tables noting the top three highest and lowest rated statements for each factor (Bartlett & DeWeese, 2015) are discussed in the Findings chapter. Finally, a narrative was constructed using the analysis, demographic information and post-sort qualitative data.

Subjectivity Statement

I am an administrator at a North Carolina community college and oversee the Career and College Promise program at my college. In this role, I witness the positive impact that being enrolled in college classes has on students socially and academically. In addition to recruiting and advising students, I work closely with high school administrators and counselors and the Vice Presidents of Instruction and Enrollment Management. However, I do not work directly with faculty as faculty supervision is managed by department chairs at this institution. My research on dual enrollment and expertise in working with this population has led to consulting on policy at the state level and invitations to speak on the subject of dual enrollment.

I chose to study dual enrollment, particularly the role of faculty, as a culmination of factors. First, the growth of the Career and College Promise (CCP) program governed by a complex set of procedures drives my daily work. Secondly, speaking to new department chairs at state-wide institutes provides a more holistic viewpoint of CCP and reveals challenges in scheduling, issues with adult students avoiding classes known to be reserved for high school students, inconsistent access to resources (a social justice issue), and some faculty's reticence to teach high school students. Lastly, the literature focuses primarily on

student success in dual enrollment programs and the faculty voice is absent from scholarly studies. My daily interaction with students, parents, administrators, and casual communication with faculty influences the development of the discourse, the findings, and conclusions.

Chapter Summary

This chapter described the background and steps necessary to conduct research using the Q-Method paradigm. The purpose of the study was to measure North Carolina community college faculty perceptions of CCP/dual enrollment students in the classroom. Q-Methodology utilizes both quantitative and qualitative elements to ascertain the perceptions of participants on a particular topic. Findings from the data analysis are addressed in Chapter 4.

CHAPTER 4: FINDINGS

This chapter details findings from Q-Methodology data analysis used to answer the research questions regarding North Carolina community college faculty perceptions of Career and College Promise students. Thirty-six North Carolina community college faculty members made up the P-Set. P-Set participants were asked to sort the 48 statement Q-Set into a forced distribution grid. The statements were drawn from the literature review comprised of scholarly research, related publications, and faculty interviews.

The literature review presented in Chapter 2 focused on community college faculty, dual enrollment, and the multigenerational classroom. Factor analysis, the fourth step in Q-Methodology, was used to analyze the data provided by the Q-Sort (the completed surveys). Open-ended questions and demographics drawn from a post-sort questionnaire provided additional information about the participants and specific indicators for ranking statements. A description of the methodology provided in Chapter 3 outlined the steps used to conduct the analysis.

The number of dual enrollment students continues to grow nationally, including North Carolina. The purpose of the study was to ascertain the perceptions of North Carolina community college faculty members about (high school) dual enrollment students in college-level classes. The following research questions guided this study:

1. How do community college faculty who teach dual enrollment classes differ with regard to teaching dual enrollment students?
2. How can the differing perspectives be characterized?
3. What are the common beliefs community college faculty have about teaching dual enrollment students?

Participants were given a *condition of instruction*, a particular viewpoint on how to sort the statements. Specifically, participants were directed to sort statements based on their perceptions of dual enrollment students. Faculty who teach dual enrollment classes were the target audience asked to complete the survey instrument. The process required participants to reflect on dual enrollment students in the college environment. This was accomplished by first by sorting statements into three categories and then placing the same statements into a forced grid ranging from *most disagree* (-5) to *most agree* (+5) (Table 2.3). Elements of the data collection included the initial sort as well as post-sort questionnaire. The post-sort questionnaire allowed participants to further reflect on statement placement with particular focus on the statements sorted at the extremes (+5, -5) of the grid.

This chapter reports the findings of the Q-sort activity and includes demographic information about the participants, correlations between sorts, a description of factor analysis, factor arrays (the ideal sort from each factor), and interpretation of each factor. The factor narrative includes the consensus statements held in common between the factors as well as the distinguishing statements. Statements at the extremes of each factor array were also included to provide additional insight into each factor's distinguishing perspective. Factor analysis provides information relevant to addressing the research question.

Overview of Analysis

Q Methodology is designed to measure individuals' perceptions of a given topic. According to Brown (1993), "The overall purpose is to determine whether or not these opinions demonstrate a theme that will assist in the understanding of subjectivity of individuals' viewpoints toward a subject matter" (cited in Bartlett & DeWeese, 2015, p. 73). The literature review revealed a gap in empirical research about dual enrollment faculty,

particularly perceptions. Q-Methodology is an appropriate choice for this study to contribute to the greater body of literature concerning dual enrollment faculty.

Data were collected using QSortWare, an online platform. QSortWare allowed for the collection of data in a forced sort distribution in addition to the collection of demographic and open-ended questions. Individual results were analyzed using Stata (v. 14.2). *Qconvert* and *qfactor* commands were designed by Dr. Norri Akhtar-Danesh as a plug-in for Stata software. Results were verified using the R software package. The study results were analyzed to group like-minded participants into factors described in the second half of the chapter. Qualitative narrative provided by the participants in the post-sort questionnaire helped to add validity differentiating between similar sorts and providing rich analysis.

P-Set

Thirty-seven q-sorts were submitted using the QSortWare platform. Four of the q-sorts were eliminated from the dataset, one for impartial answers and three others because faculty were out of the target population. Also, two of the q-sorts used the same email address. The completed q-sort was retained in favor of the incomplete sort. The three additional q-sorts were eliminated from the dataset because the participant indicated a Workforce/ Continuing Education field. The legislation added the option for State and Industry Recognized Credentials to Career and College Promise in 2017. It was determined that these faculty members had limited experience in working with dual enrollment students in the classroom and would therefore not have an authoritative viewpoint about the topic. P-Set individuals were described as being familiar or having an opinion about the topic (Bartlett & DeWeese, 2015). Before eliminating this group from the dataset, the researcher returned to the raw data and checked the open-ended questions for relevant post-sort

reflections. The data revealed that none of these faculty members provided additional information often writing “N/A” in the comment section. Based on the IRB requirements, this group was eliminated from the dataset. The IRB protocol is found in Appendix A. The revised dataset includes thirty-three members. Demographic information is located in Appendix F.

Table 4.1 displays the P-Set demographic data. The participants were predominantly female (n=28; 75%), Caucasian (n=28; 84.85%), teaching College Transfer courses (n=27; 81.81%) with a Master’s degree (n=22; 66.67%), full-time (n=27; 81.81%) with face-to-face delivery (n=27; 81.81%). Approximately two-thirds of the participants were between 35 and 55 years of age (n=26; 78.78%). Thirty of the 33 participants (90.90%) split evenly into three ranges of college sizes (1-999, 1500-2499, and 2500-3499 FTE).

Table 4.1.

Q-Set Demographics

	Overall N=33		Factor I N=14		Factor II N=7		Factor III N=7		Factor IV N=3	
	F	%	f	%	F	%	F	%	f	%
Gender										
Male	8	24.24%	4	28.57	1	14.29%	1	14.29%	2	66.67%
Female	25	75.76%	10	71.43%	6	85.71%	6	85.71%	1	33.33%
Race										
African-American/Black	3	9.09%	2	14.29%	0	0%	0	0%	1	33.33%
Caucasian	28	84.85%	10	71.43%	7	100%	7	100%	2	66.67%
Multi	1	3.03%	1	7.14%	0	0%	0	0%	0	0%
Hispanic	1	3.03%	1	7.14%	0	0%	0	0%	0	0%
Age										
26-35	2	6.06%	1	7.14%	1	14.29%	0	0%	0	0%
36-45	12	36.36%	6	42.86%	3	42.86%	2	28.57%	0	0%
46-55	14	42.42%	5	35.71%	3	42.86%	2	28.57%	3	100%
56-65	5	15.15%	2	14.29%	0	0%	3	42.86%	0	0%
Education										
Bachelors	2	6.06%	1	7.14%	0	0%	0	0%	0	0%
Masters	22	66.67%	9	64.29%	6	85.71%	5	71.43%	1	33.33%
Doctorate	7	21.21%	2	14.29%	1	14.29%	2	28.57%	2	66.67%
Other	2	6.06%	2	14.29%	0	0%	0	0%	0	0%
College Size in FTE										
1-999	10	30.30%	6	42.86%	1	14.29%	3	42.86%	0	0%
1000-1499	1	3.03%	1	7.14%	0	0%	0	0%	0	0%
1500-2499	10	30.30%	3	21.43%	3	42.86%	2	28.57%	1	33.33%
2500-3499	10	30.30%	3	21.43%	2	28.57%	2	28.57%	1	33.33%
3500-4999	0	0%	0	0%	1	14.29%	0	0%	0	0%
5000+	2	6.06%	1	7.14%	0	0%	0	0%	1	33.33%
Type										
College Transfer	27	81.81%	9	64.29%	7	100%	6	85.71%	3	100%
CTE	6	18.18%	5	35.71%	0	0%	1	14.29%	0	0%
Employment Status										
Full-time	27	81.81%	10	71.43%	7	100%	7	100%	2	66.67%
Part-time	6	18.18%	4	28.57%	0	0%	0	0%	1	33.33%
Delivery Method										
Face-to-Face (F2F)	27	81.81%	10	71.83%	6	85.71%	5	71.43%	3	100%
Online	3	9.09%	2	14.29%	1	14.29%	0	0%	0	0%
Hybrid	3	9.09%	2	14.29%	0	0%	1	14.29%	0	0%

Qualitative Data Collection

The post-sort questionnaire (See Appendix B) allowed participants to reflect and elaborate on choices relative to the q-sorting process and statement placement. The qualitative answers allowed the researcher to compare responses among and between factors. A synopsis of demographic information is provided as part of the factor description and analysis. The qualitative data is woven throughout the narrative. Table 4.2 lists the demographic and narrative questions addressed in the post-sort questionnaire.

Table 4.2.

Post-Sort Questionnaire Questions

Question	Demographic and narrative questions
1	Email
2	Gender
3	Age
4	Education
5	Ethnicity
6	Primary Program Area
7	Community College Size
8	Employment Status (Full-time/Part-time)
9	Delivery Method (F2F, Online, Hybrid)
10	Do you teach at multiple community colleges?
11	What was the rationale for selecting +5 statements?
12	What was the rationale for selecting -5 statements?
13	Add any statements that were missing.
14	Which statements were easiest to place?
15	Which statements were most difficult to place?
16	Were you thinking of a positive or negative experience?
17	List years of instructional experience.

Correlation Matrix

A correlation matrix (33 x 33) was created in Stata to show the similarity between participants' sorts. The correlation matrix displays coefficients between -1.00 and +1.00. A correlation of +1.00 indicates an exact match while a correlation of -1.00 reflects an opposite sort (Kandelac, 2015). Participants 22 (African-American female who teaches in the College Transfer full-time) and 24 (Multi-ethnic male who teaches CTE hybrid) have the highest correlation of 0.60. Participants 13 (Caucasian female teaches college transfer face-to-face full-time) and 33 (Caucasian female teaches CTE face-to-face full-time) have the lowest correlation of -0.23. No two sorts were perfect correlations; however, several sorts were similar indicating potential relationships between participants. QSort 4 and QSort 5 both correlated at 0.41 with QSort 6. Table 4.3 provides a truncated view of the initial correlation matrix.

Table 4.3.

Correlation Matrix between Sorts (Truncated)

	QSort t1	QSort 2	QSort 3	QSort 4	QSort 5	QSort 6	QSort 7	QSort 8	QSort 9	QSort 10
QSort1	1.00									
QSort2	0.36	1.00								
QSort3	0.43	0.49	1.00							
QSort4	0.46	0.32	0.44	1.00						
QSort5	0.57	0.32	0.51	0.30	1.00					
QSort6	0.43	0.24	0.43	0.41	0.41	1.00				
QSort7	0.48	0.16	0.27	0.65	0.10	0.29	1.00			
QSort8	0.23	0.12	0.06	0.47	0.04	0.25	0.37	1.00		
QSort9	0.13	0.20	-0.03	-0.09	-0.06	.18	0.12	0.07	1.00	
QSort10	0.18	0.08	0.01	0.03	-0.12	0.12	0.23	0.11	0.49	1.00

Factor Analysis and Eigenvalues

The next step in Q-Methodology is factor analysis. The goal is to identify a solution combining the greatest number of participants loading on a factor with the largest percentage of explained variance. The factor analysis produces an unrotated factor matrix. Q-Methodology employs by-person factor analysis considering each participant's q-sort and grouping similar sorts into factors. According to Akhtar-Danesh (2017), factors reflect "a group of individuals with similar views, feelings, or preferences about the theme of the study" (p. 148). Initial analysis indicated 8 factors with Eigenvalues greater than 1.0 indicating the amount of variance within each factor. Eigenvalues greater than 1.0 are considered significant and values under 1.0 are too weak for additional analysis (Stanigar, 2016). Further analysis revealed that three of the 8 factors contained two sorts each and Factor 8 comprised a single sort. Factor 1 remained consistent with 8 sorts. Table 4.4 displays the unrotated factor analysis.

Table 4.4.

Unrotated Factor Matrix (Truncated)

Sort	Eigenvalue	Difference	Proportion
1	10.24	6.62	31.05%
2	3.62	1.13	10.98%
3	2.49	1.13	7.56%
4	2.01	0.26	6.08%
5	1.75	0.13	5.30%
6	1.62	0.36	4.91%
7	1.26	0.17	3.80%
8	1.09	0.11	3.29%

Factor extraction. *Principal component analysis* (PCA) is the most common factor extraction method (Akhtar-Danesh, 2017; Bartlett & DeWeese, 2015) and was used for analysis in this study. According to Akhtar-Danesh (2017), “PCA extracts uncorrelated linear combinations of the observed Q-Sorts” (p. 149). The first factor explains the highest variance, the second factor the next highest, and so forth until all of the variance is explained.

Analysis was repeated and a four-factor solution was selected. The first factor had an Eigenvalue of 10.24; the second 3.62; the third 2.49; and the fourth 2.01. Factor One explained 31.05% of the variance; Factor Two 10.98%; and Factor Three 7.56%, and Factor Four 6.08%. Overall, 56.67% of the variance was explained in a four-factor solution. The strength of analysis is determined by the combination of eigenvalues over 1.0 and variance explained by the solution. The explained variance can be calculated by adding the proportions. For example, the explained variance of a two-factor solution is 42.03% (31.05+10.98). Another key to choosing a solution is how many sorts loaded onto a given factor.

Scree plot. Figure 4.1 shows a scree plot of eigenvalues. The scree plot depicts a linear solution of the principal data components. The point at which the line dips is a point where a possible solution exists. The line bends between 3 and 4 and again at 5 and 6. Solutions 5 and 6 scatter the sorts so as factors at the ends only have one person and thus are rejected as potential solutions.

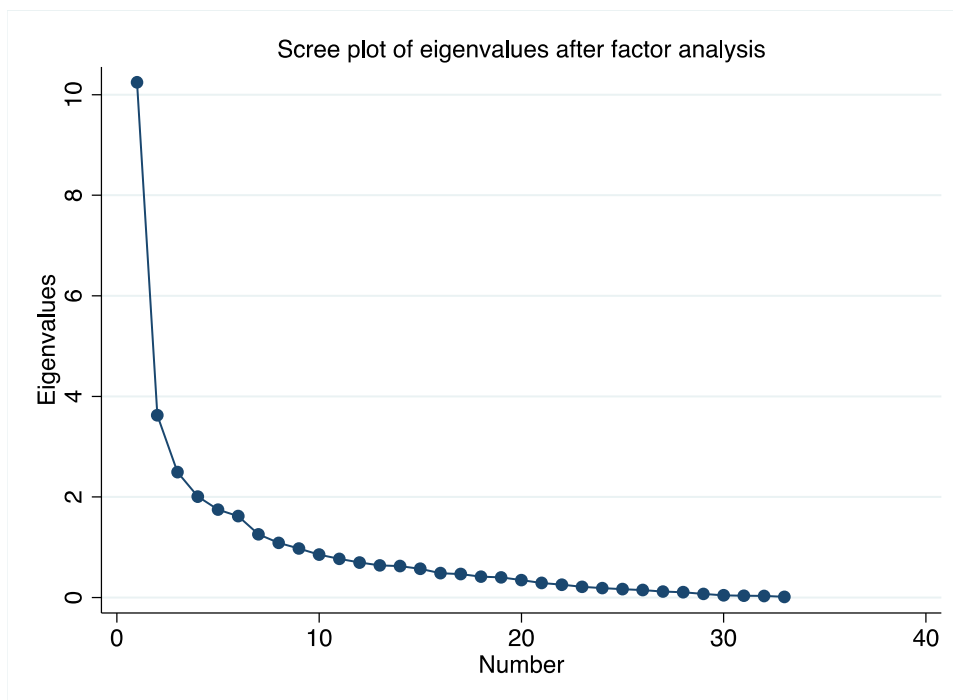


Figure 4.1. Scree Plot of Eigenvalues after Factor Analysis

Comparing Solutions

I compared solutions considering explained variance and number of participants loaded to determine the best solution. Table 4.5 depicts the solutions with two through five factors rotated. The two-factor solution included the highest number of participants loaded, but also the lowest variance explained and was rejected. Factors Three and Four both included 31 participants loaded; however, Factor Four explained 5% more of the variance than Factor 3. Finally, Factor Five explained the greatest percentage of variance, but also the fewest number of participants loaded. Factor Five was also rejected as a possible solution. Only one sort loaded onto Factor Five in the five-factor solution making it difficult to describe differences within and among factors. For these reasons, the four-factor solution was selected.

Table 4.5.

Comparison of Factor Solutions

Factors Rotated	Explained variance (EV)	Participants loaded (PL)	Reasoning
2	42.03%	32	Reject: high PL, low EV
3	49.58%	31	Reject: low PL
4	55.66%	31	Accept: high PL, high EV
5	60.96	28	Reject: low PL, high EV

Factor Loadings

Using varimax rotation, 31 of 33 sorts loaded onto a factor. Factor One included fourteen sorts. Factor Two and Factor Three each included seven sorts, and Factor Four included three sorts. QSorts 1 and 15 did not load onto a factor and were eliminated from additional analysis. Table 4.6 shows the sorts loading onto each factor as well as the number of sorts per factor and the percentage of participants in each factor. Table 4.8 shows the strength of the loading onto a particular factor as well as onto which factor the sort loaded. Q-sort 31 loaded most strongly onto Factor 1 at 0.77; Q-sort 3 is the strongest in Factor 2 at 0.73; Q-sort 9 at 0.73 in Factor 3, and Q-sort 16 at 0.66 onto Factor Four.

Table 4.6.

Sorts Loading on Each Factor

	Factor 1	Factor 2	Factor 3	Factor 4
Sorts	4	2	9	16
	7	3	10	18
	8	5	12	33
	11	6	13	
	14	25	19	
	17	27	26	
	20	32	28	
	21			
	22			
	23			
	24			
	29			
	30			
	31			
Number of sorts	14	7	7	3
Percent of participants	45%	23%	23%	10%

Note: (N=31, 101%)

Table 4.7.

Factor Loadings

QSort	F1	F2	F3	F4	Loaded 1	Loaded 2	Loaded 3	Loaded 4
1	0	0	0	0	0	0	0	0
2	0	0.57	0	0	0	1	0	0
3	0	0.73	0	0	0	1	0	0
4	0.65	0	0	0	1	0	0	0
5	0	0.71	0	0	0	1	0	0
6	0	0.63	0	0	0	1	0	0
7	0.57	0	0	0	1	0	0	0
8	0.74	0	0	0	1	0	0	0
9	0	0	0.73	0	0	0	1	0
10	0	0	0.66	0	0	0	1	0
11	0.63	0	0	0	1	0	0	0
12	0	0	0.63	0	0	0	1	0
13	0	0	0.51	0	0	0	1	0
14	0.51	0	0	0	1	0	0	0
15	0	0	0	0	0	0	0	0
16	0	0	0	0.66	0	0	0	1
17	0.48	0	0	0	1	0	0	0
18	0	0	0	0.63	0	0	0	1
19	0	0	0.49	0	0	0	1	0
20	0.64	0	0	0	1	0	0	0
21	0.66	0	0	0	1	0	0	0
22	0.74	0	0	0	1	0	0	0
23	0.68	0	0	0	1	0	0	0
24	0.7	0	0	0	1	0	0	0
25	0	0.6	0	0	0	1	0	0
26	0	0	0.69	0	0	0	1	0
27	0	0.69	0	0	0	1	0	0
28	0	0	0.65	0	0	0	1	0
29	0.59	0	0	0	1	0	0	0
30	0.64	0	0	0	1	0	0	0
31	0.77	0	0	0	1	0	0	0
32	0	0.54	0	0	0	1	0	0
33	0	0	0	0.57	0	0	0	1

Factor Arrays

A factor array is created by averaging each Q-sort's response within a given factor. The factor array represents the composite sort for each factor. Scores are presented in whole numbers for easy analysis (Bartlett & DeWeese, 2015). Scores range from -5 (*most disagree*) to +5 (*most agree*). Table 4.8 lists the statement number, statement, and factor arrays for each of the four factors. The table provides a visual representation of the factors' responses. Readers can compare statement rankings by factor (column) as well as across factors (rows). A completed grid for each factor is presented in the factor discussion section.

Table 4.8.

Factor Arrays

Stat No	Statement	Factor Scores			
		F1	F2	F3	F4
1	CCP students are not academically prepared for college-level classes.	-2	-2	1	1
2	CCP classes should only be taught by full-time college faculty versus adjunct faculty.	-2	2	0	-4
3	CCP participation eases the transition from high school to college.	3	4	-1	5
4	CCP classes should only be available for high-achieving students.	-3	4	4	4
5	Adult students prefer not to take classes with CCP students.	-4	-1	2	-3
6	CCP classes should be for College Transfer students only.	-5	-3	-5	0
7	Faculty should be incentivized to teach CCP classes.	0	5	0	-1
8	CCP students are more interested in grades than content as opposed to traditional students.	0	0	-2	2
9	CCP students exhibit less initiative than traditional students.	-3	-4	1	2
10	CCP students lack time management skills.	1	-3	3	1

Table 4.8 continued

Stat No	Statement	Factor Scores			
		F1	F2	F3	F4
11	CCP students take notes in class less frequently than traditional students.	1	-1	1	3
12	I can distinguish CCP students from traditional students.	1	1	-2	-2
13	CCP students understand the importance of doing well in college classes.	1	1	-4	-2
14	CCP students do not feel the need to work hard for good grades.	-2	-4	2	2
15	CCP students are immature.	0	-1	2	2
16	High schools do not adequately prepare students for college expectations.	2	2	5	5
17	Former high school teachers have an advantage teaching CCP students.	0	0	-3	1
18	Providing CCP students with adequate supports (library, counseling, tutoring) increases the likelihood of passing the class.	2	3	-1	4
19	I dislike aligning my course schedule to the public school's academic calendar.	-1	5	3	-2
20	Participation in CCP classes increases student motivation to enroll in college.	2	1	-1	0
21	Participation in CCP classes helps prepare students for the expectations of college.	4	2	0	3
22	CCP pushes students to perform at a higher level.	3	1	1	1
23	CCP students benefit from taking classes with mature and productive students (traditional students).	5	4	0	4
24	CCP students require more support from me than traditional students.	-1	-3	1	1
25	CCP students are less likely than traditional students to ask for help outside the classroom.	0	-1	-2	0
26	CCP students require more repetition than adult students.	-1	-2	-1	-2
27	CCP students are more dependent on peers than traditional students.	0	-1	0	-3
28	I enjoy teaching in an intergenerational classroom (CCP and traditional students in the same class).	5	3	-1	1

29 CCP students are eager to learn. 1 0 -3 0

Table 4.8 continued

Stat No	Statement	Factor Scores			
		F1	F2	F3	F4
30	CCP students do not strive to improve.	-4	-5	-3	-1
31	CCP classes maintain the same rigor as traditional classes at the college.	3	0	0	-2
32	CCP classes have the same rigor as classes taught at the high school.	-1	0	-4	-3
33	Academic rigor suffers when high school instructors teach CCP classes.	-3	0	0	3
34	SLOs are the same for CCP and traditional courses.	4	2	4	-4
35	CCP students disrupt class more often than traditional students.	-3	-3	2	0
36	CCP students have more stringent deadlines than traditional students.	-2	-2	-4	-1
37	CCP students' problems are less important to me than traditional students' issues (e.g. ballgame versus sick child).	-5	0	0	-4
38	CCP students are more motivated than adult students to adhere to deadlines.	0	-2	-5	-1
39	CCP students complete assignments less often than traditional students.	-1	-2	2	-1
40	CCP students are not prepared for college-level classes.	0	-4	5	0
41	CCP saps increasingly limited resources (e.g. seats in high demand classes).	-2	0	-2	-3
42	CCP classes are an effective component toward facilitating on-time graduation (2 year or 4 year).	2	1	-2	0
43	CCP is an effective recruitment tool for programs.	4	2	-3	0
44	CTE students should have access to entry level English and Math classes.	1	-1	3	3
45	My college values CCP students.	3	3	4	2
46	Traveling to the high school to teach would be a burden on me.	2	3	3	-5
47	Community college faculty are not trained to educate high school students.	-1	1	1	-1

48	CCP and adult learners should be in separate classrooms.	-4	-5	-1	-5
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Factor Discussion

Each factor is discussed in terms of demographics, consensus statements, distinguishing statements, and extreme statements. The narrative statements are interwoven and examined based on the topics identified in the q-set by theme. The table of themes and the breakdown of statements is shown in Table 4.9. The themes are identified in the consensus, distinguishing, and extreme statement tables using the abbreviations identified in Table 4.9.

Table 4.9.

Q-Set Topics

Topic	Number of Statements	Statements
Faculty Beliefs (FB)	8	1, 13, 14, 20, 29, 30, 37, 40
CCP Student Behaviors (SB)	9	8, 9, 10, 11, 15, 25, 27, 35, 39
Support of Diverse Learner Needs (DLN)	9	5, 12, 17, 23, 24, 28, 46, 47, 48
Rigorous Coursework (RC)	8	4, 6, 26, 31, 32, 33, 34, 44
Organizational Structure (OS)	7	2, 7, 18, 19, 38, 41, 42
Organizational Culture (OC)	7	3, 16, 21, 22, 36, 43, 45
Total	48	

Consensus Statements

The *qfactor* command in Stata identified *consensus* and *distinguishing* statements. Statements sorted similarly between the four factors are known as *consensus statements* in Q-

Methodology. Two of the 48 statements (4.17%) were categorized as consensus statements at the 0.8 significance level. The two consensus statements are: *CCP students are less likely than traditional students to ask for help outside the classroom.* (Statement 25) and (Statement 26) *CCP students require more repetition than adult students.* The consensus across factors showed neither strong agreement nor strong disagreement with these statements. Statement 25 is classified *CCP Student Behaviors*. Statement 26 is *Rigorous Coursework*. None of the post-sort questionnaires specifically addressed either of these statements. In general, all four factors were relatively neutral about Statement 25 with z-scores ranging from -0.20 to -0.71 indicating a placement of these items in the Q-matrix in the slightly disagree range. Likewise, all four factors ranked Statement 26 as either -1 (Factors One and Three) or -2 (Factors Two and Four).

The remaining 46 statements were categorized as *distinguishing statements*, statements that discern differences between factors. Table 4.10 shows a comparison of each consensus statement's ranking between factors. Distinguishing statements will be discussed in greater detail in the description and analysis of each specific factor.

Table 4.10.

Consensus statements

Stat No	Statement	Factor 1		Factor 2		Factor 3		Factor 4	
		Rank	Zscore	Rank	Zscore	Rank	Zscore	Rank	Zscore
25	CCP students are less likely than traditional students to ask for help outside the classroom. (SB)	0	-0.28	-1	-0.71	-2	-0.80	0	-0.20

26	CCP students require more repetition than adult students. (RC)	-1	-0.61	-2	-0.79	-1	-0.45	-2	-0.95
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Distinguishing statements. Distinguishing statements have higher or lower statistical comparisons related to other statements (Ahktar-Danesh, 2017). Analyzing distinguishing statements provides valuable insight into the thought processes of the Q-Set members in each factor. Factor One had three distinguishing statements, Factors Two and Four 8 distinguishing statements, and Factor Three 11 distinguishing statements. Collectively, the distinguishing statements represented sufficient data to identify distinctive characteristics between factors.

Extreme statements. Though not specifically a part of the steps in Q-Methodology as defined by Brown, I extracted statements that each factor most agreed and most disagreed with (Stanigar, 2016). In other words, I extracted the statements ranked +5, +4, -5, and -4 for each factor array. These statements were sometimes categorized as distinguishing statements and other times provide additional insight into statements that most resonated with participants.

Factor One: The Idealists

Factor One is the largest and most diverse group comprising 31% of the P-Set. Fourteen q-sorts loaded onto Factor One. This represents 45.16% of the final P-Set (n=31) and 21.36% of the variance. Perhaps most notable was that five of the six respondents who teach in the CTE area were part of Factor One.

Table 4.12 lists distinguishing statements attributed to Factor One. Only two of the 14 people thought of negative experiences when sorting statements. This factor is termed

“Idealists” for consistently seeing the positive aspects of dual enrollment. The group collectively believes in CCP for all—especially CTE students. The post-sort questionnaire noted that faculty drew from their experiences to answer the questions. This group identified the need to provide access to courses in both college transfer and CTE areas.

Table 4.11.

Demographic Characteristics of Factor One

QSort	Gender	Age	Education	College Size	Subject	Delivery	Status	Years of Experience
4	Male	36-45	Doctorate	1500-2499	CT	Online	PT	11-20
7	Female	36-45	Masters	1-999	CT	Online	FT	11-20
8	Female	56-65	Doctorate	5000+	CT	F2F	PT	6-10
11	Female	36-45	Masters	1500-2499	CT	F2F	FT	6-10
14	Female	46-55	Masters	2500-3499	CT	Hybrid	PT	20+
17	Female	56-65	Masters	1-999	CT	F2F	PT	11-20
20	Male	46-55	Bachelors	1-999	CTE	F2F	FT	20+
21	Female	36-45	Other	1-999	CTE	F2F	PT	1-5
22	Female	36-45	Masters	1000-1499	CT	F2F	FT	20+
23	Female	36-45	Masters	1500-2400	CT	F2F	FT	6-10
24	Female	26-35	Master’s	2500	CTE	Hybrid	FT	6-10
29	Female	46-55	Masters	1-999	CTE	F2F	FT	11-20
30	Male	46-55	Other	1-999	CTE	F2F	FT	20+
31	Female	46-55	Masters	2500	CT	F2F	FT	20+

Note: College Transfer=CT, Career & Technical Education=CTE; Face-to-face=F2F; Full-time=FT, Part-time=PT

Participants were asked in the post-sort questionnaire which statements were most difficult to place. A consistent theme for Factor One was in not labeling or categorizing CCP students in any particular way. Participant 4 noted that statements “that dealt with differences between CCP and traditional students because it really depends on a variety of factors.” Participant 20 noted that statements concerning academic performance were difficult to place, saying, “I have witnessed both extremes of CCP students. (Those who want to be in college and those who are just filling a schedule.)” Similarly, Participant 21 highlighted statements that asked about students working harder than others: “It was hard because it is up to each person how they handle issues.” Participants recognize that CCP students are a complex population.

The easiest statements to place seemed to be ones that resonated personally with participants. Participant 4 underscored statements about high school teachers teaching CCP students at a higher education level: “I feel teachers who have taught high school understand how to teach that level.” Participant 7 noted “the benefits of teaching these students.” The positive outlook on teaching CCP students is laudable. Participant 21 found the statement about high schools not preparing students easiest to place. She states, “I work with CCP students every day and they talk to me about the high school and how they are not helping them.” Factor One emphasized the structural components of the Career and College Promise program in the open-ended post-sort questionnaire. Participant 8 thought an easy statement to place was that CCP classes should be only available for high-achieving students. Participant 20 easily placed the statement about CCP and traditional students having the same rigor

“because the content does not change for high school students.” Participant 23 states, “Not having the students come to campus would eliminate many of the benefits of the program.” Participants 23 and 24 agree that the program should be available to all students.

<i>Most Disagree</i>					<i>Most Agree</i>					
-5	-4	-3	-2	-1	0	1	2	3	4	5
6	5	4	1	19	7	10	16	3	21	23
37	30	9	2	24	8	11	18	22	34	28
(2)	48	33	14	26	15	12	20	31	43	(2)
	(3)	35	36	32	17	13	42	45	(3)	
		(4)	41	39	25	29	46	(4)		
			(5)	47	27	44	(5)			
				(6)	38	(6)				
					40					
					(8)					

Figure 4.2. Factor Array for Factor One

Table 4.12.

Factor One: Extreme Viewpoints

StatNo	Statement	Rank	Code
23	CCP students benefit from taking classes with mature and productive students (traditional students).	+5	DLN
28	I enjoy teaching in an intergenerational classroom (CCP and traditional students in the same class).	+5	DLN
21	Participation in CCP classes helps prepare students for the expectations of college.	+4	OC
34	SLOs are the same for CCP and traditional courses.	+4	RC
43	CCP is an effective recruitment tool for programs.	+4	OC
5	Adult students prefer not to take classes with CCP students.	-5	DLN
30	CCP students do not strive to improve.	-5	FB
48	CCP and adult learners should be in separate classrooms.	-4	DLN
6	CCP classes should be for College Transfer students only.	-4	RC

37	CCP students' problems are less important to me than traditional students' issues (e.g. ballgame versus sick child).	-4	FB
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Table 4.13.

Distinguishing Statements for Factor One

Stat No	Statement	F1	ZS1	F2	ZS2	F3	ZS3	F4	ZS4
43	CCP is an effective recruitment tool for programs. (OC)	4	1.54	2	0.69	-3	-0.94	0	0.25
31	CCP classes maintain the same rigor as traditional classes at the college. (RC)	3	1.18	0	0.13	0	0.11	-2	-0.94
4	CCP classes should only be available for high-achieving students. (RC)	-3	-1.03	4	1.24	4	1.51	4	1.48

Three distinguishing statements provide valuable insight into Factor One. Table 4.13 shows the distinguishing statements for Factor One as well as how the other factors ranked the same statement. The members of Factor One ranked Statement 43 positively (+4), and this ranking distinguished the group from the other factors. The narrative, however, noted that faculty did not recruit for programs and could not respond to this statement. Two of the three distinguishing statements related to *rigorous coursework*. Faculty responses strongly reflected that all students should have the opportunity to attend the community college in both the College Transfer and CTE program areas, and that *CCP classes maintain the same rigor as traditional classes at the college*. This statement is important from a policy perspective as SACSCOC is emphasizing the importance of maintaining the same rigor of dual enrollment and traditional classes. Policy implications are discussed in greater detail in Chapter 5.

Factor Two: The Traditionalists

Seven q-sorts loaded on Factor Two representing 22.58% (n=31) of the sample and 10.98% of the variance. One-hundred percent of the members of this factor are employed full-time and teach in the College Transfer area. The majority of the group is female with a Master's degree. One member has a doctorate with one male in the group. One member teaches primarily online while the remaining six members teach face-to-face. All but one respondent has at least 11 years of teaching experience.

Table 4.14.

Demographic Characteristics of Factor Two

QSort	Gender	Age	Education	College Size	Subject	Delivery	Status	Years of Experience
2	Female	46-55	Masters	1500-2499	CT	Online	FT	20+
3	Female	36-45	Doctorate	2500-3499	CT	F2F	FT	11-20
5	Female	36-45	Masters	1500-2499	CT	F2F	FT	11-20
6	Female	36-45	Masters	1500-2499	CT	F2F	FT	20+
25	Male	26-35	Masters	1-999	CT	F2F	FT	6-10
27	Female	46-55	Masters	1500-2499	CT	F2F	FT	20+
32	Female	46-55	Masters	3499-	CT	F2F	FT	11-20

Note: College Transfer=CT, Career & Technical Education=CTE; Face-to-face=F2F; Full-time=FT, Part-time=PT

<i>Most Disagree</i>					<i>Most Agree</i>					
-5	-4	-3	-2	-1	0	1	2	3	4	5
30	9	6	1	5	8	12	2	18	3	7
48	14	10	26	11	17	13	16	28	4	19
(2)	40	24	36	15	29	20	21	45	23	(2)
	(3)	35	38	25	31	22	34	46	(3)	
		(4)	39	27	32	42	43	(4)		
			(5)	44	33	47	(5)			
				(6)	37	(6)				
					41					
					(8)					

Figure 4.3. Ideal sort for Factor Two

Table 4.15.

Factor Two: Extreme Viewpoints

StatNo	Statement	Rank	Topic
7	Faculty should be incentivized to teach CCP classes.	+5	OS
19	I dislike aligning my course schedule to the public school's academic calendar.	+5	OS
3	CCP participation eases the transition from high school to college.	+4	OC
4	CCP classes should only be available for high-achieving students.	+4	RC
23	CCP students benefit from taking classes with mature and productive students (traditional students).	+4	DLN
30	CCP students do not strive to improve.	-5	FB
48	CCP and adult learners should be in separate classrooms.	-5	DLN
9	CCP students exhibit less initiative than traditional students.	-4	SB
14	CCP students do not feel the need to work hard to get good grades.	-4	FB
40	CCP students are not prepared for college-level classes.	-4	FB

Table 4.16.

Distinguishing Statements for Factor Two

Stat No	Statement	F1	ZS1	F2	ZS2	F3	ZS3	F4	ZS4
19	I dislike aligning my course schedule to the public school's academic calendar. (OS)	-1	-0.40	5	2.18	3	0.88	-2	-0.71
7	Faculty should be incentivized to teach CCP classes. (OS)	0	-0.28	5	1.82	0	0.15	-1	-0.23
11	CCP students take notes in class more often than traditional students. (SB)	1	0.40	-1	-0.68	1	0.36	3	1.03
44	CTE students should have access to entry level English and Math classes. (RC)	1	0.58	-1	-0.29	3	0.92	3	0.92
10	CCP students lack time management skills. (SB)	1	0.73	-3	-0.90	3	0.84	1	0.62
6	CCP classes should be for College Transfer students only. (RC)	-5	-2.23	-3	-0.88	-5	-2.36	0	-3
40	CCP students are not prepared for college-level classes. (FB)	0	-0.26	-4	-1.13	5	1.93	0	.25
30	CCP students do not strive to improve. (FB)	-4	-1.03	-5	-1.92	-3	-1.08	-1	-0.34

Factor Two's q-sort responses indicate a more traditional view of CCP students in the classroom. Table 4.16 shows Factor Two's distinguishing statements. The statements ranked as *most agree* (+5) were Statement 7 (*Faculty should be incentivized to teach CCP classes.*) and Statement 19 (*I dislike aligning my course schedule to the public school's academic calendar.*). Both statements address the organizational culture related to dual enrollment.

Factor Two was originally termed The Skeptics based on an analysis of the statements; however, the open-ended questions illuminate an opposite perspective.

Participant 3 said that, “CCP students are generally some of my best students. They are motivated and have a strong work ethic.” Participant 32 affirms the positive aspects of CCP students stating, “CCP students are high achievers and care about their success in school. They love being at the college and feel they are given more autonomy than in the high school. They are a pleasure to work with.”

Participant 25, when referring to mixing CCP and traditional students in the same classroom, said, “I have worked with CCP students for many years and understand from experience that integration helps students learn not separation.” He continues with personal insight:

I was a CCP (dual enrollment) student who was not planning on going to a university. The CCP program is responsible for me attending college rather than going straight into the workforce. It changed my life. Being around older students taught me how to act in college. These students are too young to learn without good role models. This section reminds the reader how personal experiences play out in the classroom setting for the next generation of learners.

Factor Two included explanations on statements considered difficult to assign value. Participant 25 writes about *Providing CCP students with adequate supports* (Statement 18):

This was difficult because I know how important these resources are but also understand that my CCP students do not have access to these. We give up many advantages of having resources on campus when are students have no way to get here to take advantage of them.

Some CCP students are bused to the community college to take classes. Providing transportation eliminates a barrier to participating in dual enrollment classes, but creates an impediment to accessing support systems such as the library and tutoring.

The open-ended statements continue to provide insight into the sorts of Factor Two. According to Participant 32, “All students deserve a chance to come to a community college. There are many technical programs that would benefit these students.” Statements asked participants to agree or disagree with statements about limiting CCP eligibility to only high-achieving students or only college transfer students. This statement clearly expresses that all students should have the opportunity to participate.

The lone dissenter in the Factor Two narrative, when referring to the statement that *My college values CCP students*, opines, “I think they are valued for the FTE but maybe not as college students.” The next statement is the genesis for this study. Referring to Statement 46 *Traveling to the high school to teach would be a burden on me*, a participant declares, “If I wanted to teach at a high school I would have taken a job at the high school!” (Underlining added for emphasis.) The reality is that the expansion of dual enrollment, and CCP in North Carolina, necessitates a re-imagining on the part of faculty and not just administration of the community college’s partnerships with secondary institutions.

Factor Three: Pragmatists

Like Factor Two, seven q-sorts loaded onto Factor Three. Factor Three includes 22.58% of the participants (N=31) and 7.56% of the variance. This group emphasized first-hand experience in the post-sort questionnaire narrative feedback. Four of the 7 faculty in Factor Three have 11-20 years of teaching experience. Factor Three is referred to as the “Pragmatists.”

Table 4.17.

Demographic Characteristics of Factor Three

QSort	Gender	Age	Education	College Size	Subject	Delivery	Status	Years of Experience
9	Male	46-55	Masters	2500-3499	CT	F2F	FT	1-5
10	Female	56-65	Masters	2500-3499	CT	F2F	FT	11-20
12	Female	56-65	Doctorate	1-999	CTE	F2F	Hybrid	11-20
13	Female	46-55	Masters	1500-2499	CT	F2F	FT	11-20
19	Female	36-45	Masters	1-999	CT	F2F	FT	11-20
26	Female	46-55	Masters	1-999	CT	F2F	FT	6-10
28	Female	56-65	Masters	1500-2499	CT	F2F	FT	1-5

Note: College Transfer=CT, Career & Technical Education=CTE; Face-to-face=F2F; Full-time=FT, Part-time=PT

According to the post-statement questionnaire, the statements most difficult to sort included those related to mixing CCP and traditional students “because of a lack of professional experience with that type of class make-up.” On the other hand, Participant 28 felt the statement regarding CCP students not being mature enough was easy to place because of their inability to handle college-level topics while the hardest statement to place related to if the college values CCP. This participant could not adequately respond as to how the college feels about CCP. Participant 13 thought the questions about “desire to learn” were

difficult to place because “this is often difficult to judge.” The participant goes on to explain, “The question about whether CCP is an effective recruitment tool for programs. I don’t recruit for a program.” This statement speaks to an opportunity for colleges to be intentional about including dual enrollment in strategic plans and ensuring that the plans are shared with faculty. Implications of the study are discussed further in Chapter 5.

The post-sort questionnaire yielded valuable insight into the P-Set members’ rationale for sorting statements. According to Participant 10, statements easiest to sort were regarding lack of student preparedness “because of my first-hand experiences with CCP students.”

Participant 13 added:

Questions about whether younger students gain benefits from being in class with more mature students (Yes) and whether adult students prefer to take classes with CCP students or not (They do not.) This has been my experience especially in traditional classes that are majority CCP students. The older traditional student feels uncomfortable and out of place in this type of environment. It may help younger students but it is a deterrent to the traditional community college student.

The emphasis on specific experience highlights the knowledge specific to individuals in this factor. It is this subject-specific knowledge that provides validity to the survey methodology.

Participant 13 continues:

Is more “liaison” staff needed to bridge high school and traditional college experience...yes! From ensuring that students have books in hand and are participating regularly and meeting deadlines to assisting students to withdraw if needed in order to avoid painful future transcript issues with admission and financial aid.

Participant 28 also discussed the importance of the college culture on high school students. He states, “I feel strongly that college instructors should teach these classes. Otherwise why not have the students remain in high school classes. This approach risks the college classes becoming high school classes.” This speaks to the standards espoused by the NACEP that traditional and dual enrollment classes should be the same. Participant 28 continues with the statement easiest to place saying, “I think students do better when they come to the college for classes. It is better for faculty and students alike.”

<i>Most Disagree</i>						<i>Most Agree</i>				
-5	-4	-3	-2	-1	0	1	2	3	4	5
6	29	13	8	2	1	9	5	15	34	4
38	36	17	28	12	3	10	11	35	40	16
(2)	41	32	30	22	7	18	14	39	45	(2)
	(3)	43	37	25	20	31	19	46	(3)	
		(4)	42	26	21	33	44	(4)		
			(5)	27	23	47	(5)			
				(6)	24	(6)				
					48					
					(8)					

?

Figure 4.4. Ideal Sort for Factor Three

Table 4.18.

Factor Three: Extreme Viewpoints

StatNo	Statement	Rank	Topic
4	CCP classes should only be available for high-achieving students.	+5	RC
16	High schools do not adequately prepare students for college expectations.	+5	OC
34	SLOs are the same for CCP and traditional courses.	+4	RC
40	CCP students are not prepared for college-level classes.	+4	FB
45	My college values CCP students.	+4	OC
6	CCP classes should be for College Transfer students only.	-5	RC
38	CCP students are more motivated than adult students to adhere to deadlines.	-5	OS
29	CCP students are eager to learn.	-4	FB
36	CCP students have more stringent deadlines than traditional students.	-4	OC
41	CCP saps increasingly limited resources (e.g. seats in high demand classes).	-4	OS

Table 4.19.

Distinguishing Statements for Factor Three

Stat No	Statement	F1	ZS1	F2	ZS2	F3	ZS3	F4	ZS4
40	CCP students are not prepared for college-level classes. (FB)	0	-0.26	-4	-1.13	5	1.93	0	0.25
19	I dislike aligning my course schedule to the public school's academic calendar. (OS)	-1	-0.40	5	2.18	3	0.88	-2	-0.71
5	Adult students prefer not to take classes with CCP students. (DLN)	-4	-1.25	-1	-0.67	2	0.70	-3	-1.18
35	CCP students disrupt class more often than traditional students. (SB)	-3	-0.95	-3	-1.07	2	0.77	0	-0.04
39	CCP students complete assignments less often than traditional students. (SB)	-1	-0.33	-2	-0.86	2	0.83	-1	-0.41
23	CCP students benefit from taking classes with mature and productive students (traditional students). (DLN)	5	1.72	4	1.55	0	0.02	4	1.16
18	Providing CCP students with adequate supports (library, counseling, tutoring) increases the likelihood of passing a class. (OS)	2	0.89	3	1.04	-1	0.33	4	1.61
28	I enjoy teaching in an intergenerational classroom (CCP and traditional students in the same class). (DLN)	5	1.66	3	.90	-1	-0.48	1	.50
3	CCP participation eases the transition from high school to college. (OC)	3	1.19	4	1.42	-1	-0.34	5	1.88
48	CCP and adult learners should be in separate classrooms. (DLN)	-4	-1.5	-5	-2.05	-1	-0.21	-5	-1.81
42	CCP classes are an effective component toward facilitating on-time graduation (2 year or 4 year). (OS)	2	0.83	1	0.68	-2	-0.74	0	0.10
43	CCP is an effective recruitment tool for programs. (OC)	4	1.54	2	0.69	-3	-0.94	0	0.25
29	CCP students are eager to learn. (FB)	1	0.37	0	0.41	-3	-1.2	0	0.15
38	CCP students are more motivated than adult students to adhere to deadlines. (OS)	0	-0.29	-2	-0.84	-5	-2	-1	-0.39

Statement 40 (*CCP students are not prepared for college-level classes.*) highlighted a difference of opinion between Factor Three and the other three factors. This statement elicited strong feelings for Factors Two and Three while it did not do so in other groups. The narrative confirms that, based on professional experience, these faculty express that CCP students are not mature enough to handle college-level topics. Another distinguishing statement confirmed by the narrative is Statement 5 (*Adult students prefer not to take classes with CCP students*). The group goes on to agree that *CCP students disrupt class more often than traditional students* and that *CCP students complete assignments less often than traditional students*.

Factor Four: Transitionists

Factor Four included the remaining three q-sorts and represented 9.68% (n=31) of the P-Set and 6.08% of the variance. This group included two of the 8 male members and two of the 7 with doctorates. One hundred percent of Factor Four members teach face-to-face, full-time in the College Transfer program area and are experienced instructors. None of the individuals in Factor Four came from the smallest institution.

Table 4.20.

Demographic Characteristics of Factor 4

QSort	Gender	Age	Education	College Size	Subject	Delivery	Status	Years of Experience
16	Male	46-55	Doctorate	5000+	CT	F2F	FT	11-20
18	Male	46-55	Doctorate	1500-2499	CT	F2F	FT	11-20
33	Female	46-55	Masters	2500-3499	CT	F2F	FT	20+

Note: College Transfer=CT, Career & Technical Education=CTE; Face-to-face=F2F; Full-time=FT, Part-time=PT

<i>Most Disagree</i>					<i>Most Agree</i>					
-5	-4	-3	-2	-1	0	1	2	3	4	5
46	2	5	12	7	6	1	8	11	4	3
48	34	27	13	30	20	10	9	21	18	16
(2)	37	32	19	36	25	17	14	33	23	(2)
	(3)	41	26	38	29	22	15	44	(3)	
		(4)	31	39	35	24	45	(4)		
			(5)	47	40	28	(5)			
				(6)	42	(6)				
					43					
					(8)					

Figure 4.5. Factor 4 Factor Array

Factor Four strongly believed that *CCP participation eases the transition from high school to college* (Statement 3) and that *High schools do not adequately prepare students for college expectations*. Participants 16 and 18 found statements about students' behavior difficult to place because "behaviors vary widely" and "all CCP students do not fit into the categories equally." This belief is also held by participants in Factor One. Participant 33 echoed that questions on student motivation were difficult to place due to variations in students. Participant 16 had a negative experience in mind when sorting statements and felt that, "most students are academically underprepared" but also that "CCP can be beneficial, but CCP students miss out by having less instruction." Q-Methodology values subjectivity so it is affirming that Participant 18 found the easiest statements to place "the ones about the classroom that I related to."

This group strongly disagreed with Statement 37 that *CCP students' problems are less important to me than traditional students' issues (e.g. ballgame versus sick child)*

ranking this statement -4 in the *most disagree* range. Participant 33 said simply that, “Instructors care.” This statement was originally generated from a college transfer instructor grappling to sympathize with high school students missing class time. Examples included a sporting event as a low priority versus a parent that had a child with seizures. These situations represent two different categories in practice. The point is weighting the magnitude of a sporting event to a high school student developmentally. Sports may be a passion, in the student’s eyes, that could result in a scholarship. The two situations are developmentally parallel.

Other extreme statements and the distinguishing statements are revealing for Factor Four. For instance, the group strongly disagreed (z-score -1.83) that *traveling to the high school to teach would be a burden on me* (Statement 46), but the narrative does not speak to having experience with this. The group also believes that *CCP classes should be for high achieving students* (Statement 4), but disagrees that *SLOs are the same for CCP and traditional courses* (Statement 34).

Table 4.21.

Factor Four: Extreme Viewpoints

StatNo	Statement	Rank	Topic
3	CCP participation eases the transition from high school to college.	+5	OC
16	High schools do not adequately prepare students for college expectations.	+5	OC
4	CCP classes should only be available for high achieving students.	+4	RC
18	Providing CCP students with adequate supports (library, counseling, tutoring) increases the likelihood of passing a classes.	+4	OS
23	CCP students benefit from taking classes with mature and productive students (traditional students).	+4	DLN
46	Traveling to the high school to teach would be a burden on me.	-5	DLN
48	CCP and adult learners should be in separate classrooms.	-5	DLN
2	CCP classes should only be taught by full-time college faculty versus adjunct faculty.	-4	OS
34	SLOs are the same for CCP and traditional courses.	-4	RC
37	CCP students' problems are less important to me than traditional students' issues (e.g. ballgame versus sick child).	-4	FB

Table 4.22.

Distinguishing Statements for Factor Four

Stat No	Statement	F1	ZS1	F2	ZS2	F3	ZS3	F4	ZS4
33	Academic rigor suffers when high school instructors teach high school classes. (RC)	-3	-0.97	0	-0.22	0	0.10	3	0.96
8	CCP students are more interested in grades than content as opposed to traditional students. (SB)	0	-0.28	0	-0.22	-2	-0.68	2	0.76
6	CCP classes should be for College Transfer students only. (RC)	-5	-2.23	-3	-0.88	-5	-2.36	0	0.14
35	CCP students disrupt class more often than traditional students. (SB)	-3	-0.95	-3	-1.07	2	0.77	0	-0.04
31	CCP classes maintain the same rigor as traditional classes at the college. (RC)	3	1.18	0	0.18	0	0.11	-2	-0.94
34	SLOs are the same for CCP and traditional courses. (RC)	4	1.51	2	0.85	4	1.73	-4	-1.71
2	CCP classes should only be taught by full-time college faculty versus adjunct faculty. (OS)	-2	-0.63	2	0.76	0	0.05	-4	-1.47
46	Traveling to the high school to teach would be a burden on me. (DLN)	2	1.07	3	1.13	3	1.2	-5	-1.83

Post-Sort Questionnaire

The post-sort questionnaire provided additional information about the P-Set participants. The demographic information is displayed in Table 4.1. The last question in the post-sort questionnaire asked if participants were thinking of a positive or negative experience with CCP students when sorting cards. This question was designed to provide a binary measure of faculty members' perceptions of dual enrollment students in the classroom. Twenty-five of 33 P-Set members (75.76%) thought of a positive experience when sorting the statements.

Additional Statements

P-Set members had the opportunity to suggest additional statements as part of the post-sort questionnaire. One participant stated that, “I felt these statements accurately addressed CCP student and instructor involvement.” One suggested statement read, “Are more ‘liaison’ staff needed to bridge high school and traditional college experiences?” The narrative elaborated that “the liaison ensures that students have books in hand and are participating regularly and meeting deadlines to assisting students to withdraw if needed in order to avoid painful future transcript issues with admission and financial aid.” A related recommendation related to the college allocating additional instructors for CCP. This is outside the bounds of the study focusing on faculty perspectives; however, it raises implications for administrators on how faculty work assignments are created. Another suggested statement was, “dealing with parents is not customary for cc [community college] instructors and that topic wasn't broached in this survey.” This is good feedback and has implications for future studies.

Summary

The Q-Method findings indicated that the P-Set sorted into four factors or similar ways of perceiving dual enrollment students in the classroom. First, participants sorted forty-eight statements into a forced grid (quantitative data). Next, members of the P-Set answered demographic and open-ended questions reflecting on the sorting experience (qualitative data). The data were analyzed using the steps following Brown's (1980) outline and the findings presented. Analysis yielded a four-factor solution. Factor One, the largest group, was termed The Idealists for the optimistic view of dual enrollment students in the classroom. Factors Two and Three were each comprised of seven sorts. Factor Two was

named Traditionalists due to the dubious nature of responses. This group's responses show that individuals are not fully invested in the dual enrollment program. Factor Three was called the Pragmatists because of the vast amount of feedback provided through the open-ended questions. Factor Four was dubbed Transitionists for their emphasis on the role that dual enrollment places on transitioning students from high school to college.

Chapter Five recaps the findings and draws conclusions. The findings correspond to the literature as presented in Chapter 2 helping to evaluate and answer the research questions. Finally, implications of this study and recommendations for future research are explored.

CHAPTER 5: DISCUSSION AND IMPLICATIONS

This study examined faculty's perceptions of dual enrolled high school students in college-level courses. The majority of dual enrollment students are enrolled in community colleges; however, community college faculty are not always trained in pedagogy. Community college faculty are expected to be experts in their field ranging from Nursing to Calculus in addition to teaching students from multiple generations—sometimes at the same time. This study contributes to the body of literature by highlighting the voice of community college faculty, often underrepresented in the literature. The results from this study inform administrators about faculty perceptions and identifies commonalities and differences among faculty perspectives. The following research questions guided this study:

1. How do community college faculty who teach dual enrollment classes differ with regard to teaching dual enrollment students?
2. How can the differing perspectives be characterized?
3. What are the common beliefs community college faculty have about teaching dual enrollment students?

To take advantage of the nature of Q-Methodology, research questions were intentionally created to be process-oriented in order to elicit “how” participants form perceptions versus “what” those perceptions are. In light of this, researchers must be cautioned to not overgeneralize or overreach implications.

The study was inspired by conversations about dual enrollment with department chairs from around the state, many of whom expressed concerns about community college faculty's willingness and abilities related to teaching young adults (under age 18). Some faculty also expressed concerns about the effects that the increased proportion of high school

students in courses had on traditional students and adult learners. This study used Strauss-Howe's generational theory as a lens through which to examine the faculty experience with the multigenerational classroom. According to Sanchez and Kaplan (2016), every classroom is multigenerational, as the instructor and students are often varying ages. Community college's open missions invite a diverse student body. The rising number of high school students enrolled in college classes changes the status quo by introducing a new generational demographic to traditional students and adult learners.

In order to glean a comprehensive view of faculty perspectives, the literature review included a survey of dual enrollment literature. This emergent topic focused heavily on student success outcomes with few qualitative studies exploring student, faculty, or administrative views. A second prong of the literature review examined community college faculty more generally. This literature provided insight into faculty training and preparation as well as pros and cons to teaching at the community college level. Finally, research exploring multigenerational classrooms sheds insight into provided a variety of viewpoints on this emerging topic and identifies several challenges faculty face when educating students who range from teenagers to retirees—a span of four generations in Strauss-Howe's (1991) model. The review of the extant literature helped identify what has thus far been ignored by academics—the subjective experiences and perceptions of community college faculty who teach in multi-generational classrooms, specifically those that include high school aged students.

Q-Methodology was designed to elicit participants' subjective experiences of a particular phenomenon and thus was chosen to answer the research questions regarding community college faculty's beliefs, attitudes, and perceptions of their experiences teaching

dually enrolled high school students (Ramlo, 2012). Q-Methodology is used to determine perspectives and outlooks in a wide variety of fields including higher education (Ramlo, 2012) and has been gaining popularity among academics. Chapter 3 provided an in-depth discussion of the methodology including research design, sample selection, data collection, analysis, and interpretation. The findings were presented in Chapter 4, which discusses the four-factor solution and distinguishing statements for each factor. Qualitative data provided in post-sort questionnaires enhanced the analysis of the quantitative data collected through the surveys. The four factors represented distinct types of faculty perspectives about dual enrollment student and were named Idealists, Traditionalists, Pragmatists, and Transitionists. Chapter 5 explores implications of these findings for current practice, policy, theory and offers suggestions for future research.

Results

The results allowed me to answer the research questions and draw numerous conclusions about the perceptions of community college faculty who teach dually enrolled students. The results also allowed me to identify possible avenues to address faculty's needs so that they may be more effective teaching the rising numbers of high school aged students who are entering college classes with peers who range from teens to adults. The next sections identify the results that were drawn by analyzing the data, connecting results with the literature, and answering the three research questions.

Result 1: Differing Perspectives

Guided by research questions 1 and 2, this study characterized the differing perspectives into four factors or faculty viewpoints: Idealists, Traditionalists, Pragmatists, and Transitionists. The Idealists believe in access to the CCP program for CTE as well as

College Transfer students. This group recognizes that not all students seek a baccalaureate degree and that access to college in high school benefits a diverse group of students. The Idealists believe in consistent rigor between high school and college classes, which is important, as maintaining rigor is a point of emphasis for SACSCOC, North Carolina's regional accrediting body (Appendix D provides the most recent SACSCOC dual enrollment policy statement).

The Traditionalist group, although mostly positive, provided a counterpoint to the Idealists as the only group that focused on the idea that faculty should be incentivized to teach CCP students and who do not want to align college schedules with the public schools' schedules. This group also believes that CCP classes should only be offered to high achieving students. It may seem that Traditionalists do not buy in to CCP; however, the results of this research suggest they do believe that the CCP students they have worked with are, indeed, prepared for college-level classes and that these students strive to improve.

The Pragmatists offer a third perspective of dual enrollment students. In fact, the Pragmatists are less enthusiastic about working in the multigenerational classroom than other groups, noting that although high school student benefits from taking college level courses, their presence negatively impacts traditional college students who share the classroom with them. One Pragmatist stated, "It is a deterrent to the traditional community college student," without providing specific reasons or examples of how traditional students are negatively impacted. Despite this expressed bias, the Pragmatists believe CCP students should take classes on the college campus taught by college instructors rather than being taught in their home high school by college instructors. Although they believe traditional college students are negatively affected by having high school students in the classroom, they still think high

school students who take college courses should experience a multigenerational class. The Pragmatists' defining statement was, "I think students do better when they come to the college for classes. It is better for faculty and students alike." Cassidy, Keating, and Young (2010) affirm this belief, finding that educators find value in students taking courses on college campuses because students learn to navigate the college campus, interact with college instructors and students, and role-play being a college student.

The Transitionists were similar to the Idealists in that they recognize that each student is unique and expressed reticence about grouping students. Their positive extreme viewpoints were similar to other groups of faculty in that they believe high schools do not adequately prepare students for college expectations. They also believe, as do others, that CCP participation eases the transition from high school to college—their agreement aligns with NCCCS data that shows dually enrolled students fare better in college than their inexperienced peers. (Refer to Figures 2.1 and 2.2.) What distinguishes the Transitionists from the other three groups is their belief that student-learning outcomes are different for CCP and traditional courses, and that CCP courses have different rigor than traditional classes. These beliefs, if they are truly evident in existing CCP classes, defies the obligations that community colleges have to provide the same level of instruction to all students enrolled in their college-level courses. Both of these perceptions should be a warning to administrators. Not maintaining the same standards in terms of learning outcomes and rigor diminishes the dual enrollment product and breaches SACSCOC guidelines.

Result 2: Identifying Commonalities

Guided by research question #3, this study found that, overall, faculty share the belief that teaching dual enrollment students is a positive experience and that their college values

CCP students. While faculty believe that high schools do not adequately prepare students for meeting college expectations, they also believe that participation in CCP classes helps prepare students for these expectations and eases the transition from high school to college. Faculty also believe that CCP and adult learners benefit from sharing a classroom environment.

Despite their belief that high schools do not yet prepare students for college, they also believe that dual enrollment participation eases the transition from high school to college. This raises the question of who should be expected to prepare high school students to experience the benefits of enrolling in CCP courses—the high school or the college. Christina Parish, director of Syracuse University’s Project Advance, notes that students gain confidence by experiencing success in college classes through navigating rigorous texts and becoming more self-directed learners (Loveland, 2018). Michael Dunn, director of college counseling at AIM Academy (Pennsylvania), adds that skills such as navigating a syllabus and advocating to one’s professor (Loveland, 2018) help prepare students for college in ways that high schools cannot or do not do.

Although some faculty expressed that CCP students are not adequately prepared, dual enrolled students actually must meet more rigorous standards than many traditional college students. In fact, the North Carolina legislature seeks to ensure a high standard for Career and College Promise participation. State Board Code requires a combination of grade level (junior or senior), high school GPA, and demonstration of college-ready scores on standardized tests to be eligible for college transfer pathways. In fact, the criteria for both GPA and test scores are more stringent for current high school students than required for recent high school graduates. Tensen (2018) states that eligibility for dual enrollment courses

is sometimes higher than that of the traditional classroom. She cites the standard for Composition I and II as 21 on the ACT in English and a 3.5 GPA at Gilbert High School (IA). CCP eligibility (Appendix D) requires students to meet college-ready benchmarks higher than those for traditional/adult students. The literature describes rigorous coursework as a benefit to dual enrollment programs (Edmunds et al., 2017; McCord & Roberts, 2014). The benefit of offering rigorous coursework to dual enrollment students increases their readiness upon matriculation to community college and senior institutions.

Faculty expressed the concern that students that are not already performing at the highest levels could risk creating a low college GPA that could impact entry into their program of choice at a senior institution and even financial aid. A caveat is that taking college classes creates a transcript and could have future implications if the student does not perform well in those classes (Loveland, 2018). Adam Lowe, now former executive director of NCAEP, said that the organization adopted a new vision that clearly specified access to dual enrollment courses for all high school students as opposed to high-achieving students.

Result 3: Sources of Ambivalence

Also addressing research question #3, faculty were ambivalent that CCP participation increases student motivation to enroll in college and that recruitment was an essential job responsibility. Faculty have daily contact with students and could be instrumental/influential in encouraging students—in any age range—to enroll in the next semester of classes; however, faculty may not see this as part of their role. Kinnick (2012) found recruiting high-achieving dual enrollment students to be an effective way to raise the college's reputation in the community. Recruitment expectations typically vary by discipline and courses taught. Instructors who teach in specialized technical areas are often called upon to conduct tours for

visiting middle and high school students, attend college fairs or sporting events at high schools, and set up informational booths at community events. General education (e.g., Math, English, psychology) instructors do not have the same expectation to recruit students into courses and do not feel committed to a particular program since the courses are taught across programs. North Carolina community colleges are funded based on enrollment, so students continuing would be a boon for colleges. While not the primary goal of dual enrollment programs, it does help relieve budgetary pressures and creates a programmatic pipeline.

Similarly, faculty commented in post-sort questionnaires that they were unaware about their beliefs related to the college valuing CCP students. One respondent reported that “CCP students are valued for the FTE and not as students,” while others were not aware of how the college felt. Faculty who do not believe that the college values the CCP program may be less likely to support these students, especially if the faculty already perceive that the students are not qualified or that the program should be limited to only college transfer or high-achieving students.

Implications for Practice, Policy, and Future Research

One impetus for the study was a concern that faculty held negative perceptions about teaching in high school students at the college-level. However, the results of the study do not support this hypothesis. The findings and conclusions reveal implications for practice, policy, and theory.

Practice

Success in the classroom begins with the college’s hiring qualified faculty. “Qualified” is typically operationalized in the community college as being a content expert as demonstrated through the requisite number of graduate credits as outlined by the college

and/or accrediting body. Administrators involved in the hiring process must also consider faculty's ability to deliver content via pedagogical training. Moreover, faculty must be not only willing, but also be enthusiastic about teaching high school students, perhaps on the high school campus and also in the multigenerational classroom.

Faculty believe that high schools do not prepare students for college expectations and that CCP students are not prepared for college-level classes. As stated earlier, CCP students enrolled in the College Transfer Pathway are held to a higher academic standard than traditional students. In fact, the opposite is true: performance data indicates that CCP students outperform non-CCP students (See Figures 2.1 and 2.2). There is a disconnect between faculty perceptions and data. The remedy is for college administrators to share performance data and eligibility requirements with faculty and their supervisors to eliminate the unconscious bias of ageism.

The North Carolina Community College System (NCCCS) also works continuously to align policy with student success initiatives to ensure college readiness of all students. Recent examples include the Developmental Education Initiative and Multiple Measures for Placement, which uses high school GPA as a predictor of college readiness. NCCCS level initiatives helped eliminate unnecessary developmental courses and speed time to degree. Further efforts by the State of North Carolina have been focused on the Reinforced Instruction for Student Excellence (RISE) program aimed at improving academic momentum through gateway English and Math courses. CCP student eligibility is expected to align with RISE to ensure dual enrollment standards are in agreement with traditional student matriculation requirements.

Another solution is for colleges to examine teaching practices relative to the changing classroom demographic. Bishop-Clark and Lynch (1995) investigated faculty perceptions of the multi-age classroom precipitated by an increase in the number of nontraditional (adult) students. Despite challenges in a multi-age classroom, the group did not alter their teaching styles to meet the changing demographic. Wilson and Gerber (2008) suggest that the “sage-on-the-stage” lecture-heavy style is outdated and recommend four pedagogical adjustments to accommodate millennial traits: “enhanced clarity of both course structure and assignments; pre-planned measures to reduce stress; and rigorous attention to the ethics of learning” (p. 29). What is perceived as a specific group’s being unprepared for college expectations may simply be a function of a generational characteristic. Providing ongoing professional development to faculty engaged in dual enrollment instruction could help faculty acclimate to addressing the needs of the constantly changing classroom demographic.

Faculty-led professional development would be a boon to faculty struggling with adjusting to multiple generations in the same classroom or even in a classroom comprised solely of high school students. Nevertheless, providing training specific to addressing generational differences and classroom management could be critical to supporting faculty who arrive at community colleges with varying levels of formal educational training and education. Establishing joint professional development between the high schools and colleges would also smooth the transition between the two levels for students and facilitate understanding for faculty.

Overall, faculty’s qualitative comments proved to be positive and affirming of high school students in college; however, this study highlighted some of the challenges inherent in teaching high school students and identified additional points to consider. Given the complex

nature of dual enrollment and its rapid growth, college administration must grapple with the changing skillset of instructors, balancing a prioritization of their having content knowledge with their demonstrating creative pedagogy and embracing the multigenerational classroom. This study showed that eight faculty members of thirty-three (24.24%) recalled negative experiences when sorting the cards. Survey participants can have an off day; however, administrators must reflect on what percentage of negativism is tolerable in an institution. Bishop-Clark and Lynch (1998) found that professors who have negative views of younger students also give preferential treatment to traditional and adult learners. This negativity could easily transfer to the classroom, affecting students who perceive it and push back, being well-versed in consumer culture. Kanny (2015) interviewed dual enrollment students who spoke about being condescended to by faculty. Such attitudes could negatively impact retention and recruitment.

Policy

Two areas of faculty concern included not maintaining the same level of rigor in CCP and traditional classes and not adhering to the same student learning outcomes. A December 2018 SACSCOC Policy Statement specifically states that “course content and rigor of dual enrollment courses are comparable to that of the same courses taught to the institution’s other students.” Not adhering to these standards not only puts colleges at risk with the accrediting agency, but also diminishes the college’s brand by producing students who are not prepared for the baccalaureate level. (Ironically, this is reproducing the same error that community college faculty attribute to high schools now.) According to Gewertz (2016), registrars already view dual enrollment programs with skepticism and express reluctance about accepting courses taken through community college or universities. Colleges need to have

stringent oversight of dual enrollment courses to ensure compliance with rules and regulations.

Two accrediting bodies issued updated standards for dual enrollment in the past two years. National Alliance for Concurrent Enrollment Partnerships (NACEP) unveiled new standards for concurrent enrollment best practices in May 2017 (See Appendix G). See Chapter 2 for a partial list of the new standards. The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) also released a policy statement regarding dual enrollment points of emphasis for accreditation in December 2018 (See Appendix D). Changes to these accreditation policies will inevitably affect faculty in the classroom. Potential areas for professional development include specific training on college policies (e.g., withdrawal, attendance, grading) (NACEP, F2) as well as targeted pedagogical training (NACEP, F3). Additionally, dual enrollment faculty will need to demonstrate that student learning is consistent with traditional classes (NACEP, A1; SACSCOC). Faculty will be evaluated by students in both models (NACEP, E1; SACSCOC) as a means of continuous improvement.

Theory

This study used two generational theories to frame the discussion on faculty perceptions of dual enrollment students in the classroom. The rapid increase of dual enrollment students, aged 16 to 18, creates a new classroom dynamic. The proliferation of high school students adds complexity to the community college classroom already comprised of traditional students (ages 18-24) and adult students (age 25 and above). The conceptual framework highlights topics relevant to examining generational differences including student behaviors, faculty beliefs, organizational culture, organizational structure, rigorous

coursework, and support of diverse learner needs. Mannheim (1952) situates individuals within a generation based on birth dates as a concrete classification mechanism. Faculty's own generation may impact perceptions over these younger learners.

Study participants self-reported a positive or negative experience when performing the q-sort. The intent of the question was to gather a binary impression of the faculty's mindset at the time of the sort. Seven participants thought of a negative experience: nine in the 36-45 age category: three in the 46-55 age group, and two between the ages of 55 and 65. Neither of the two participants in the 26-35 age group registered negative thoughts when sorting statements. Those older than 35 appear to have the most negative view of younger students in the classroom. However, this group could have been expressing a negative view about the sorting activity in general. A focus group could yield greater insight into specific generations' perceptions.

The Idealists was the largest and most diverse group containing half of the youngest two demographic groupings, 29% of 46-55 year-olds, and 40% of 56-54 year-olds. This group favored access to CTE students in addition to college transfer students and grasped the complexity of comparing dual enrollment and traditional students. The Traditionalist group was also composed of participants on the younger end of the spectrum. The Traditionalists' narrative statements showed they strongly support the benefits of the multigenerational classroom. The Pragmatists believe strongly that dual enrollment should be limited to high-achieving students. Faculty's outlooks could reflect generational differences as the programmatic structure of dual enrollment in North Carolina changed in 2012. Some faculty may only know the current dual enrollment program while others are more familiar with past versions.

Limitations

The current study focused on North Carolina community faculty perceptions of dual enrollment students. Five community colleges were selected as a representative sample. As such, the results may not be generalized to all faculty or applicable to all states. In fact, Q-Methodology is not meant to provide generalizable data; rather, it is designed as a way to identify previously unaddressed perceptions among a specific group of participants. Recruitment from a greater number of community colleges or from multiple states may have resulted in more disparate factor loadings and different themes. Nevertheless, the number of colleges was appropriate for this study and provided an array of different outlooks on teaching dually enrolled high school students in North Carolina with implications for action.

Another limitation involved the timing of the Q-sort. Timing is always challenging when surveying faculty. Faculty have a continuous cycle of planning, teaching/grading, and resetting. This survey was launched at the behest of the liaisons in the first days of the Fall semester, arguably the busiest time of the year for college faculty beginning the academic year. The timing of the survey at the beginning of the semester may have impacted the number of responses.

Another limitation was the way the surveys were distributed. Rather than meeting with participants to physically sort the 48 statements, the survey was administered online using the Q-sort platform in order to mitigate the timing issue and allow faculty to complete the sort when and if they were willing and available. Some liaisons reported that some faculty had technical trouble with the questionnaire link, and the software required participants to complete the sort in one session in order to be recorded. Incomplete attempts were not recorded, so the researcher has no data on how many surveys were started and

abandoned limiting the pool of participants. The ability for faculty to take the survey at a time and location of their choosing was a tradeoff for being on-site to address issues in survey administration. A second benefit of administering the Q-sort online rather than in person was that faculty anonymity was preserved, thereby allowing them to provide both negative and positive perceptions without fear of recourse. Faculty were encouraged to submit dummy email addresses to preserve this anonymity. Of course, self-reporting formats have advantages and disadvantages. Accessing individuals' viewpoints on a subject is an advantage, while inherently knowing that they are part of a study may impact subjects' responses (Cross, 2005).

The study topic was selected based upon anecdotal conversations with department chairs from across North Carolina who indicated that teaching dual enrollment students can be problematic, particularly with regard to scheduling, maturity, and balancing the needs of adult learners. In order to solicit candid feedback and protect participants, I chose to collect data online and anonymously. The intent in doing so was to establish trust with the participant that comments—positive or negative—could not be attributed either to the individual or the community college. While I expected to receive criticism from faculty about dual enrollment students, the results yielded a mostly positive outlook. This could be attributed to selection bias in that the survey participants already had positive perspectives about dual enrollment students.

A final limitation is that the forced grid format meant that some statements were sorted into an agree category when the participant really disagreed and vice versa. Participants were informed that some statements may need to be ranked in a less-than-ideal column. Two respondents expressed frustration with the format: “The first part of the survey

was legit. After that, the separation was tedious and difficult to see.” Another participant said “Numeric limitations on the second sorting did not allow me to express my true opinion for each statement. I would not consider this survey valid.”

Future Research

The value of Q-Methodology is gaining insight into the perspectives of various groups. While the literature includes some studies on student perspectives, dual enrollment is growing quickly and academic research needs to be updated and expanded. Likewise, there are limited studies from the perspectives of other key stakeholders within the community college such as presidents, chief academic officers, and department chairs. The positionality of each of these three stakeholder groups influences the organizational culture and structure that ultimately impact students. Future research could focus on collecting perspectives from each of these stakeholder groups.

North Carolina is a leader in dual enrollment, and this survey could be repeated in individual North Carolina community colleges, across North Carolina, or replicated in another state. Texas, for one, mandates dual enrollment for high school students. A faculty study may be beneficial to uncovering bias or identifying implementation gaps, particularly as they relate to state-level and accreditation body standards.

Lastly, design limitations promoted anonymity and fostered simultaneous data collection throughout North Carolina; however, the online methodology limited access to participants and the choice to make the survey process anonymous thwarted the ability to convene follow up focus groups. Future studies may consider these design elements when conducting their own Q-Sort, including ways to elicit more nuanced feedback from participants.

Summary

In 2009, President Obama challenged the nation to increase college graduation rates from 40% to 60% by 2020, and in 2016, he declared that a high school education is no longer adequate to equip a skilled workforce in today's economy (Strauss, 2016). In 2013, Obama highlighted the importance of dual enrollment in making college more affordable (The White House, Office of the Press Secretary, 2013). The Career and College Promise program is expanding, thereby offering college access to more students in an effort to fulfill this challenge. However, access is but one part of implementation. Effectiveness of dual enrollment programs relies heavily on instructors at the front of classrooms. The evolving classroom, marked by an increase in the percentage of high school students present in community college classrooms, requires added attention to ensure that instructors are equipped to teach this new age group.

This dissertation discussed conclusions and implications drawn from answering research questions regarding North Carolina community college faculty's perceptions of dual enrollment students using Q-Methodology. One key finding is that the college administrators need to communicate the value of CCP/dual enrollment to faculty. Administrators also have an obligation to ensure consistency with regard to student learning outcomes regardless of instructor (full-time, adjunct, or high school teacher hired by the college) or location (online, at the college, or on the high school campus). Lastly, dual enrollment provides an opportunity for community colleges to work closely with secondary partners to ensure college readiness for all students.

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APPENDICES

Appendix A: IRB Approval

NORTH CAROLINA STATE UNIVERSITY
 INSTITUTIONAL REVIEW BOARD FOR THE USE OF HUMAN SUBJECTS IN RESEARCH
 SUBMISSION FOR NEW STUDIES

Protocol Number 14130

Project Title

Teaching in the Multi-Generational Classroom: Faculty Perceptions of Dual Enrollment Students in North Carolina Community Colleges

IRB File Number:

Original Approval Date:

07/26/2018

Approval Period

07/26/2018 -

Source of funding (if externally funded, enter PINS or RADAR number of funding proposal via 'Add New Sponsored Project Record' button below):

N/A

NCSU Faculty point of contact for this protocol:NB: only this person has authority to submit the protocol

Fleener, Mattie Jayne: Educational Leadership, Policy, and Human Development (ELPHD)

Does any investigator associated with this project have a significant financial interest in, or other conflict of interest involving, the sponsor of this project? (Answer No if this project is not sponsored)

No

Is this conflict managed with a written management plan, and is the management plan being properly followed?

No

Preliminary Review Determination

Category:

Exempt b.2

In lay language, provide a brief synopsis of the study (limit text to 1500 characters)

This study will examine perceptions of faculty regarding dual enrollment students in the community college classroom. Faculty members at identified community colleges who teach dual enrollment students will be asked to sort a series of statements into a fixed grid. Faculty will then be asked a series of open-ended questions to clarify reasons for sorting the statements the way they did. Finally, demographic information including number of years teaching, subject area, delivery method (e.g. online, face-to-face, or hybrid), location of classes taught (e.g. at the high school versus at the community college), gender, and age range will be collected.

Briefly describe in lay language the purpose of the proposed research and why it is important.

Community college faculty are currently confronted with multigenerational classrooms comprised of traditional recent high school graduates, adult learners, and an increasing number of high school students. The purpose of the proposed research is to examine community college faculty's perceptions of dual enrollment students in the classroom. The number of dual enrollment students is escalating across the country and ranges from 5% to 64% of headcount with an average of 27% for the Fall 17 semester (NCCCS data, 2018) in North Carolina community colleges. Faculty may be reticent to teach high school students resulting in diminished quality or faculty turnover. Both scenarios have implications for community college administrations.

My research qualifies for Exemption. Exempt research is minimal risk and must fit into the categories b.1 - b.6 found here: <http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html>

1

Is this research being conducted by a student?

Yes

Is this research for a thesis?

No

Is this research for a dissertation?

Yes

Is this independent research?

No

Is this research for a course?

No

Do you currently intend to use the data for any purpose beyond the fulfillment of the class assignment?

No

Please explain

If so, please explain

If you anticipate additional NCSU-affiliated investigators (other than those listed on the Title tab) may be involved in this research, list them here indicating their name and department.

N/A

Will the investigators be collaborating with researchers at any institutions or organizations outside of NC State?

No

List collaborating institutions and describe the nature of the collaboration

What is NCSU's role in this research?

Describe funding flow, if any (e.g. subcontractors)

Is this international research?

No

Identify the countries involved in this research

An IRB equivalent review for local and cultural context may be necessary for this study. Can you recommend consultants with cultural expertise who may be willing to provide this review?

Adults 18 - 64 in the general population?

Yes

NCSU students, faculty or staff?

No

Adults age 65 and older?

No

Minors (under age 18--be sure to include provision for parental consent and/or child assent)?

No

List ages or age range:

Could any of the children be "Wards of the State" (a child whose welfare is the responsibility of the state or other agency, institution, or entity)?

No

Please explain:

Prisoners (any individual involuntarily confined or detained in a penal institution -- can be detained pending arraignment, trial or sentencing)?

No

Pregnant women?

No

Are pregnant women the primary population or focus for this research?

No

Provide rationale for why they are the focus population and describe the risks associated with their involvement as participants

Fetuses?

No

Students?

No

Does the research involve normal educational practices?

No

Is the research being conducted in an accepted educational setting?

No

Are participants in a class taught by the principal investigator?

No

Are the research activities part of the required course requirements?

No

Will course credit be offered to participants?

No

Amount of credit?

No

If class credit will be given, list the amount and alternative ways to earn the same amount of credit. Note: the time it takes to gain the same amount of credit by the alternate means should be commensurate with the study task(s)

How will permission to conduct research be obtained from the school or district?

Will you utilize private academic records?

No

Explain the procedures and document permission for accessing these records.

Employees?

No

Describe where (in the workplace, out of the workplace) activities will be conducted.

Faculty will be emailed a survey link. Faculty can opt to take the survey in or out of the workplace.

From whom and how will permission to conduct research on the employees be obtained?

Permission will be solicited from the president of each participating community college or alternatively granted by the community college's IRB process as appropriate.

How will potential participants be approached and informed about the research so as to reduce any perceived coercion to participate?

The researcher will identify a point of contact at the community college or one may be assigned by the college president. The contact will provide the researcher with a list of names and email addresses for community college faculty who teach dual enrollment courses. The researcher will then approach and inform identified faculty via email.

Is the employer involved in the research activities in any way?

Yes

Please explain:

The employer is responsible for identifying and providing the names and email addresses of Career and College Promise (dual enrollment) faculty.

Will the employer receive any results from the research activities (i.e. reports, recommendations, etc.)?

No

Please explain. How will employee identities be protected in reports provided to employers?

Impaired decision making capacity/Legally incompetent?

No

How will competency be assessed and from whom will you obtain consent?

Mental/emotional/developmental/psychiatric challenges?

No

Identify the challenge and explain the unique risks for this population.

Describe any special provisions necessary for consent and other study activities (e.g., legal guardian for those unable to consent).

People with physical challenges?

No

Identify the challenge and explain the unique risks for this population.

Describe any special provisions necessary for working with this population (e.g., witnesses for the visually impaired).

Economically or educationally disadvantaged?

No

Racial, ethnic, religious and/or other minorities?

No

Non-English speakers?

No

Describe the procedures used to overcome any language barrier.

Will a translator be used?

No

Provide information about the translator (who they are, relation to the community, why you have selected them for use, confidentiality measures being utilized).

Explain the necessity for the use of the vulnerable populations listed.

N/A

State how, where, when, and by whom consent will be obtained from each participant group. Identify the type of consent (e.g., written, verbal, electronic, etc.). Label and submit all consent forms.

Community college presidents will consent to be part of the study per an emailed invitation. See attachment. Participants will self-select to complete the electronic survey. They will read the consent at the beginning of the survey and click yes to consent. The consent will read as follows:

This survey is designed to gauge faculty perceptions of dual enrollment students in the classroom. The survey allows you the opportunity to reflect on your interactions with students and share your viewpoint. The survey asks you to sort statements into a grid ranging from "most disagree" to "most agree." Open-ended follow up questions will allow you to explain your choices.

*This survey is part of a research project by Deana Guido, Ph.D. candidate under the direction of Dr. M. Jayne Fleener. The purpose is to examine faculty perceptions of dual enrollment/Career and College Promise students. Your college will not see your individual responses nor will anyone at your institution be made aware that you participated in the survey. Direct quotes from open-ended responses will be assigned a code (e.g. Participant 1). The software will ask for an email address. You may enter your actual email or a dummy address to preserve anonymity. It is recommended that you take the survey at a private location away from your workplace. Clear browser history and cookies after finishing the survey or use a private browsing mode which will not record site history.

If any participants are minors, describe the process for obtaining parental consent and minor's assent (minor's agreement to participate).

N/A

Are you applying for a waiver of the requirement for consent (no consent information of any kind provided to participants) for any participant group(s) in your study?

No

Describe the procedures and/or participant group for which you are applying for a waiver, and justify why this waiver is needed and consent is not feasible.

Are you applying for an alteration (exclusion of one or more of the specific required elements) of consent for any participant group(s) in your study?

No

Identify which required elements of consent you are altering, describe the participant group(s) for which this waiver will apply, and justify why this waiver is needed.

Are you applying for a waiver of signed consent (consent information is provided, but participant signatures are not collected)? A waiver of signed consent may be granted only if: The research involves no more than minimal riskThe research involves no procedures for which consent is normally required outside of the research context.

Yes

Would a signed consent document be the only document or record linking the participant to the research?

Yes

Is there any deception of the human subjects involved in this study?

No

Describe why deception is necessary and describe the debriefing procedures. Does the deception require a waiver or alteration of informed consent information? Describe debriefing and/or disclosure procedures and submit materials for review. Are participants given the option to destroy their data if they do not want to be a part the study after disclosure?

For each participant group please indicate how many individuals from that group will be involved in the research. Estimates or ranges of the numbers of participants are acceptable. Please be aware that participant numbers may affect study risk. If your participation totals differ by 10% from what was originally approved, notify the IRB.

North Carolina community college faculty who teach dual enrollment students is the only participant group. Twenty-five (25) to fifty (50) participants will be involved in the research.

How will potential participants be found and selected for inclusion in the study?

Potential participants will be identified by the contact at each community college provided by the president. Participants will be invited to participate by the Principal Investigator/doctoral candidate.

For each participant group, how will potential participants be approached about the research and invited to participate? Please upload necessary scripts, templates, talking points, flyers, blurbs, and announcements.

To Solicit College Presidents:

To solicit college participation, the following procedures will be followed. Presidents from identified community colleges in NC will be invited to have their college participate in the study. It will be explained that: You are invited to include your college in a research project by Deana Guido, Ph.D. candidate under the direction of Dr. M. Jayne Fleener. The project is designed to measure North Carolina community college faculty's perception of Career and College Promise (dual enrollment) students in the classroom. The survey allows your faculty the opportunity to reflect on their interactions with students and share their viewpoints. Once you consent for your college to participate, I will ask you for a contact person who will help identify participants. Participants will be asked to sort statements into a grid ranging from "most disagree" to "most agree." Open-ended follow up questions will allow them to explain their choices. The survey will take approximately 15-20 minutes to complete.

There are minimal risks to participating in this project. Your college will not see your individual faculty responses nor will anyone be made aware that your college participated in the survey. Direct quotes from open-ended responses will be assigned a code (e.g. Participant 1). The software will ask for an email address from the participants. They may enter their actual email or a dummy address to preserve anonymity. It will be recommended that they take the survey at a private location away from their workplace and they will be advised to clear browser history and cookies after finishing the survey or use a private browsing mode which will not record site history. The benefit to you and your institution is in reflecting on instructor experiences teaching dual enrollment students and contributing to the body of literature on dual enrollment instruction. You may withdraw from the project at any time without penalty.

Thank you for considering participating in this study.

Describe any inclusion and exclusion criteria for your participants and describe why those criteria are necessary (If your study concentrates on a particular population, you do not need to repeat your description of that population here.)

North Carolina community college faculty who teach dual enrollment students will be included. Faculty who only teach Workforce Development courses will be excluded. Workforce Development has only been part of the Career and College Promise program for one year. In order to have deep knowledge of teaching dual enrollment students, faculty will ideally have more than one year of instructional experience with dual enrollment students.

Is there any relationship between researcher and participants - such as teacher/student, employer/employee?

No

What is the justification for using this participant group instead of an unrelated participant group? Please outline the steps taken to mitigate this relationship.

Describe any risks associated with conducting your research with a related participant group.

Describe how this relationship will be managed to reduce risk during the research.

How will risks to confidentiality be managed?

Address any concerns regarding data quality (e.g. non-candid responses) that could result from this relationship.

In the following questions describe in lay terms all study procedures that will be experienced by each group of participants in this study. For each group of participants in your study, provide a step-by-step description of what they will experience from beginning to end of the study activities.

Potential participants will be identified by the contact at the community college provided by the president. The participant will receive an email from the Principal Investigator explaining the study and asking the faculty member to take the survey. The link to the survey will be included in the email. The participant will open a link to the survey, consent, complete the exercises, and submit the survey.

Describe how, where, when, and by whom data will be collected.

The study will be conducted online. Data will be collected during the Fall 2018 term. The results will be recorded by Q sort software and stored by the surveyors.

Social?

No

Psychological?

No

Financial/Employability?

No

Legal?

No

Physical?

No

Academic?

No

Employment?

No

Financial?

No

Medical?

No

Private Behavior?

No

Economic Status?

No

Sexual Issues?

No

Religious Issues/Beliefs?

No

Describe the nature and degree of risk that this study poses. Describe the steps taken to minimize these risks. You CANNOT leave this blank, say 'N/A', none' or 'no risks'. You can say "There is minimal risk associated with this research."

There is minimal risk associated with this research.

If you are accessing private records, describe how you are gaining access to these records, what information you need from the records, and how you will receive/record data.

N/A

Are you asking participants to disclose information about other individuals (e.g., friends, family, co-workers, etc.)?

No

You have indicated that you will ask participants to disclose information about other individuals (see Populations tab). Describe the data you will collect and discuss how you will protect confidentiality and the privacy of these third-party individuals.

If you are collecting information that participants might consider personal or sensitive or that if revealed might cause embarrassment, harm to

reputation or could reasonably place the subjects at risk of criminal or civil liability, what measures will you take to protect participants from those risks?

Participants will not be asked to reveal sensitive information. Participants may elect to not answer questions they deem to be invasive.

If any of the study procedures could be considered risky in and of themselves (e.g. study procedures involving upsetting questions, stressful situations, physical risks, etc.) what measures will you take to protect participants from those risks?

Participants may withdraw from the study at any time without penalty.

Describe the anticipated direct benefits to be gained by each group of participants in this study (compensation is not a direct benefit).

N/A

If no direct benefit is expected for participants describe any indirect benefits that may be expected, such as to the scientific community or to society.

Participants will benefit by helping researchers better understand the perceptions of faculty that teach dual enrollment students. The survey is directed at North Carolina community college faculty, but is scalable to contribute to the body of literature regarding dual enrollment faculty on a national scale.

Will you be receiving already existing data without identifiers for this study?

No

Will you be receiving already existing data which includes identifiers for this study?

No

Describe how the benefits balance out the risks of this study.

Will data be collected anonymously (meaning that you do not ever collect data in a way that would allow you to link any identifying information to a participant)?

Yes

Will any identifying information be recorded with the data (ex: name, phone number, IDs, e-mails, etc.)?

No

Will you use a master list, crosswalk, or other means of linking a participant's identity to the data?

No

Will it be possible to identify a participant indirectly from the data collected (i.e. indirect identification from demographic information)?

Yes

Audio recordings?

No

Video recordings?

No

Images?

No

Digital/electronic files?

No

Paper documents (including notes and journals)?

No

Physiological Responses?

No

Online survey?

Yes

Restricted Computer?

No

Password Protected files?

Yes

Firewall System?

No

Locked Private Office?

No

Locked Filing Cabinets?

No

Encrypted Files?

No

Describe all participant identifiers that will be collected (whether they will be retained or not) and explain why they are necessary.

Participant identifiers to be collected include: age, gender, education level, race/ethnicity, number of years as an instructor, and full or part-time status.

If any links between data and participants are to be retained, how will you protect the confidentiality of the data?

Links between data and participants will not be retained as the survey is anonymous.

If you are collecting data electronically, what (if any) identifiable information will be collected by the host site (such as email and/or IP address) and will this information be reported to you?

The host site will collect an email address. Participants will be directed to use a fake email if desired. This information will not be reported to the researcher.

Describe any ways that participants themselves or third parties discussed by participants could be identified indirectly from the data collected, and describe measures taken to protect identities.

The mention of particular institutions will be scrubbed from the data. Direct quotes will be assigned a code (e.g. Participant 1) in order to protect identities.

For all recordings of any type: Describe the type of recording(s) to be made Describe the safe storage of recordings Who will have access to the recordings? Will recordings be used in publications or data reporting? Will images be altered to de-identify? Will recordings be transcribed and by whom?

N/A

Describe how data will be reported (aggregate, individual responses, use of direct quotes) and describe how identities will be protected in study reports.

The mention of particular institutions will be scrubbed from the data. Direct quotes will be assigned a code (e.g. Participant 1) in order to protect identities.

Will anyone besides the PI or the research team have access to the data (including completed surveys) from the moment they are collected until they are destroyed?

The dissertation chair, Dr. Jayne Fleener, and a staff member at the Odom Institute who is assisting with data analysis will also have access to the data. Dr. Alessio Pruneddu, owner of Q-software will have access to the data until 6/19/19 when the account expires.

Describe any compensation that participants will be eligible to receive, including what the compensation is, any eligibility requirements, and how it will be delivered.

No compensation for participation.

Explain compensation provisions if the participant withdraws prior to completion of the study.

N/A

Appendix B: Post-Sort Questionnaire Demographic Information

Please indicate your choice with an X or \surd in front of your selection, or write your answer.

1. Age (yrs): 25 and under 26-35 36-45 46-55 56-65 Over 65
2. Gender: Male Female
3. Education: High School Bachelor Master Doctoral Other_____
4. Race/Ethnicity: African-American/Black Asian Caucasian Hispanic
Native American Multi-racial/Multi-ethnic

5. Experience as an instructor (yrs): Less than 1 1-5 6-10 11-20 Over 20
6. Instructional Area: College Transfer Career and Technical Education
Workforce/Continuing Education Other_____
7. Full-time community college instructor
Part-Time/Adjunct Instructor
High School Teacher Other_____
8. Delivery method: (Check all that apply.)
 Face-to-face
 Hybrid
 Online
9. Do you currently teach CCP students at multiple community colleges? Yes No
10. Consider the two statements you placed in the +5 “Most Important” column. What rationale did you use to place them there? Why did those statements most resonate with you?
11. Consider the two statements you placed in the -5 “Most Unimportant” column. What rationale did you use to place them there? Why did those statements most resonate with you?
12. As you sorted the cards, did you feel that any statements that represent your views

about teaching Career and College Promise student was missing? If so, please list them here. Where would you place that card and why?

13. Which statements were the most difficult to place? Why?
14. Which statements were the easiest to place? Why?
15. Are there any distinctions you would like to make between Early College and non-Early College CCP students?
16. When you sorted the statements, were you thinking of a positive or negative experience?

Appendix C: Recruitment Letter

September 5, 2018

Dear XXXXX:

I am Deana Guido, a doctoral student at North Carolina State University in Educational Leadership, Policy and Human Development, and I am writing today to request your assistance. My dissertation, which has been approved by the North Carolina State University Institutional Review Board (IRB), focuses on dual enrollment programs and is under the direction of Dr. Jayne Fleener, former dean of the College of Education at NC State. My professional role is Associate Vice President of Transfer Initiatives at Nash Community College.

As you are undoubtedly aware, dual enrollment programs have existed in North Carolina for decades. The rise of early colleges and policy changes surrounding these students is causing a surge in enrollment, and current research indicates this trend will continue into the foreseeable future.

Recent Department Chair Institute (DCI) participants shared comments on the impact the increased number of Career and College Promise students have on the classroom. One participant pointed out that adult students avoided class offerings at certain points of the day in order to circumvent classrooms overrun with high school students. Another instructor remarked that the reason for choosing the college environment was to teach college students; however, statistics indicate that increases in dual enrollment students is not a passing phase. Strategies should be examined to empower and prepare faculty working in multigenerational classrooms.

The goal of this study is to measure faculty perceptions of dual enrollment students in the classroom in order to address these professional development needs. Participants will be asked to sort a series of statements in a forced grid ranging from strongly disagree to strongly agree via an online survey. Participants will then be asked to answer open-ended questions allowing them to elaborate on the rationale for sorting statements into the various categories. The survey is expected to take approximately 15-20 minutes to complete.

Once you, or your designee, consent for your college to participate, I will ask you for a contact person who will help identify participants. To minimize risks and to maintain participant anonymity, neither the college nor the faculty members will be identified in the study. Your college will not see your individual faculty responses nor will anyone be made aware that your college participated in the survey. Direct quotes from open-ended responses will be assigned a code (e.g. Participant 1). The software will ask for an email address from the participants. They may enter their actual email or a dummy address to preserve anonymity. It will be recommended that they take the survey at a private location away from their workplace and will be advised to clear their browser history and cookies after finishing the survey or use a private browsing mode which will not record site history. The benefit to your institution and faculty is in reflecting on instructor experiences teaching dual enrollment students and contributing to the body of literature on dual enrollment instruction.

Please contact me using the information below if you would like your college to participate in this study, or if you have any questions. Thank you for your consideration.

Sincerely,

Deana L. Guido

Ph.D. Candidate, NC State University

252-314-0603

dguido2@ncsu.edu

Appendix D: SACSCOC Dual Enrollment Policy Statement



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

DUAL ENROLLMENT

Policy Statement

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

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

Applying the Principles of Accreditation to Dual Enrollment

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

Substantive Change

An institution offering dual enrollment ensures appropriate notification and prior approval (if needed) of off-campus instructional sites where dual enrollment courses and programs are offered. Another aspect of dual enrollment that may require notification or approval could be the use of a cooperative academic arrangement to deliver courses. (Please refer to the SACSCOC policy “Substantive Change for SACSCOC Accredited Institutions.”)

Faculty

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

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

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

Curriculum and Instruction

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

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

Institutional Effectiveness

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

Library and Learning Resources

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

Academic and Student Support Services

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

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

Admissions and Transparency

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

Statements and other representations regarding the ability to transfer credit earned in dual enrollment programs and courses are accurate and complete. The institution ensures that its registration and transcripting practices for dual enrollment students are consistent with those in effect for all other students.

Facilities

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

Document History

Approved: SACSCOC Board of Trustees, June 2018

Revised: SACSCOC Board of Trustees, December 2018

Appendix E: College Readiness Benchmarks

College Readiness* Benchmarks on Approved Diagnostic Assessment Tests

Test	PLAN**	PSAT 2014 and earlier**	PSAT 10 and PSAT/NMSQT 2015 and Future**	Asset (NCCCS Cut Score)	COMPASS (NCCCS Cut Score)	Accuplacer (NCCCS Cut Score)	NC DAP (NCCCS Cut Score)
English	15	45	26 or a composite score of 460 for Evidenced-Based Reading and Writing	41 Writing	70 Writing	86 Sentence Skills	Composite score of 151 or higher ***
Reading	18	47	26 or a composite score of 460 for Evidenced-Based Reading and Writing	41 Reading	81 Reading	80 Reading	
Mathematics	19	47	24.5 or 510	41 Numerical Skills and 41 Int. Algebra	47 Pre-Algebra and 66 Algebra	55 Arithmetic and 75 Elem. Algebra	7 on each assessment for DMA 010 thru 060

In addition to the diagnostic assessments, colleges may use the following SAT and ACT scores recommended by the testing companies as benchmarks for college readiness:*

SAT (Pre-March 2016)		SAT (March 2016 and Future)		Pre-ACT		ACT	
English	500	Evidence-Based Reading and Writing	480	English	18	English	18
Critical Reading	500			Reading	22	Reading	22
Mathematics	500	Mathematics	530	Mathematics	22	Mathematics	22

*To be eligible for enrollment in a College Transfer Pathway, students must demonstrate college readiness in English, reading, and mathematics on an approved test or tests. Eligibility may be demonstrated by achieving the required scores on a single test or by combining test scores from any of the approved assessments. For example, a student may combine a 19 on PLAN math with an 86 and an 80 on Accuplacer sentence skills and reading to demonstrate college readiness.

**PLAN, Pre-ACT/PSAT scores recommended by ACT and College Board as indicators of college readiness.

***The Reading and English part of the NC DAP is an integrated assessment of reading and English skills; meeting the composite cut score for placement into ENG 111 is one way to demonstrate college readiness in order to participate in the College Transfer Pathway.

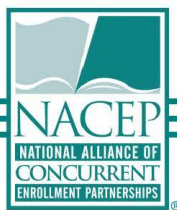
Appendix F: P-Set Demographic Characteristics

Sort ID	Gender	Age Range	Education Level	Ethnicity	Program Area	CC Size	Status	Delivery Method	Teach at Multiple Community Colleges	Years of Experience	Positive/Negative
1	Female	46-55	Master's	Caucasian	College Transfer	2500-3499	Full-Time	F2F	Yes	20+	-
2	Female	46-55	Master's	Caucasian	College Transfer	1500-2499	Full-Time	Online	No	11-20	+
3	Female	36-45	Doctorate/Professional	Caucasian	College Transfer	2500-3499	Full-Time	F2F	Yes	11-20	+
4	Male	36-45	Doctorate/Professional	Caucasian	College Transfer	1500-2499	Part-Time	Online	No	11-20	+
5	Female	36-45	Master's	Caucasian	College Transfer	1500-2499	Full-Time	F2F	Yes	20+	+
6	Female	36-45	Master's	Caucasian	College Transfer	1500-2499	Full-Time	F2F	Yes	20+	+
7	Female	36-45	Master's	Caucasian	College Transfer	1-999	Full-Time	Online	No	11-20	+
8	Female	56-65	Doctorate/Professional	Hispanic	College Transfer	5000+	Part-Time	F2F	No	6-10	+
9	Male	46-55	Master's	Caucasian	College Transfer	2500-3499	Full-Time	F2F	No	1-5	+
10	Female	56-65	Master's	Caucasian	College Transfer	2500-3499	Full-Time	F2F	No	16-20	+
11	Female	36-45	Master's	Caucasian	College Transfer	1500-2499	Full-Time	F2F	No	6-10	+

Sort ID	Gender	Age Range	Education Level	Ethnicity	Program Area	CC Size	Status	Delivery Method	Teach at Multiple Community Colleges	Years of Experience	Positive/Negative
12	Female	56-65	Doctorate/ Professional	Caucasian	CTE	1-999	Full-Time	Hybrid	Yes	11-20	-
13	Female	46-55	Master's	Caucasian	College Transfer	1500-2499	Full-Time	F2F	No	11-20	+
14	Female	46-55	Master's	Caucasian	College Transfer	2500-3499	Part-Time	Hybrid	Yes	20+	-
15	Female	36-45	Master's	Caucasian	College Transfer	1500-2499	Full-Time	F2F	No	11-20	+
16	Male	46-55	Doctorate/ Professional	Caucasian	College Transfer	5000+	Full-Time	F2F	Yes	11-20	-
17	Female	56-65	Master's	Caucasian	College Transfer	1-999	Part-Time	F2F	Yes	11-20	+
18	Male	46-55	Doctorate/ Professional	Caucasian	College Transfer	1500-2499	Part-Time	F2F	Yes	11-20	+
19	Female	36-45	Master's	Caucasian	College Transfer	1-999	Full-Time	F2F	Yes	11-20	-
20	Male	46-55	Bachelor's	Caucasian	CTE	1-999	Full-Time	F2F	No	20+	-
21	Female	36-45	Other	African-American/ Black	CTE	1-999	Part-Time	F2F	No	1-5	+
22	Female	36-45	Master's	African-American/ American/	College Transfer	1000-1499	Full-Time	F2F	Yes	11-20	+

Sort ID	Gender	Age Range	Education Level	Ethnicity	Program Area	CC Size	Status	Delivery Method	Teach at Multiple Community Colleges	Years of Experience	Positive/Negative
				Black							
23	Female	36-45	Master's	Caucasian	College Transfer	1500-2499	Full-Time	F2F	No	6-10	+
24	Male	26-35	Master's	Multi	CTE	2500-3499	Full-Time	Hybrid	No	6-10	+
25	Male	26-35	Master's	Caucasian	College Transfer	1-999	Full-Time	F2F	Yes	6-10	+
26	Female	36-45	Master's	Caucasian	College Transfer	1-999	Full-Time	F2F	No	6-10	-
27	Female	46-55	Master's	Caucasian	College Transfer	2500-3499	Full-Time	F2F	No	20+	+
28	Female	56-65	Doctorate/ Professional	Caucasian	College Transfer	1500-2499	Full-Time	F2F	No	1-5	-
29	Female	46-55	Bachelors	Caucasian	CTE	1-999	Full-Time	F2F	No	11-20	+
30	Male	46-55	Other	Caucasian	CTE	1-999	Full-Time	F2F	Yes	20+	+
31	Female	46-55	Master's	Caucasian	College Transfer	2500-3499	Full-Time	F2F	No	20+	+
32	Female	46-55	Master's	Caucasian	College Transfer	2500-3499	Full-Time	F2F	No	11-20	+
33	Female	46-55	Master's	African-American/ Black	College Transfer	2500-3499	Full-time	F2F	Yes	20+	+

Appendix G: 2017 National Concurrent Enrollment Standards



2017 NATIONAL CONCURRENT ENROLLMENT PARTNERSHIP STANDARDS

Adopted May 2017

Partnership Standards	
Partnership 1 (P1)	The concurrent enrollment program aligns with the college/university mission and is supported by the institution's administration and academic leadership.
Partnership 2 (P2)	The concurrent enrollment program has ongoing collaboration with secondary school partners.
Faculty Standards	
Faculty 1 (F1)	All concurrent enrollment instructors are approved by the appropriate college/university academic leadership and must meet the minimum qualifications for instructors teaching the course on campus.
Faculty 2 (F2)	Faculty liaisons at the college/university provide all new concurrent enrollment instructors with course-specific training in course philosophy, curriculum, pedagogy, and assessment prior to the instructor teaching the course.
Faculty 3 (F3)	Concurrent enrollment instructors participate in college/university provided annual discipline-specific professional development and ongoing collegial interaction to further enhance instructors' pedagogy and breadth of knowledge in the discipline.
Faculty 4 (F4)	The concurrent enrollment program ensures instructors are informed of and adhere to program policies and procedures.
Assessment Standard	
Assessment 1 (A1)	The college/university ensures concurrent enrollment students' proficiency of learning outcomes is measured using comparable grading standards and assessment methods to on campus sections.

Curriculum Standards	
Curriculum 1 (C1)	Courses administered through a concurrent enrollment program are college/university catalogued courses with the same departmental designations, course descriptions, numbers, titles, and credits.
Curriculum 2 (C2)	The college/university ensures the concurrent enrollment courses reflect the learning objectives, and the pedagogical, theoretical and philosophical orientation of the respective college/university discipline.
Curriculum 3 (C3)	Faculty liaisons conduct site visits to observe course content and delivery, student discourse and rapport to ensure the courses offered through the concurrent enrollment program are equivalent to the courses offered on campus.
Student Standards	
Student 1 (S1)	Registration and transcripting policies and practices for concurrent enrollment students are consistent with those on campus.
Student 2 (S2)	The concurrent enrollment program has a process to ensure students meet the course prerequisites of the college/university.
Student 3 (S3)	Concurrent enrollment students are advised about the benefits and implications of taking college courses, as well as the college's policies and expectations.
Student 4 (S4)	The college/university provides, in conjunction with secondary partners, concurrent enrollment students with suitable access to learning resources and student support services.
Program Evaluation Standards	
Evaluation 1 (E1)	The college/university conducts end-of-term student course evaluations for each concurrent enrollment course to provide instructors with student feedback.
Evaluation 2 (E2)	The college/university conducts and reports regular and ongoing evaluations of the concurrent enrollment program effectiveness and uses the results for continuous improvement.